

Syllabus for Environmental Studies of B.A./B.Sc./B.Com programs under CBCS w.e.f. 2017-18

**ENVIRONMENTAL STUDIES**

(No. of credits = 4; No. of contact hours = 60)  
(for B.A. and B.Sc.)

**Learning Objectives:** The course envisages that all the under graduates coming out of our University system are aware of our natural resources, ecosystems and their linkages to society, livelihood, environment and conservation. This theoretical learning shall be supported by the actual field visits.

**SECTION – A Natural Endowments: Status, Issues, concerns and responses**

**Unit 1: The Multi-Disciplinary Nature of Environmental Studies** (2 hours)  
Definition, Scope and Importance; need for public awareness.

**Unit 2: Natural Resources:** (8 hours)

- Renewable and Non-Renewable resources: natural resources and associated problems
- a) Forest Resources: use and over-exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forests and tribal people.
- b) Water Resources: use and over-exploitation of surface and ground water; floods, droughts, conflicts over water, dams-benefits and problems.
- c) Mineral Resources: use and exploitation, environmental effects of extracting and using mineral resources; case studies related to mining and its effect on siltation and loss of biodiversity.
- d) Food Resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity; case studies.
- e) Energy Resources: growing energy needs, renewable and non-renewable energy sources, use of alternative energy sources, case studies
- f) Land Resources: land as a resource, land degradation, man-induced landslides, coastal erosion, soil erosion and desertification.
- Role of an individual in conservation of natural resources.
- Equitable use of resources for sustainable lifestyles.

**Unit 3: Ecosystems** (6 hours)  
Concept of an ecosystem, structure and functions of ecosystems; producers, consumers and decomposers, energy flow in the ecosystem, ecological succession, food chains, food webs and ecological pyramids.  
Introduction, types, features, structure and functions of the following ecosystems: forest ecosystem, grassland ecosystem, desert ecosystem, aquatic ecosystem (ponds, streams, lakes, rivers, oceans, coastal zone, estuaries).

**Unit 4: Biodiversity and its Conservation** (8 hours)  
Introduction, definition, genetic, species and ecosystem diversity; bio-geographical classification of India; value of biodiversity - consumptive use, productive use, social, ethical, aesthetic and option values; biodiversity at global, national, regional and local levels; India as a mega-diversity nation; hotspots of biodiversity; threats to biodiversity - habitat loss, poaching of wildlife, man-wildlife conflicts, bio-invasion, and over exploitation; endangered and endemic species of India (at least 5 examples of animals and plants each); conservation of biodiversity- in-situ and ex-situ conservation, role of biotechnology in conservation of biodiversity.



Goa University  
Choice Based Credit System  
**THREE YEARS B. A. GENERAL AND HONOURS DEGREE PROGRAMME**  
**GEC103: GEOGRAPHY OF NATURAL RESOURCE DEVELOPMENT**  
**GEOGRAPHY CORE COURSE (THEORY)**  
**B. A. SEMESTER-III**

**Course Credits: 03**

**Theory: 45 Sessions of One Hour Duration each.**

**COURSE OBJECTIVES:** To provide an exposure to develop geographical knowledge in understanding and appreciating the distribution of natural resources of the world in general and India in particular.

**LEARNING OUTCOMES:** At the end of the successful completion of this course, students will be able to understand the location of resources in the world and their occurrences in places within India. It will enable students to understand the interaction among various resources.

Unit s	Course Content	Contact Hours	Credit s
I	<p>Economic Geography: Meaning, Definitions and significance.</p> <p>Bases of world Economy: Physical, E c o n o m i c , Cultural and Technological;</p> <p>Classification of Economic activities.</p> <p>Historical Evolution of world economic systems: Medieval feudal economies, The rise of Mercantilism &amp; its economic benefits, Emergence of colonialism &amp; its economic benefits, Mechanism of modern economic systems.</p>	15	1
II	<p>Natural Resources:</p> <p>Meaning, Classification and their significance.</p> <p>Distribution and Development:</p> <p>i) Forest Resources: Types of Forest, Study of Tropical &amp; Temperate Forest, Conservation of Forest</p> <p>ii) World Fisheries: factors affecting distribution, major fishing grounds, Fish Conservation.</p> <p>iii) Mineral Resources: Economic Significance, Global and Indian Distribution</p> <p>a) Metallic: Ferrous - Iron Ore, Non-Ferrous – Bauxite.</p> <p>b) Fuel &amp; Power Resources: Coal &amp; Petroleum.</p>	15	1



	Renewable: Hydel power. c) Non-Conventional Energy Resources-Merits and distribution.		
<b>III</b>	World Agriculture: Types of Agriculture a) Intensive and Extensive farming b) Subsistence and commercial farming, c) Mixed and Plantation Agriculture. Crops: Cereals - Rice & Wheat; Cash Crops: Beverages-Tea, Coffee; Industrial Crops: Cotton, Sugarcane. Agricultural Land Use Theory by Von Thunen.	<b>15</b>	<b>1</b>
	<b>Total</b>	<b>45</b>	<b>03</b>

**Weightage: I.S.A: 15 + S.E.E: 60**

**Total= 75.**

**Credits: 03**

### **Instructions**

1. Maximum thrust may be given to local, regional, national and international examples.
2. Due weightage for maps, diagrams in teaching as well as in paper setting is mandatorily expected.

### **References**

1. Boesch, H., (1964): A Geography of World Economy, Van Nostrand Co., New York.
2. Chapman J. D. (1989): Geography and Energy, Longman, London.
3. Hartshorne T. N. & Alexander J. W.( 1988): Economic Geography, Prentice Hall, New Delhi.
4. Jones C. F. and Darkenwald G. G.,(1975): Economic Geography, Macmillan & Co, New York.
5. Smith, D. M., (1971): Industrial location: An Economic Geographical Analysis, John Wiley, New York.
6. Bengston & Van, G. H. Royan.,(1988): Fundamentals of Economic Geography, Prentice Hall, New Delhi.
7. Leong, G. C. & Morgan, G. H., (1982): Human & Economic Geography, Oxford Univ. Press, New York.



**THREE YEARS GENERAL AND HONOURS DEGREE PROGRAMME**  
(Goa University Choice Based Credit System)  
**GEOGRAPHY SKILL ENHANCEMENT COURSE GPSEC-I w.e.f. 2018-19**  
**TRAVEL AND TOURISM OPERATION IN GEOGRAPHY**  
**S. Y. B. A. / B. SC. / B. COM.**  
**SEMESTER III**

**COURSE CREDITS: 04**

**Total Lectures: 60 Lectures of 1 Hour Each.**

**COURSE OBJECTIVES:** The main objective of this paper is to orient the students to the skills of travel and tourism operation with the fundamental knowledge of tourism geography. It is to develop preparedness to work or assist travel and tourism enterprise in the competitive market in the society.

**LEARNING OUTCOMES:** At the end of this skill based course, the students will be able to be comprehend the possibilities and unforeseen challenges in travel and tourism activity. The information gained from the course will enable the students to become fair businessman or worker. Finally the students will acquire confidence of taking up tourism related activities which is expanding every where across the world.

UNIT NO.	COURSE CONTENT	MARKS WEIGHTAGE	TEACHING PERIODS
I	Fundamentals of Geography of Travel and Tourism 1. Concepts, Nature and Scope; Inter-Relationships of Tourism, Recreation and Leisure; Geographical Parameters of Tourism by Robinson. Factors influencing the prosperity and development of Tourism	20	15
II	2. Type of Travel and Tourism: Travels: Need based, Vacational, Vocational, Political, Pilgrimage, Official, Events, Educational, Leisure & Tourism related, Local, National and International, Present Modes of Travel. Tourism: Nature and Eco Tourism, Cultural Tourism, Medical Tourism, Pilgrimage, Educational, Event. 3. Recent Trends of Tourism: International and Regional; Domestic (India); Eco-Tourism, Sustainable Tourism, Meetings, Incentives, Conventions and Exhibitions (MICE)	30	15
III	4. Benefits and Impact of Tourism on Economy, infrastructure, Society at International, National, State and Local Institutional level (Urban Local Bodies, Panchayats) Negative Impacts on economy, society and environment; Human Induced Travel and Tourism Hazards: Fire and travel related accidents.	30	15
IV	5. Travel and Tourism in India: Tourism Infrastructure; Case Studies of Himalaya, Desert and Coastal and Heritage; National and State Tourism Policy.	20	15
	<b>TOTAL</b>	<b>100</b>	<b>60</b>

**Total= 100. Credit: 4**

**Weightage of marks: ISA 20 + SEE 80**

**Instructions**

1. Complete thrust must be given to draw several global, national and regional examples by the trainers.
2. Field orientation should be attempted by the teachers and the Institutions for exposing to ground truths.
3. The information should be updated by referring journals, newspapers, websites and other relevant materials.
4. Questions should be set with due weightages to all the units as specified above or by Goa University.

**Reading List**

1. Dhar, P.N. (2006) International Tourism: Emerging Challenges and Future Prospects. Kanishka, New Delhi.
2. Hall, M. and Stephen, P. (2006) Geography of Tourism and Recreation – Environment, Place and Space, Routledge, London.
3. Kamra, K. K. and Chand, M. (2007) Basics of Tourism: Theory, Operation and Practise, Kanishka Publishers, Pune.
4. Page, S. J. (2011) Tourism Management: An Introduction, Butterworth-Heinemann- USA. Chapter 2.
5. Raj, R. and Nigel, D. (2007) Morpeth Religious Tourism and Pilgrimage Festivals Management: An International perspective by, CABI, Cambridge, USA, www.cabi.org.
6. Tourism Recreation and Research Journal, Center for Tourism Research and Development, Lucknow



Goa University  
Choice Based Credit System  
**THREE YEARS GENERAL AND HONOURS DEGREE PROGRAMME**  
**GEG111: FUNDAMENTALS OF DISASTER MITIGATION**  
**GEOGRAPHY GENERIC ELECTIVE**  
**B. A. / B. SC. / B. COM. SEMESTER III**

**Course Credits: 04**

**Total Contact Hours: 60 Lectures of 1 Hour Each.**

**COURSE OBJECTIVES:** The main objective of this paper is to orient the students to know the fundamentals or basic concepts of disaster management and mitigation in a geographical perspective. Studying of disaster management and mitigation as a multi disciplinary subject will also be met. It is to develop awareness amongst the students as the catalyst in the Society.

**LEARNING OUTCOMES:** At the end of this Generic course, the students will be able to understand the link between the physical unavoidable hazard systems in the world. The information will enable the students to become alert citizen and express their understanding before others. Finally the students will acquire basic skills of taking judicious decisions for saving their family and society at the time of distress.

Units	Course Content	Contact Hours	Credits
I	1. Introduction to Disaster Management and Disaster Mitigation Fundamentals: Natural Calamities and Accidents and Abuses. Natural Hazards, Risks, Vulnerability and Disasters: Definition and Concepts, Nature, and contents of Disaster Mitigation in Geog. Source of Disaster data (Govt. agencies and NGOs).	15	1
II	2. Disasters in India: (a) Causes, Impact, Distribution and Mapping: Flood, Landslide, Drought with elaborate examples from the world and Indian States.	15	1
III	3. Disasters in India: (b) Causes, Impact, Distribution and Mapping: Earthquake, Tsunami and Cyclone.	15	1
IV	4. Human induced disasters: Causes, Impact, Distribution and Mapping. 5. Response and Mitigation to Disasters: Mitigation and Preparedness, NDMA and NIDM; Indigenous Knowledge and Community-Based Disaster Management; Do's and Don'ts During Disasters	15	1
	<b>TOTAL</b>	<b>60</b>	<b>04</b>

**Weightage of marks: ISA 20 + SEE 80**

**Total= 100.**

**Instructions**

1. Thrust may kindly be given to draw national and regional examples by the teachers.
2. Field orientation should be attempted by the teachers and the Institutions for verifying ground truths.



Goa University  
Choice Based Credit System  
**THREE YEARS GENERAL AND HONOURS DEGREE PROGRAMME**  
**GEG112: APPLICATION OF DISASTER RISK REDUCTION AND MITIGATION**  
**(WITH A MINI PROJECT)**  
**GEOGRAPHY GENERIC ELECTIVE**  
**B. A. / B. SC. / B. COM. SEMESTER IV**

**Course Credits: 04**

**Total Contact Hours: 60 Lectures of 1 Hour Each.**

**COURSE OBJECTIVES:** The main objective of this paper is to orient the students to apply the fundamental knowledge of disaster risk reduction, management and mitigation in a geographical perspective. It is to develop preparedness amongst the students as the catalyst in the Society.

**LEARNING OUTCOMES:** At the end of this Generic course, the students will be able to be alert during the unforeseen hazards. The information will enable the students to become moral citizen and use their understanding before others. Finally the students will acquire confidence of taking judicious decisions for saving their family and society at the time of disasters.

Units	Course Content	Contact Hours	Credits
I	Fundamentals of Application of Disaster Risk Reduction and Mitigation: Understanding the Threat, Mental Preparedness, Logistics, Coordination, Warning Signals, Communication Disaster Mitigation in Geog.	15	1
II	Climate Change: Understanding Climate Change; Green House Gases and Global Warming; Global Climatic Assessment- IPCC.	15	1
III	Impact of Climate Change: Agriculture and Water; Flora and Fauna; Human Health Adaptation and Mitigation: Global Initiatives with Particular Reference to South Asia. National Action Plan on Climate Change; Local Institutions (Urban Local Bodies, Panchayats)	15	1
IV	A Mini Project Report based on any one field based case studies among following disasters and preparedness plan of the Government or respective college or locality: 1. Flood, 2. Drought, 3. Cyclone and Hailstorms 4. Earthquake, 5. Landslides, 6. Human Induced Disasters: Fire Hazards, Chemical, Industrial accidents.	15	1
	<b>TOTAL</b>	<b>60</b>	<b>04</b>

**Weightage of marks: ISA 20 + SEE 80**

**Total= 100.**

**Instructions**

1. Thrust may kindly be given to draw national and regional examples by the teachers.
2. Field orientation should be attempted by the teachers and the Institutions for verifying ground truths.
3. The data should be updated by referring to journals, newspapers, websites and other relevant materials.
4. Questions should be set with due weightages to all the units as specified above or by Goa University.



**THREE YEARS GENERAL AND HONOURS DEGREE PROGRAMME**  
 (Goa University Choice Based Credit System)  
**GEOGRAPHY SKILL ENHANCEMENT COURSE GPSEC-II w.e.f. 2018-19**  
**APPLIED TRAVEL AND TOURISM OPERATION IN GEOGRAPHY**  
**(WITH A MINI PROJECT)**  
**S. Y. B. A. / B. SC. / B. COM.**  
**SEMESTER IV**

**COURSE CREDITS: 04**

**Total Lectures: 60 Lectures of 1 Hour Each.**

**COURSE OBJECTIVES:** The main objective of this skill based paper is to enable the students to apply the fundamental knowledge of travel and tourism operation gained earlier for management and operation in an efficient way. It is to develop preparedness amongst the students as employees or self employed youths in the Society.

**LEARNING OUTCOMES:** At the end of this skill based training course, the students will be able to be dedicated employees in travel and tourism operation sector. The students will become trained and moral citizen to use their skill. Finally the students will acquire confidence of taking up part time or full time jobs to help their family.

UNIT NO.	COURSE CONTENT	MARKS WEIGHTAGE	TEACHING PERIODS
I	Infrastructure and support system in travel and tour operation Accommodation and supplementary accommodation, travel agencies and tour operators, tour planning, role of guides.	25	15
II	Application of Travel and Tourism Operation Skills through Geographical Networking and Geographical Tools (Maps, Atlases, Satellite Images) Identifying the areas of Interest, Identifying Places of Interest Budget of the Tourists, Suitable seasons for tourism Feasibility in terms of availability of tickets and accommodation,	25	15
III	Identification and liaisoning of Agency or Institution (Tourism Dept., Tourism Corporation, tour or travel agency, enterprenure, company etc.). At least 30 hours Duration of Training Programme for skill development and hands on working experience partly supervised by the teacher or Trainer and certified by the Authority of the agency or Instition of training. Training could be individual or Group of not more than 4 to 5.	25	15
IV	A Mini Project Report based on field based work experience under the joint guidance and certification of the Trainer and the Teacher to be submitted by 15 <sup>th</sup> March. Conduct of a Viva-Voce or Presentation and submission of Marks by 31 <sup>st</sup> March. <b>Allotment of Marks (50):</b> Attendance in the Training (15) + Discipline, Dedication, Atticates and Skill / Efficiency during the Training (15) + Training Report of 10-20 pgs (15) + Viva-Voce / Presentation (10).	25	15
	<b>TOTAL</b>	<b>100</b>	<b>60</b>

**Weightage of marks: ISA (Unit I & II) 10 + SEE 40 Training and Report (50) Total= 100. Credit: 4**

**Instructions**

1. Thrust should be given to application at international, national and regional levels by the teachers.
2. Field orientation is the main focuss, which should be attempted by the students during vacations or non teaching hours. The concerned Institutions should be approached either by students or by teachers or colleges for the hands on training for the students. Periodic checking by the teacher/s is desirable.
3. The information should be updated by referring journals, newspapers, websites and other relevant materials.
4. Questions should be set with due weightages to all the units as specified above or by Goa University.

**Reading List**

1. Dhar, P.N. (2006) International Tourism: Emerging Challenges and Future Prospects. Kanishka, New Delhi.
2. Hall, M. & Stephen, P. (2006): Geog. of Tourism & Recreation-Environment, Place & Space, Routledge, London.
3. Kamra, K. K. & Chand, M. (2007) Basics of Tourism: Theory, Operation and Practise, Kanishka Publishers, Pune.
4. Page, S. J. (2011) Tourism Management: An Introduction, Butterworth-Heinemann- USA. Chapter 2.
5. Raj, R. and Nigel, D. (2007) Morpeth Religious Tourism and Pilgrimage Festivals Management: An International perspective by, CABI, Cambridge, USA, www.cabi.org.



Goa University  
Choice Based Credit System  
**THREE YEARS B. A. GENERAL AND HONOURS DEGREE PROGRAMME**  
**GEC105: Physical Geography**  
**Geography Core Course (Theory)**  
**B. A. SEMESTER-V**

**Course Credits: 03    Total Contact Hours: 45 Lectures of 1 Hour Duration each.**

**Course Objectives:** This is an introductory paper which is intended to acquaint the students with basics concepts in physical Geography.

**Learning Outcomes:** At the end of this course students will be able to gain knowledge and about physical Geography.

Units	Course Content	Contact Hours	Credits
I	<b>Concept and Nature of Physical Geography:</b> Introduction to physical geography Meaning, Definitions, Nature and Scope of Physical Geography Branches of Physical Geography( Geomorphology, Climatology, Oceanography, Soil Geography and Bio geography)	15	1
II	<b>Earth Systems I:</b> Earth and its Structure: Internal Structure of Earth based on Temperature, Density, Pressure & Seismic evidences. Formation and classification of Rocks Folds Faults its origin and type Earthquakes; Volcanoes and Associated Landforms	15	1
III	<b>Earth Systems II:</b> Sun as A source of Energy: Insolation, Factors affecting , Global Heat Budget/ Balance Global Warming, Climate change and its impacts Climate Change: Causes and Evidences, Land use change and climate. and its application in agriculture, health and disaster risk reduction Oceans: Study of Relief & Configuration of Pacific, Atlantic & Indian Ocean. Biosphere: Concepts, ecosystem and their types & world hotspots	15	1
	<b>Total</b>	45	03

**Weightage of Marks: I. S. A: 15 + S. E. E.: 60**

**Total= 75.**

**References:**



Goa University  
Choice Based Credit System  
**THREE YEARS B. A. GENERAL AND HONOURS DEGREE PROGRAMME**  
**GED102: Physical Geography of India**  
**Discipline Specific Elective in Geography (Theory)**  
**B. A. SEMESTER-V**

**Course Credits: 03**

**Total Contact Hours: 45 Lectures of 1 Hour Duration each.**

**Course Objectives:** The course provides the basic understanding of India in a brief but adequate manner.

**Learning outcomes:** At the end of this course, students are expected to have an understanding of the inter linkages and interaction between physical aspects and resource base of India.

Units	Course Content	Contact Hours	Credits
I	<b>Introduction, Location, Extent and Geo-Political significance:</b> Location and extent Relationship with Neighboring countries Geo- Political importance of Indian Ocean  <b>Major Physiographic regions and their importance:</b> The Northern mountains The Northern plain Peninsular plateau The Coastal lowlands Islands	15	1
II	<b>The Himalayan Drainage System of India:</b> The Indus The Ganga The Bramhaputra.  <b>The Peninsular River system:</b> East flowing Rivers: Mahanadi, Krishna & Cauvery West flowing Rivers: Narmada, Tapi and Mahi Rivers of Sahyadri: Mandovi and Zuari  <b>Water Resource Development:</b> multipurpose projects, inland waterways plan	15	1
III	<b>Climatic characteristics, Origin and Mechanism of Monsoons and Various Seasons:</b> Characteristics of Indian Climate Role of various controlling factors on climate of India Monsoons: Origin and Mechanism Various seasons and weather associated with them.  <b>Natural Resources:</b> Soil, Forest, Mineral, Power Production Mineral and power resources distribution and utilization: iron ore, coal, petroleum, gas.	15	1



Goa University  
Choice Based Credit System  
**THREE YEARS B. A. GENERAL & HONOURS DEGREE PROGRAMME**  
**GED103: Climate Change: Vulnerability and Adaptations**  
**DISCIPLINE SPECIFIC ELECTIVE IN GEOGRAPHY (THEORY)**  
**B. A. SEMESTER-V**

**Course Credits: 04**

**Total Contact Hours: 60 Lectures of 1 Hour Each**

**Course Objectives:** The course content allows students who need to acquaint with a different presentation of Earth Science than they have seen/perceived in the class. It supplements the classroom teaching and experiences.

**Learning Outcomes:** Since important connections of natural surroundings are lost in the dry facts and abstract concepts the discussion with example orientation will give the reader a complete knowledge.

Ultimately a firm grasp of the concepts of how and why our world works makes us partners in a relationship with nature as we are all immersed in every day as we are neither foreign objects or subjects rather than victims of it.

Units	Course Content	Contact Hours	Credits
I	<b>The science of climate change:</b> Origin, scope and trends Climate change with reference to the geological time scale <b>The science of climate change</b> The nature–man dichotomy Greenhouse gases and Global warming Electromagnetic spectrum, atmospheric window, heat balance of the earth	15	1
II	<b>Global climatic assessment:</b> IPCC reports <b>Climate change and vulnerability:</b> Physical; economic and social <b>Impact of climate change:</b> Agriculture and water; flora and fauna; human health and morbidity	15	1
III	<b>Global initiatives to climate change mitigation:</b> Kyoto Protocol, carbon trading, clean development mechanism, COP, climate fund Climate change vulnerability assessment and adaptive strategies with particular reference to South Asia	15	1
IV.	<b>National Action Plan on climate change:</b> Role of urban local bodies, panchayats and educational institutions on climate change mitigation Awareness and action programmes	15	1
	Total	60	04

**Weightage: I.S.A: 20 + S.E.E: 80 Total= 100**

**References**



Goa University  
Choice Based Credit System  
**THREE YEARS B. A. GENERAL & HONOURS DEGREE PROGRAMME**  
**GED107: Biogeography**  
**Discipline Specific Elective in Geography (Theory)**  
**B. A. SEMESTER-VI**

**Course Credits: 04**

**Total Contact Hours: 60 Lectures of 1 Hour Duration each.**

**Course Objectives:** The course provides the understanding of basic concepts in biogeography with reference to spatial and temporal patterns of biodiversity.

**Learning Outcomes:** At the end of the course students will understand and appreciate the basic concepts in biogeography and biodiversity.

Units	Course Content	Contact Hours	Credits
I	Introduction to Biogeography: Definitions of Biosphere and Biogeography, Concepts of Biogeography, Meaning of Ecology, Ecosystem, Environment, Ecotone, Communities, Habitats, Niche, Biotopes and Biomes.	15	1
II	<b>Biosphere and Energy:</b> Energy Sources, Laws of Energy Exchange, Food Chains and Flow of Energy. Factors of Plant Ecology: Light, Heat, Moisture, Wind and Topography. Bio-geochemical cycles with special reference to carbon dioxide and nitrogen	15	1
III	<b>Impact of Climate and Soil on Distribution of Flora and Fauna.</b> Biomes: Geographical extent, characteristic features of Tropical Rainforest and Temperate Grassland. Bio-Climatic Regions in India and their Characteristics.	15	1
IV	<b>Wildlife Conservation in India: Projects and their Importance with Special Reference to Tiger and Crocodile.</b> Biodiversity and its Importance with reference to Western Ghat	15	1
	Total	60	04

**Weightage: I.S.A: 20 + S.E.E: 80 Total= 100**

References:

1. Bhattacharyya, N.N.: Biogeography, Rajesh Publications, New Delhi.
2. Chapman J.L., Rens, M.J.,(1993): Ecology: Principle and Applications, Cambridge University Press, Cambridge.





**Goa University**  
**Programme : T.Y. B. A. Marathi (BA)**  
**DSC Course : MRC 105**

**Title of the course: प्राचीन मराठी वाङ्मयाचा इतिहास (भाग १)**

**Sem. V No. of credits: 4 (60 hours)**

**Effective from academic year 2019-20**

<b>Prerequisites for the course</b> विषयाची पार्श्वभूमी	प्राचीन मराठी साहित्याचा इतिहास अभ्यासणे. प्राचीन मराठी साहित्यातील महत्त्वाचे कवी अभ्यासणे.
<b>Objective</b> उद्दिष्टे	<ol style="list-style-type: none"> <li>१. मराठी भाषेची उत्पत्ती, परंपरा व तिचा होत गेलेला विकास याविषयी विद्यार्थ्यांचे संबोधन.</li> <li>२. मराठी भाषेतील प्राचीन शिलालेख आणि ताम्रपट यांचा परिचय करून देणे.</li> <li>३. प्राचीन वाङ्मयाच्या निर्मिती मागची कारणे व प्रेरणा यांची विद्यार्थ्यांना जाणीव देणे.</li> <li>४. मराठी भाषेतील लिखित वाङ्मयाची निर्मिती व त्यात होत गेलेले बदल, निर्माण झालेले विविध संप्रदाय व त्यांनी निर्माण केलेले वाङ्मयाचे स्वरूप विद्यार्थ्यांना लक्षात आणून देणे.</li> <li>५. प्राचीन काळातील महत्त्वाच्या लेखकांचा परिचय देणे व त्यांनी केलेल्या वाङ्मयीन कार्याची महत्ता विद्यार्थ्यांना सांगणे.</li> </ol>
<b>Content</b> अभ्यासक्रम	<p>प्रथम श्रेयांकन : मराठी भाषेची उत्पत्ती व विकास, मराठी भाषेचे लिखित स्वरूप, नाथ संप्रदाय (गोरक्षनाथ, मुकुंदराज), महानुभव संप्रदाय (तत्त्वज्ञान, आचारधर्म, चरित्रग्रंथ, सूत्रपाठ, दृष्टांतपाठ, धवळे, सातीग्रंथ)</p> <p>द्वितीय श्रेयांकन : वारकरी संप्रदाय (ज्ञानेश्वर, नामदेव, संतमेळा, एकनाथ आणि तुकाराम)</p> <p>तृतीय श्रेयांकन : दत्त संप्रदाय व समर्थ संप्रदाय (संत रामदास)</p> <p>चतुर्थ श्रेयांकन : तुकारामांचे निवडक १०० अभाग, संपा. श्री. म. पिंगे., गजमल माळी, व्हिनस प्रकाशन, पुणे.</p>
<b>Pedagogy</b> अध्यापन पद्धती	व्याख्यान, स्वाध्याय, स्व-अध्ययन, दृक्-श्राव्य प्रस्तुतीकरण.





## Goa University

Programme : T.Y. B. A. Marathi (BA)

DSE Course : MRD 101

Title of the course : गोमंतकीय मराठी वाङ्मयाची सांस्कृतिक पार्श्वभूमी

Sem. V

No. of credits: 4

(60 hours)

Effective from academic year 2019-20

Prerequisites for the course विषयाची पार्श्वभूमी	गोमंतकीय मराठी संस्कृतीचा इतिहास, साहित्यातील महत्वाचे टप्पे, सामाजिक, सांस्कृतिक राजकीय संदर्भ व त्याचे परिणाम लक्षात घेणे
Objective उद्दिष्टे	पोर्तुगीजपूर्व गोमंतकीय मराठी संस्कृतीचा परिचय विद्यार्थ्यांना करून देणे. गोमंतकातील मौर्य, चालुक्य, भोज, शिलाहार, कदंब, यादव यां राजवटीचा परिणाम विद्यार्थ्यांच्या लक्षात आणून देणे. पोर्तुगीजांच्या राजवटीचा गोमंतकीय जनजीवनावर झालेला परिणाम व त्याचा साहित्य निर्मितीवरील परिणाम विद्यार्थ्यांना सांगणे पोर्तुगीजकालीन मराठी साहित्याचा विद्यार्थ्यांना परिचय करून देणे
Content अभ्यासक्रम	प्रथम श्रेयांकन : पोर्तुगीजपूर्व गोमंतकीय संस्कृती (मौर्य, चालुक्य, भोज, शिलाहार, कदंब, यादव यां गोमंतकातील राजवटींचा परिचय) (आदीम संस्कृती ते पोर्तुगीजांचे आक्रमण) द्वितीय श्रेयांकन : गोमंतकातील समाज व संस्कृती यांवरील पोर्तुगीज राजवटीचे परिणाम, पोर्तुगीजकालीन साहित्यनिर्मिती तृतीय श्रेयांकन : विसाव्या शतकाचा प्रारंभ ते गोवामुक्तीपर्यंतची सामाजिक, सांस्कृतिक, राजकीय व साहित्यिक स्थिती चतुर्थ श्रेयांकन : 'भारत'कार हेगडे देसाई यांचे निवडक अग्रलेख खंड १ संपा. शशीकांत नावेंकर, भारतकार हेगडे देसाई, प्रतिष्ठान, केपे गोवा.
Pedagogy अध्यापन पद्धती	व्याख्यान, स्वाध्याय, स्व-अध्ययन, दृक्-श्राव्य प्रस्तुतीकरण.





## Goa University

Programme : T.Y. B. A. Marathi (BA)

DSE Course : MRD 103

Title of the course: प्रसार माध्यमांसाठी लेखन कौशल्य

Sem. V

No. of credits: 4

(60 hours)

Effective from academic year 2019-20

<b>Prerequisites for the course</b> विषयाची पार्श्वभूमी	१. दृक्-श्राव्य माध्यमांसाठी लेखन कौशल्य २. परीक्षणाचे महत्त्व लक्षात येणे. ३. विविध संपादकीय कार्याचा परिचय होणे.
<b>Objective</b> उद्दिष्टे	१. प्रसारमाध्यमांची व्यापकता, विविध प्रसारमाध्यमे व त्यांच्यासाठी लेखन कसे केले जाते हे विद्यार्थ्यांना समजेल. २. संपादन कार्याचा परिचय होईल.
<b>Content</b> अभ्यासक्रम	प्रथम श्रेयांकन : पटकथा लेखन, (चित्रमालिका, वेब सिरिज) द्वितीय श्रेयांकन : माहितीपट लेखन तृतीय श्रेयांकन : ग्रंथपरीक्षण, नाट्य परीक्षण, चित्रपट परीक्षण चतुर्थ श्रेयांकन : संपादन कौशल्य
<b>Pedagogy</b> अध्यापन पद्धती	व्याख्यान, स्वाध्याय, स्व-अध्ययन, दृक्-श्राव्य प्रस्तुतीकरण.





## Goa University

Programme : T.Y. B. A. Marathi (BA)

DSC Course: MRC 106

Title of the course: प्राचीन मराठी वाङ्मयाचा इतिहास (भाग २)

Sem. VI

No. of credits: 4

(60 hours)

Effective from academic year 2019-20

Prerequisites for the course विषयाची पार्श्वभूमी	प्राचीन मराठी साहित्यातील महत्वाच्या टप्प्यांचा परिचय
Objective उद्दिष्टे	<ol style="list-style-type: none"> <li>१. मराठी भाषेचा कालानुक्रमे होत गेलेला विकास याविषयी विद्यार्थ्यांचे संबोधन.</li> <li>२. प्राचीन वाङ्मयाच्या निर्मिती मागची कारणे व प्रेरणा यांची विद्यार्थ्यांना जाणीव देणे.</li> <li>३. मराठी भाषेतील पंडिती साहित्य, शाहिरी कविता आणि बखर वाङ्मयाचे स्वरूप विद्यार्थ्यांना लक्षात आणून देणे.</li> <li>१. गोमंतकातील मराठी भाषेतील प्राचीन शिलालेख, ताम्रपट, टके, झुलवे यांची माहिती करून देणे.</li> <li>२. गोमंतकातील प्राचीन मराठी ग्रंथपरंपरा, संतसाहित्य आणि ख्रिस्ती मराठी साहित्य यांचा परिचय करून देणे.</li> </ol>
Content अभ्यासक्रम	<p>प्रथम श्रेयांकन : पंडिती काव्याचे स्वरूप व वैशिष्ट्ये (मुक्तेश्वर, वामनपंडित, श्रीधर, मोरोपंत, नागेश, सामराज, विठ्ठल, रघुनाथपंडित, आनंदतनय)</p> <p>द्वितीय श्रेयांकन : शाहिरी कविता: स्वरूप व प्रकार, लावणी व पोवाडा (अनंत फंदी, रामजोशी, सगनभाऊ, होनाजी बाळा, प्रभाकर आणि परशुराम)</p> <p>बखर वाङ्मय : शिवपूर्वकालीन बखरी, शिवकालीन, पेशवेकालीन बखरी.</p> <p>तृतीय श्रेयांकन : प्राचीन गोमंतकीय मराठी वाङ्मय (शिलालेख, ताम्रपट, टका, शमीपत्र, झुला)</p> <p>प्रारंभीचे गोमंतकीय मराठी वाङ्मय. (कृष्णदास शामा, ज्ञानदेव, निवृत्ती, पूर्णप्रकाशानंद, सोहिरोबानाथ आंबिये, विठ्ठल केरीकर, कृष्णभट्ट बांदकर)</p> <p>ख्रिस्ती मराठी वाङ्मय (फादर थोमस स्टीफन्स, एतियेन —द— ला क्रुवा, आतोनियो द साल्दाज)</p> <p>चतुर्थ श्रेयांकन : आज्ञापत्र— संपा. विलास खोले, साहित्य परिषद केंद्र, नागपूर.</p>
Pedagogy अध्यापन पद्धती	व्याख्यान, स्वाध्याय, स्व-अध्ययन, दृक्-श्राव्य प्रस्तुतीकरण.





## Goa University

Programme : T.Y. B. A. Marathi(BA)

DSE Course : MRD 105

Title of the course : एका लेखकाचा अभ्यास

Sem. VI No. of credits: 4 (60 hours)

Effective from academic year 2019-20

<b>Prerequisites for the course</b> विषयाची पार्श्वभूमी	एकूण मराठी साहित्याच्या पार्श्वभूमीवर एका विशिष्ट लेखकाच्या साहित्य कृतींचा सखोल चिकित्सात्मक अभ्यास करण्याची आवश्यकता.
<b>Objective</b> उद्दिष्टे	मध्यवर्ती मराठी साहित्याच्या तुलनेत गोमंतकीय साहित्याचे स्वरूप पडताळणे
<b>Content</b> अभ्यासक्रम	प्रथम श्रेयांकन : चांदणवेल (कविता संग्रह) संपादक — कुसुमाग्रज द्वितीय श्रेयांकन : भावीण — बा. भ. बोरकर तृतीय श्रेयांकन : समुद्र काठची रात्र — बा. भ. बोरकर चतुर्थ श्रेयांकन : घुमटावरले पारवे — बा. भ. बोरकर
<b>Pedagogy</b> अध्यापन पध्दती	व्याख्यान, स्वाध्याय, स्व-अध्ययन, दृक्-श्राव्य प्रस्तुतीकरण.

<b>References / reading</b> संदर्भ/संदर्भग्रंथ	<ol style="list-style-type: none"> <li>1- सरदेसाई, मनोहर, बा.भ. बोरकर, व्यक्ती आणि वाङ् मय, गोमंतक मराठी अकादमी, गोवा.</li> <li>2- गणोरकर, प्रभा, बाळकृष्ण भगवंत बोरकर, साहित्य अकादमी, नवी दिल्ली, १९९०.</li> <li>3- कुलकर्णी, व.दि., पोण्ट बोरकर, पद्मगंधा प्रकाशन, पुणे, २००१.</li> <li>4- सावदेकर, आशा, बा.भ. बोरकर यांच्या कवितेची पृथगात्मकता, पद्मगंधा प्रकाशन, पुणे, २००८.</li> <li>5- रसीळ, सुधीर. १९८२, मुंबई, मौज प्रकाशन, कविता आणि प्रतिमा,</li> <li>6- रेगे, पुरुषोत्तम शिवराम. १९६८, मुंबई, मौज प्रकाशन, छांदसी,</li> <li>7- धायगुडे, सुरेशमाश्रवात्य साहित्यशास्त्र, : सिध्दांत व संकल्पनानिर्भय, १९९०, पुणे, प्रकाशन</li> <li>8- धोंगडे, रमेश. २००६, पुणे, दिलीपराज प्रकाशन, मराठी भाषा आणि शैली,</li> <li>9- गोमंतकिय मराठी वाङ् मयाचा इतिहास, २ खंड, गोमंतक मराठी अकादमी, गोवा</li> </ol>
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## Goa University

Programme : T.Y. B. A. Marathi (Honours)

DSC Course : MRC 106

Title of the course : मराठी व्याकरण

Sem. V

No. of credits: 4

(60 hours)

Effective from academic year 2019-20

<b>Prerequisites for the course</b> विषयाची पार्श्वभूमी	भाषेतील अत्यंत महत्वाचा घटक असणाऱ्या व्याकरण या घटकाचे महत्त्व सांगून त्याचे उपयोजन कसे केले जाते हे शास्त्रीयदृष्ट्या सांगणे.
<b>Objective</b> उद्दिष्टे	१. भाषेतील व्याकरणाचे महत्त्व विषद करणे. २. व्याकरणातील वर्णांचे महत्त्व विद्यार्थ्यांना सांगणे. ३. मराठीतील शब्दांच्या जातीचा विद्यार्थ्यांना परिचय करून देणे ४. मराठीतील वाक्य विकरण विचार विद्यार्थ्यांना स्पष्ट करणे .
<b>Content</b> अभ्यासक्रम <b>MRC 108</b> <b>VI Unite</b>	प्रथम श्रेयांकन : अ. भाषाशास्त्र आणि व्याकरण परस्परसंबंध, ब. मराठी वर्णविचार आणि वर्गीकरण द्वितीय श्रेयांकन : संधी विचार (संधीचे प्रकार) तृतीय श्रेयांकन : शब्दविचार (शब्दांच्या जाती, साधीत शब्द आणि समास) चतुर्थ श्रेयांकन : शब्दविकरण विचार अ. लिंग, वचन आणि विभक्ती ब. प्रयोगविचार
<b>Pedagogy</b> अध्यापन पध्दती	व्याख्यान, गट चर्चा, स्वाध्याय, स्व-अध्ययन, दृक्-श्राव्य प्रस्तुतीकरण.

<b>References / reading</b> संदर्भ/संदर्भग्रंथ	१. वाळंबे, मो.रा, सुगम मराठी व्याकरण, नितिन प्रकाशन, पुणे. २. जोशी, चंद्रहास, मराठी लेखन दर्शन, मेहता पब्लिकेशन हाऊस, पुणे. ३. मराठी भाषा उगम आणि विकास, मेहता पब्लिकेशन हाऊस, पुणे. ४. केळकर, ग. ह. मराठी व्याकरण, ५. गोविलकर, लीला, मराठीचे व्याकरण, मेहता पब्लिकेशन हाऊस, पुणे. ६. आचार्य मा.ना, मराठी व्याकरणविवेक, संजय प्रकाशन, पुणे.
<b>Learning outcome</b> शैक्षणिक फलित	१. मराठी भाषा व व्याकरण यांच्यातील परस्पर संबंधांची जाणीव विद्यार्थ्यांना होईल. २. मराठीतील वर्णव्यवस्था समजेल. ३. शब्दांच्या जातीची ओळख होईल. ४. उच्चारण व लेखनातील व्याकरणीक महत्त्व लक्षात येईल.





## Goa University

Programme : T.Y. B. A. Marathi(Honours)

DSE Course: MRD 102

Title of the course : साठोत्तरी मराठी साहित्यातील प्रवृत्ती व प्रवाह

Sem. V

No. of credits: 4

(60 hours)

Effective from academic year 2019-20

<b>Prerequisites for the course</b> विषयाची पार्श्वभूमी	मराठी साहित्याच्या इतिहासाच्या पार्श्वभूमीवर साठोत्तरी मराठी साहित्य निर्मितीच्या प्रेरणा व त्यातील प्रवाह समजून घेणे. साहित्यिक क्षेत्रात घडणारी स्थित्यंतरे विद्यार्थ्यांना निर्देशित करणे.
<b>Objective</b> उद्दिष्टे	१. बदलत जाणाऱ्या साहित्याचे स्वरूप लक्षात आणून देणे. २. साहित्यातील कालसापेक्षता विद्यार्थ्यांच्या लक्षात आणून देणे. ३. साठोत्तरी मराठी साहित्यातील महत्वाच्या लेखकांचा व त्यांच्या साहित्यकृतींचा परिचय करून देणे.
<b>Content</b> अभ्यासक्रम	प्रथम श्रेयांकन : साठोत्तरी साहित्याचे स्वरूप द्वितीय श्रेयांकन : साठोत्तरी कविता आणि आत्मकथन यांची वैशिष्ट्ये तृतीय श्रेयांकन : सनद — नारायण सुर्वे (कविता संग्रह) चतुर्थ श्रेयांकन : आयदान — उर्मिला पवार आत्मकथन
<b>Pedagogy</b> अध्यापन पद्धती	व्याख्यान, स्वाध्याय, स्व-अध्ययन, दृक्-श्राव्य प्रस्तुतीकरण.

<b>References / reading</b> संदर्भ/संदर्भग्रंथ	<ol style="list-style-type: none"> <li>खोले, विलास. २०११, मुंबई, लोकवाङ् मय गृहअर्धशतकातील मराठी कांदवरी,</li> <li>देशपांडे, केजकर प्रकाश, स्वरूप प्रकाशन आधुनिक मराठी कविता: एक विश्लेषण, २०१२, औरंगाबाद</li> <li>पवार, गो, (संपा) .दहातकणंगलेकर म. व .मा. मराठी कादंबरी: प्रेरणा व स्वरूप, पॉप्युलर प्रकाशन. १९८६, मुंबई,</li> <li>देशपांडे, विमेहता पब्लिशिंग मराठी भाषा आणि साहित्य, तावरे स्नेहल .भा. १९९०, पुणे, हाऊस</li> <li>समकालिन मराठी साहित्यि कुलकर्णी अभिनंदन ग्रंथ .द -</li> <li>कुलकर्णी, दा ., वी. मराठी कथा स्वरूप आणि आस्वाद, पुणे, स्वाध्याय प्रकाशन, १९८४</li> </ol>
<b>Learning outcome</b> शैक्षणिक फलित	<ol style="list-style-type: none"> <li>साठोत्तरी मराठी साहित्याचे स्वरूप विद्यार्थ्यांना समजेल.</li> <li>साठोत्तरी मराठी साहित्यकृतींचा विद्यार्थ्यांना परिचय होईल.</li> </ol>





**Goa University**  
**Programme : T.Y. B. A. Marathi(Honours)**  
**DSC Course: MRC 110**

**Title of the course : साहित्यसमीक्षा**

**Sem. VI                      No. of credits: 4                      (60 hours)**  
**Effective from academic year 2019-20**

<b>Prerequisites for the course</b> विषयाची पार्श्वभूमी	१. साहित्यक्षेत्रातील समीक्षा या संकल्पनेचा परिचय व उपयोजित स्वरूपात ओळख करून देऊन प्रत्यक्ष उपयोजन करणे.
<b>Objective</b> उद्दिष्टे	१. समीक्षा ही संकल्पना व समीक्षेचे विविध घटक यांचा परिचय विद्यार्थ्यांना होईल. २. समीक्षेचे विविध दृष्टीकोन व त्यांची आवश्यकता विद्यार्थ्यांना समजेल. ३. विविध समीक्षात्मक दृष्टिकोनाचे उपयोजन कसे करावे याची जाण विद्यार्थ्यांना येईल.
<b>Content</b> अभ्यासक्रम	प्रथम श्रेयांकन : सौंदर्यशोध द्वितीय श्रेयांकन : विवेचन, करुण रसविचार तृतीय श्रेयांकन : साहित्य समीक्षेचे स्वरूप व विविध पद्धती (आस्वादक, समाजशास्त्रीय, मानसशास्त्रीय, स्त्रीवादी) चतुर्थ श्रेयांकन : समीक्षापद्धतीचे उपयोजन पाठ्यपुस्तकाच्या आधारे
<b>Pedagogy</b> अध्यापन पद्धती	व्याख्यान, स्वाध्याय, स्व-अध्ययन, दृक्-श्राव्य प्रस्तुतीकरण.

<b>References / reading</b> संदर्भ/संदर्भग्रंथ	१. मर्ढेकर, बा. सी., सौंदर्य आणि साहित्य, मौज प्रकाशन, २. पाटणकर, रा. भा., सौंदर्य मीमांसा, ३. जोग रा.श्री, अभिनव काव्यप्रकाश, व्हिनस प्रकाशन, पुणे. ४. गाडगीळ स. रा, काव्यशास्त्र प्रदीप, व्हिनस प्रकाशन, पुणे. ५. कुळकर्णी वा.ल, साहित्य स्वरूप आणि समीक्षा, पॉप्युलर प्रकाशन, मुंबई. ६. देशपांडे, कुसुमावती, पासंग, आ. दुसरी ७. पाटील गंगाधर, समीक्षेची नवी रूपे, मॅजेस्टिक प्रकाशन, पुणे. ८. कंगले र.पं, प्राचीन काव्यशास्त्र, मौज प्रकाशन, मुंबई. ९. कंगले र.पं, रसविभावविचार (अनुवादित), म.रा.सा.सं.मंडळ, मुंबई १०. जोशी लक्ष्मणशास्त्री, आधुनिक मराठी साहित्याचा इतिहास आणि रससिद्धान्त, व्हिनस प्रकाशन, पुणे.
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## Goa University

Programme : T.Y. B. A. Marathi(Honours)

DSE Course: MRD 106

Title of the course : मराठी साहित्य प्रकारांचा अभ्यास : कादंबरी आणि नाटक

Sem. V

No. of credits: 4

(60 hours)

Effective from academic year 2019-20

<b>Prerequisites for the course</b> विषयाची पार्श्वभूमी	मराठी साहित्याच्या इतिहासाच्या पार्श्वभूमीवर मराठी साहित्य निर्मितीच्या प्रेरणा व त्यातील प्रवाह समजून घेणे. साहित्यिक क्षेत्रात घडणारी स्थित्यंतरे विद्यार्थ्यांना निर्देशित करणे.
<b>Objective</b> उद्दिष्टे	१. बदलत जाणाऱ्या साहित्याचे स्वरूप लक्षात आणून देणे. २. साहित्यातील कालसापेक्षता विद्यार्थ्यांच्या लक्षात आणून देणे. ३. मराठी साहित्यातील महत्त्वाच्या लेखकांचा व त्यांच्या साहित्यकृतींचा परिचय करून देणे.
<b>Content</b> अभ्यासक्रम	प्रथम श्रेयांकन : कादंबरी आणि नाटक या साहित्य प्रकारांचे स्वरूप द्वितीय श्रेयांकन : कादंबरी आणि नाटक यांची वैशिष्ट्ये तृतीय श्रेयांकन : गणूराया आणि चानी — चि. त्रयं. खानोलकर चतुर्थ श्रेयांकन : शोभायात्रा — शफाअत खान
<b>Pedagogy</b> अध्यापन पद्धती	व्याख्यान, स्वाध्याय, स्व-अध्ययन, दृक्-श्राव्य प्रस्तुतीकरण.

<b>References / reading</b> संदर्भ/संदर्भग्रंथ	1- खोले, विलास. २०११, मुंबई, लोकवाङ् मय गृहप्रार्थनाशतकातील मराठी कादंबरी, 2- पवार, गो. (संपा) . दहातकणंगलेकर म. व. मा. मराठी कादंबरी: प्रेरणा व स्वरूप पॉप्युलर प्रकाशन १९८६, मुंबई, 3- देशपांडे, विमेहता पब्लिशिंग मराठी भाषा आणि साहित्य, व तावरे स्नेहल. भा. पुणे, हाऊस १९९० 4- समकालिन मराठी साहित्यीक कुलकर्णी अभिनंदन ग्रंथ . द -
<b>Learning outcome</b> शैक्षणिक फलित	मराठी साहित्याचे स्वरूप विद्यार्थ्यांना समजेल. मराठी साहित्यकृतींचा विद्यार्थ्यांना परिचय होईल.



**Title of the course: साहित्य सिद्धांत**  
**(Theory of Literature)**

Course code: MAR-502

Number of credits: 4      Number of hours: 60

Effective from AY: 2022-2023

आवश्यकता :	साहित्यशास्त्राला फार प्राचीन व श्रेष्ठ अशी परंपरा लाभलेली आहे. या परंपरेत जे साहित्यशास्त्रीय सिद्धांत मांडले आहेत, त्या सिद्धांतासंबंधीच्या मूलभूत प्रश्नांचे आकलन विद्यार्थ्यांना करून देऊन साहित्याचा अभ्यास अधिक समृद्ध करण्यासाठी या अभ्यासक्रमाची आवश्यकता आहे.	
उद्दिष्टे :	साहित्य सिद्धांतांच्या ह्या अभ्यासक्रमाचे महत्त्व म्हणजे वेगवेगळ्या सिद्धांतांचे, संकल्पनेचे आणि साहित्य सिद्धांत विषयक विचारांचे परिष्कृत रूप विद्यार्थ्यांना सूत्ररूपाने समजावून देणे.	
अभ्यासक्रम :	<p>श्रेयांकन 1: साहित्याची प्रकृती</p> <p>I. ललित व ललितेतर साहित्य</p> <p>II. साहित्यकृतीतील कलात्मकता व रंजकता</p> <p>III. साहित्यनिर्मिती व आस्वाद यांतील कल्पनाशक्तीचे कार्य</p> <p>IV. भावनाजागृती सिद्धांत, कॅथार्सिस व प्रेरणा संतुलनाचा सिद्धांत व रससिद्धांत</p> <p>श्रेयांकन 2: साहित्याचे प्रयोजन</p> <p>I. भारतीय प्रयोजने</p> <p>II. पाश्चात्य प्रयोजने</p> <p>श्रेयांकन 3: साहित्यातील प्रवृत्ती व विचारसरणी</p> <p>I. अभिजातवाद</p> <p>II. सौंदर्यवाद</p> <p>III. वास्तववाद</p> <p>IV. अतिवास्तववाद</p> <p>V. अस्तित्ववाद</p> <p>VI. आधुनिकतावाद</p> <p>श्रेयांकन 4 : साहित्याचे मूल्यमापन</p>	<p>तासिका</p> <p>३</p> <p>३</p> <p>३</p> <p>६</p> <p>७</p> <p>८</p> <p>२</p> <p>३</p> <p>२</p> <p>२</p> <p>४</p> <p>२</p> <p>१५</p> <p>एकूण ६०</p>
अध्यापन पद्धती :	व्याख्याने, चर्चासत्र, स्वाध्याय, पावर पॉइन्ट सादरीकरण इत्यादी.	
शैक्षणिक फलित :	<p>१. साहित्याच्या संदर्भात सौंदर्याची संकल्पना विद्यार्थ्यांना स्पष्ट होईल.</p> <p>२. वेगवेगळ्या साहित्य सिद्धांतांचे (भारतीय व पाश्चात्य) स्वरूप विद्यार्थ्यांना समजेल.</p> <p>३. विद्यार्थ्यांना साहित्याची संकल्पना नेमकेपणाने स्पष्ट होईल.</p> <p>४. वाङ्मयातील 'वाद' संकल्पना लक्षात येईल व त्या आधारे साहित्याचे मूल्यमापन करण्याची दृष्टी विकसित होईल.</p>	
संदर्भ ग्रंथ :	१. करंदीकर गो. वि., 'अरिस्टॉटलचे काव्यशास्त्र', मौज प्रकाशन मुंबई, १९७८	



**Title of the course:** एका आधुनिक मराठी साहित्यिकाचा अभ्यास (चिं. त्र्यं. खानोलकर)

**A Study of Modern Marathi Author – (C.T. Khanolkar)**

**Course code:** MAR-503

**Number of credits:** 4 **Number of hours:** 60

**Effective from AY:** 2022-2023

आवश्यकता :	वाङ्मयाच्या आकलनासाठी व वाङ्मयविषयक जाणिवा प्रगल्भ व्हाव्यात यासाठी एका लेखकाचा साहित्यविषयक दृष्टीकोण समजणे आवश्यक आहे.	
उद्दिष्ट्ये :	एका लेखकाच्या विविध साहित्यकृतींचा सर्वांगाने अभ्यास करणे.	
अभ्यासक्रम :	श्रेयांकन 1: अ) लेखक अभ्यासाचे स्वरूप	तासिका
	आ) कवितासंग्रह	३
	I. दिवेलागण	५
	II. नक्षत्रांचे देणे	७
	श्रेयांकन 2: नाटक	
	I. एक शून्य बाजीराव ✓	८
	II. अवध्य ✓	७
	श्रेयांकन 3: कादंबरी	
	I. कोंडुरा	८
	II. त्रिशंकू	७
	श्रेयांकन 4: कथासंग्रह	
	I. राखी पाखरू	८
	II. सनई	७
	एकूण	६०
अध्यापन पद्धती :	व्याख्याने, चर्चासत्र, स्वाध्याय, पावर पॉइन्ट सादरीकरण इत्यादी.	
शैक्षणिक फलित :	१. विशिष्ट काळाचा त्या काळातील साहित्यिकाच्या जडणघडणीवर कसा परिणाम होतो, हे विद्यार्थ्यांना समजेल. २. विशिष्ट काळ आणि त्या काळातील लिहिले जाणारे साहित्य यामधील अनुबंध विद्यार्थ्यांच्या लक्षात येईल. ३. एखाद्या विशिष्ट साहित्यिकाच्या साहित्याचा अभ्यास कसा करावा हे समजेल. ४. विद्यार्थ्यांमध्ये चिकित्सक दृष्टी विकसित होईल.	
संदर्भ ग्रंथ :	१. वैद्य माधवी, आरती प्रभूची कविता, नीहारा प्रकाशन, पुणे २. पाध्ये प्रभाकर आत्माराम, कादंबरीकार खानोलकर, नूतन प्रकाशन, पुणे, १९७७ ३. वैद्य माधवी, खानोलकरांची कादंबरी, नीहारा प्रकाशन, पुणे ४. वैद्य माधवी, खानोलकरांचे नाटक, नीहारा प्रकाशन, पुणे ५. घारे दीपक, चिं. त्र्यं. खानोलकरांचे ललित चरित्र, ग्रंथाली प्रकाशन, १९८८ ६. दडकर जया, चिं. त्र्यं. खानोलकरांच्या शोधात, मौज प्रकाशन, १९८३ ७. दडकर जया, चिं. त्र्यं. खानोलकर आदिपर्व, मौज प्रकाशन, पुणे, २०२१	



**Title of the course: साहित्यप्रकाराचा अभ्यास - नाटक**  
**A Form of Literature - Drama**

**Course code: MAR-506**

**Number of credits: 4**

**Number of hours: 60**

**Effective from: 2022-2023**

आवश्यकता:	साहित्याच्या अध्यापनामध्ये कोणत्याही साहित्यप्रकाराचा सैद्धांतिक अभ्यास करणे आवश्यक ठरते.	
उद्दिष्ट्ये:	या विषायामध्ये नाटक या साहित्यप्रकाराचे स्वरूप सांगणे, तसेच मराठीतील काही नाटकांचा अभ्यास करणे.	
अभ्यासक्रम :	श्रेयांकन 1:	तासिका
	I. नाटक या साहित्यप्रकाराची संकल्पना व स्वरूप	५
	II. मराठी नाटकांची परंपरा आणि इतिहास	६
	III. नाटक या साहित्यप्रकाराचे मूल्यमापन	४
	श्रेयांकन 2:	
	I. कीचकवध - कृष्णाजी प्रभाकर खाडिलकर	८
	II. संगीत जयद्रथ विडंबन - हिराबाई पेडणेकर	७
	श्रेयांकन क्रमांक 3:	
	I. गिधाडे - विजय तेंडुलकर	८
	II. तुझे आहे तुजपाशी - पु. ल. देशपांडे	७
	श्रेयांकन क्रमांक 4:	
	I. आरण्यक - रत्नाकर मतकरी	८
	II. वाडा चिरेबंदी - महेश एलकुंचवार	७
	एकूण	६०
अध्यापन पद्धती:	व्याख्याने, चर्चासत्र, स्वाध्याय, पावर पॉइन्ट सादरीकरण इत्यादी. प्रत्यक्ष नाट्यावलोकन	
शैक्षणिक फलित:	१. साहित्याचे विविध प्रकार मानण्यामागील कारणे विद्यार्थ्यांच्या लक्षात येतील व साहित्य प्रकारांची आवश्यकता ही विद्यार्थ्यांना समजेल. २. नाटक या साहित्य प्रकाराची सैद्धांतिक बैठक विद्यार्थ्यांना परिचित होईल. ३. नाट्य लेखनातील विविध प्रवाह, नाट्य लेखनाची विविध वैशिष्ट्ये परिचित होईल. ४. नाट्यलेखनाची विविध तंत्रे यांचा सविस्तर परिचय विद्यार्थ्यांना होईल.	
संदर्भ ग्रंथ:	१. देशपांडे वि. भा., मराठी नाटक - नाटककार: काळ आणि कर्तृत्व खंड १. दिलीपराज प्रकाशन, पुणे, २००८ २. सरदेसाई माया, भारतीय रंगभूमीची परंपरा, स्नेहवर्धन प्रकाशन, पुणे, प्रथमावृत्ती २०१० ३. नाईक राजीव, प्रवीण भोळे, (संपा.) भारतीय प्रयोगकलांचा परिचय व इतिहास :	



**Title of the course: दोन मध्ययुगीन मराठी लेखकांचा अभ्यास**  
**A Study of Two Medieval Marathi Authors**

Course code: MAR- 507

Number of credits: 4 Number of hours: 60

Effective from AY 2022-2023

आवश्यकता :	मराठी साहित्याला लाभलेल्या मध्ययुगीन साहित्यकृतींचा आशय व आकृतीबंधाच्या दृष्टीने विचार करणे आवश्यक आहे.												
उद्दिष्ट्ये :	मध्ययुगीन साहित्य, समाज भाषा, प्रयोजन याचा विचारविर्मश करणे.												
अभ्यासक्रम :	<table border="1"> <thead> <tr> <th></th><th>तासिका</th></tr> </thead> <tbody> <tr> <td>श्रेयांकन 1 : नामदेव गाथा, संपा. हरी श्रीधर शेणोलीकर, साहित्य अकादमी प्रकाशन I. अभंग विभाग : १ ते ३ II. अभंग विभाग : ४ ते ५</td><td>८ ७</td></tr> <tr> <td>श्रेयांकन 2 : नामदेव गाथा, संपा. हरी श्रीधर शेणोलीकर, साहित्य अकादमी प्रकाशन I. अभंग विभाग : ६ ते ९ II. अभंग विभाग : १० ते १२</td><td>८ ७</td></tr> <tr> <td>श्रेयांकन 3 : कृष्णदासशामा विरचीत श्री कृष्णचरित्रकथा संपा. वि. बा. प्रभुदेसाई I. अवस्वरू : १ ते ६ II. अवस्वरू : ७ ते ९</td><td>८ ७</td></tr> <tr> <td>श्रेयांकन 4 : कृष्णदासशामा विरचीत श्री कृष्णचरित्रकथा, संपा. वि. बा. प्रभुदेसाई I. अवस्वरू : १० ते १४ II. अवस्वरू : १५ ते १९</td><td>८ ७</td></tr> <tr> <td align="right">एकूण</td><td>६०</td></tr> </tbody> </table>		तासिका	श्रेयांकन 1 : नामदेव गाथा, संपा. हरी श्रीधर शेणोलीकर, साहित्य अकादमी प्रकाशन I. अभंग विभाग : १ ते ३ II. अभंग विभाग : ४ ते ५	८ ७	श्रेयांकन 2 : नामदेव गाथा, संपा. हरी श्रीधर शेणोलीकर, साहित्य अकादमी प्रकाशन I. अभंग विभाग : ६ ते ९ II. अभंग विभाग : १० ते १२	८ ७	श्रेयांकन 3 : कृष्णदासशामा विरचीत श्री कृष्णचरित्रकथा संपा. वि. बा. प्रभुदेसाई I. अवस्वरू : १ ते ६ II. अवस्वरू : ७ ते ९	८ ७	श्रेयांकन 4 : कृष्णदासशामा विरचीत श्री कृष्णचरित्रकथा, संपा. वि. बा. प्रभुदेसाई I. अवस्वरू : १० ते १४ II. अवस्वरू : १५ ते १९	८ ७	एकूण	६०
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एकूण	६०												
अध्यापन पद्धती :	व्याख्याने, चर्चासत्र, स्वाध्याय, पावर पॉईन्ट सादरीकरण इत्यादी.												
शैक्षणिक फलित :	१. मराठी साहित्याची समृद्ध परंपरा विद्यार्थ्यांच्या लक्षात येईल व मध्ययुगीन साहित्याचे स्वरूप विद्यार्थ्यांना समजेल. २. मराठी साहित्याच्या विकासात मध्ययुगीन साहित्याचे असलेले योगदान विद्यार्थ्यांना ज्ञात होईल. ३. विद्यार्थ्यांना मध्ययुगीन मराठी भाषेचे स्वरूप समजेल. ४. अभ्यासक्रमात असलेल्या साहित्यकृतींच्या अनुषंगाने मध्ययुगीन मराठी भाषेचा परिचय विद्यार्थ्यांना होईल.												
संदर्भ ग्रंथ :	१. गोसावी र. रा., 'पाच भक्तिसंप्रदाय' प्रतिमा प्रकाशन, पुणे २००८ २. तुळपुळे शं. गो., 'पाच संतकवी' व्हिनस प्रकाशन, पुणे १९६२ ३. पठाण यु. म., 'मध्ययुगीन संत साहित्य काही आयाम' स्वरूप प्रकाशन, औरंगाबाद, २००३												



**Discipline Specific Optional Courses**  
**Title of the course: लोकसाहित्याचा अभ्यास**  
**A Study of Folk Literature**

**Course code: MAR- 521**

**Number of credits: 4      Number of hours: 60**

**Effective from AY: 2022-2023**

आवश्यकता :	प्राचीन काळापासून भारतीय लोकजीवनामध्ये निर्माण झालेली लोकवाङ्मयाची परंपरा जाणून घेण्याच्या दृष्टीने या विषयाची आवश्यकता आहे.	
उद्दिष्ट्ये :	लोकसाहित्यामध्ये असलेल्या अनेक प्रकारांचा तसेच त्यांच्या आविष्कारांच्या स्वरूपलक्षणांची चर्चा या विषयामध्ये करणे.	
अभ्यासक्रम :	<p>श्रेयांकन 1 : लोकसाहित्य</p> <p>I. स्वरूप</p> <p>II. संकल्पना</p> <p>श्रेयांकन 2 : लोकसाहित्य अभ्यासाच्या पद्धती</p> <p>I. अभ्यासाच्या पद्धती</p> <p>II. अभ्यास परंपरा</p> <p>श्रेयांकन 3: महाराष्ट्रीय व गोमंतकीय लोकसाहित्याचा स्थूल परिचय</p> <p>I. महाराष्ट्रीय लोकसाहित्य</p> <p>II. गोमंतकीय लोकसाहित्य</p> <p>श्रेयांकन 4: पाठ्यपुस्तके</p> <p>I. कोकणातील लोककथा- सूर्यकांत आजगांवकर</p> <p>II. मराठी लोकगीत - डॉ. सरोजिनी बाबर</p>	<p>तासिका</p> <p>८</p> <p>७</p> <p>८</p> <p>७</p> <p>८</p> <p>७</p> <p>८</p> <p>७</p>
अध्यापन पद्धती :	व्याख्याने, चर्चासत्र, स्वाध्याय, पावर पॉइन्ट सादरीकरण इत्यादी.	एकूण
शैक्षणिक फलित :	<p>१. विद्यार्थ्यांना लोकसाहित्याची संकल्पना समजेल.</p> <p>२. लोकसाहित्याचे स्वरूप विद्यार्थ्यांना ज्ञात होईल.</p> <p>३. लोकसाहित्याचे अध्ययन व संशोधनाच्या विविध पद्धती यांचा परिचय विद्यार्थ्यांना होईल.</p> <p>४. लोकसाहित्यातील प्रांतिक भेदांचा परिचय विद्यार्थ्यांना होईल.</p>	६०
संदर्भ ग्रंथ:	<p>१. खेडेकर विनायक, 'गोमंतकीय लोककला', गोवा राज्य गोवा, १९८०</p> <p>२. वाकोडे मधुकर, करोगल सुषमा, 'मौखिकता आणि लोकसाहित्य', साहित्य अकादमी दिल्ली, २००१</p> <p>३. सुखठणकर ज. स., 'रूपड्यांची रूपकथा', धी गोवा हिंदू असोसिएशन गोवा, १९८३</p> <p>४. फडते विनायक विठ्ठल, आखाडकर, 'लोककलानंद', विठ्ठल कला आणि सांस्कृतिक मंडळ गोवा. २०२०.</p>	



**Title of the course: दलित साहित्याचा अभ्यास**  
**A Study of Dalit Literature**

**Course code: MAR-525**

**Number of credits: 4      Number of hours: 60**

**Effective from AY: 2022-2023**

आवश्यकता :	मराठी साहित्यक्षेत्रात आशयाच्या व भाषेच्या दृष्टीने महत्त्वाचा ठरलेला हा प्रवाह अभ्यासणे आवश्यक आहे.																								
उद्दिष्ट्ये :	पारंपरिक समाजव्यवस्थेपासून उपेक्षित राहूनही साहित्यामध्ये आपल्या वेगळ्या प्रकाराच्या निर्मितीची जाणीव करून देणाऱ्या वेगवेगळ्या जाती-जमातीमधील वैशिष्ट्यांची ओळख करून देणे.																								
अभ्यासक्रम :	<table border="1"> <thead> <tr> <th>श्रेयांकन 1: दलित साहित्य</th><th>तासिका</th></tr> </thead> <tbody> <tr> <td>I. संकल्पना</td><td>८</td></tr> <tr> <td>II. स्वरूप</td><td>७</td></tr> <tr> <td>श्रेयांकन 2: दलित साहित्यातील विविध वाङ्मयप्रकारांचा विकास (कविता, कथा, आत्मकथने, नाटके इत्यादी)</td><td>१५</td></tr> <tr> <td>श्रेयांकन 3: पाठ्यपुस्तके</td><td></td></tr> <tr> <td>I. कोंडवाडा- दया पवार</td><td>८</td></tr> <tr> <td>II. दलित कथा- संपा. गंगाधर पानतावणे, चंद्रकुमार नलगे</td><td>७</td></tr> <tr> <td>श्रेयांकन 4: पाठ्यपुस्तके</td><td></td></tr> <tr> <td>I. राघववेळ - नामदेव कांबळे</td><td>८</td></tr> <tr> <td>II. माज्या जल्माची चित्तरकथा - शांताबाई कांबळे</td><td>७</td></tr> <tr> <td align="right" colspan="2">एकूण</td></tr> <tr> <td align="right" colspan="2">६०</td></tr> </tbody> </table>	श्रेयांकन 1: दलित साहित्य	तासिका	I. संकल्पना	८	II. स्वरूप	७	श्रेयांकन 2: दलित साहित्यातील विविध वाङ्मयप्रकारांचा विकास (कविता, कथा, आत्मकथने, नाटके इत्यादी)	१५	श्रेयांकन 3: पाठ्यपुस्तके		I. कोंडवाडा- दया पवार	८	II. दलित कथा- संपा. गंगाधर पानतावणे, चंद्रकुमार नलगे	७	श्रेयांकन 4: पाठ्यपुस्तके		I. राघववेळ - नामदेव कांबळे	८	II. माज्या जल्माची चित्तरकथा - शांताबाई कांबळे	७	एकूण		६०	
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शैक्षणिक फलित :	<ol style="list-style-type: none"> <li>१. दलित साहित्याची संकल्पना विद्यार्थ्यांना स्पष्ट होईल व दलित साहित्याच्या निर्मितीमागील कारणे समजतील.</li> <li>२. दलित साहित्याचे वेगळेपण लक्षात येईल.</li> <li>३. दलित साहित्याची विविध वैशिष्ट्ये अधोरेखित होतील.</li> <li>४. पाठ्यक्रमात असलेल्या साहित्यकृतींच्या आधारे दलित साहित्याचे व्यापक स्वरूप विद्यार्थ्यांच्या लक्षात येईल.</li> </ol>																								
संदर्भ ग्रंथ :	<ol style="list-style-type: none"> <li>१. मेश्राम केशव, 'अक्षर भाकिते', स्वरूप प्रकाशन औरंगाबाद, १९९९</li> <li>२. बागूल बाबुराव, 'दलित साहित्य: आजचे क्रांतिविज्ञान', बुद्धिस्त पब्लिशिंग हाऊस नागपुर, १९८९</li> <li>३. पगारे म. सु., दलित साहित्याचा इतिहास, प्रशांत पब्लिकेशन, जळगाव, २००५</li> <li>४. कवठेकर बाळकृष्ण, 'दलित साहित्य: एक आकलन', अजब पुस्तकालय</li> </ol>																								





GOA UNIVERSITY  
DEPARTMENT OF MARATHI

Course code: MRC- 205

Title of the course: साहित्य सिध्दांत  
(Theory of Literature)

Number of credits:4 Number of hours: 48

Marks: 100 w. e. f. 2018-2019

आवश्यकता:	साहित्यशास्त्राला फार प्राचीन व श्रेष्ठ परंपरा लाभलेली आहे. या परंपरेला जे साहित्यशास्त्रीय सिध्दांत मांडले आहे, त्या साहित्यविषयक मूलभूत प्रश्नांचे आकलन विद्यार्थ्यांना करून देऊन साहित्याचा अभ्यास अधिक समृद्ध करण्यास या पाठ्यक्रमाची आवश्यकता आहे.
उद्दिष्टे:	साहित्यसिध्दांताच्या ह्या पाठ्यक्रमाचे महत्त्व म्हणजे वेगवेगळ्या सिध्दांतांचे, संकल्पनेचे आणि साहित्यसिध्दांत विषयक विचारांचे परिष्कृत रूप विद्यार्थ्यांना सुत्ररूपाने समजावून देणे.
अभ्यासक्रम	<p>श्रेयांकन क्रमांक 1: साहित्याची प्रकृती</p> <ol style="list-style-type: none"> <li>ललित व ललितेतर साहित्य</li> <li>साहित्यकृतीतील कलात्मकता व रंजकता</li> <li>साहित्यनिर्मिती व आस्वाद यांतील कल्पनाशक्तीचे कार्य</li> <li>साहित्याचा परिणाम विविध सिध्दांत</li> <li>भावनाजागृती सिध्दांत- कॅथार्सिस व प्रेरणा संतुलनचा सिध्दांत व रससिध्दांत</li> <li>ज्ञानात्मक सिध्दांत</li> <li>नैतिक परिणाम</li> <li>वाचक- प्रतिसाद सिध्दांत</li> </ol> <p>श्रेयांकन क्रमांक 2: साहित्याचे प्रयोजन (भारतीय व पाश्चात्य साहित्यशास्त्राच्या आधारे)</p> <p>श्रेयांकन क्रमांक 3: साहित्यातील प्रवृत्ती व विचारसरणी</p> <ol style="list-style-type: none"> <li>अतिवास्तववाद</li> <li>सौंदर्यवाद</li> <li>वास्तववाद</li> <li>अतिवास्तववाद</li> <li>अस्तित्ववाद</li> <li>आधुनिकवाद</li> </ol> <p>श्रेयांकन क्रमांक 4: साहित्याचे मूल्यमापन</p>
अध्यापन पध्दती:	व्याख्याने, चर्चासत्र, स्वाध्याय, पावर पॉईंट सादरीकरण इत्यादी.
संदर्भ ग्रंथ-	<ol style="list-style-type: none"> <li>अरिस्टॉटलचे काव्यशास्त्र (भाषांतर- गो.वि. करंदीकर)</li> <li>कविता आणि प्रतिमा (कल्पनाशक्तीचे कार्य, पृष्ठांक 45-47)- सुधीर रसीळ</li> <li>छांदसी- पुरुषोत्तम शिवराम रेगे</li> </ol>





GOA UNIVERSITY  
DEPARTMENT OF MARATHI  
Course code: MRC- 206

Title of the course: विशिष्ट साहित्यप्रकाराचा अभ्यास(आत्मचरित्र )

(A Form of Literature) (Autobiography)

Number of credits:4 Number of hours: 48

Marks: 100 w. e .f. 2018-2019

आवश्यकता:	साहित्याच्या अध्ययनामध्ये कोणत्याही साहित्यप्रकाराचा सैध्दांतिक अभ्यास करणे आवश्यक ठरते
उद्दिष्टे:	या विषयामध्ये आत्मचरित्र या प्रकाराचे स्वरूप सांगणे, तसेच मराठीतील काही आत्मचरित्रांचा अभ्यास करणे.
अभ्यासक्रम	<p>श्रेयांकन क्रमांक 1: आत्मचरित्र या साहित्यप्रकाराची संकल्पना</p> <ol style="list-style-type: none"> <li>चरित्र आणि आत्मचरित्र</li> <li>आत्मचरित्रलेखनाची परंपरा</li> <li>आत्मचरित्राची लेखनवैशिष्ट्ये</li> <li>आत्मचरित्रांचे मूल्यमापन</li> </ol> <p>श्रेयांकन क्रमांक 2:</p> <ol style="list-style-type: none"> <li>आत्मवृत्त- महर्षी धोंडो केशव कर्वे</li> <li>आमचा बा आनी मी- नरेंद्र जाधव</li> </ol> <p>श्रेयांकन क्रमांक 3:</p> <ol style="list-style-type: none"> <li>लेखक आणि माणूस- श्री. ना पेंडसे</li> <li>बलुतं- दया पवार</li> </ol> <p>श्रेयांकन क्रमांक 4:</p> <ol style="list-style-type: none"> <li>जीणं आमुचं- बेबी कांबळे</li> <li>रास- सुमा करंदीकर</li> </ol>
अध्यापन पद्धती:	व्याख्यान, चर्चासत्र, स्वाध्याय, पावर पॉईंट सादरीकरण इत्यादी.
संदर्भ ग्रंथ-	<ol style="list-style-type: none"> <li>आत्मचरित्र- आलोचना, ऑक्टोबर, (1974) गो. म. कुलकर्णी</li> <li>आधुनिक मराठी वाङ्मयाचा इतिहास, खंड-2- अ.ना देशपांडे</li> <li>चरित्र- आत्मचरित्र- अ.म. जोशी</li> <li>चरित्र- आत्मचरित्र- सदा कर्हाडे</li> <li>दलित स्वकथने- आरती कुसरे कुलकर्णी</li> <li>स्त्रियांचे आत्मचरित्र- विमल भालेराव</li> </ol>





**GOA UNIVERSITY**  
**DEPARTMENT OF MARATHI**  
**Course code: MRC- 2067**

**Title of the course: दोन मध्ययुगीन मराठी लेखकांचा अभ्यास**  
**(A Study of Two Medieval Authors)**

**Number of credits:4      Number of hours: 48**

**Marks: 100      w. e. f. 2018-2019**

<b>आवश्यकता:</b>	मराठी साहित्याला लाभलेल्या मध्ययुगीन साहित्यकृतीचा आशय व आकृतीबंधाच्यादृष्टीने विचार करणे आवश्यक आहे.
<b>उद्दिष्टे:</b>	मध्ययुगीन साहित्य, समाज भाषा, प्रयोजन याचा विचारविर्मश करणे.
<b>अभ्यासक्रम</b>	श्रेयांकन 1 व 2 <b>सर्मथ रामदास विवेक दर्शन (संत रामदास, साहित्य अकादमी प्रकाशन)</b>  श्रेयांकन 3 व 4 <b>कृष्णदासशामा विरचीत "श्री कृष्णचरित्रकथा"</b>
<b>अध्यापन पध्दती:</b>	व्याख्याने, चर्चासत्र, स्वाध्याय, पावर पॉईंट सादरीकरण इत्यादी.
<b>संदर्भ ग्रंथ-</b>	<ol style="list-style-type: none"> <li>1. ऐसी हे सर्मथ पदवी, अशोक प्रभाकर कामत</li> <li>2. पाच भक्तिसंप्रदाय- र.रा. गोसावी</li> <li>3. पाच संतकवी- शं.गो. तुळपुळे</li> <li>4. मध्ययुगीन संत साहित्य काही आयाम- यु. म पठाण</li> <li>5. मध्ययुगीन संतसाहित्य काही आयाम- यु. म. पठाण</li> <li>6. मराठी वाङ् मयाचा इतिहास (खंड, 1) (आरंभापासून इ.स. 1350 पर्यंत) संपा. शं.गो. तुळपुळे.</li> <li>7. महाराष्ट्र सारस्वत – वि. ल. भावे</li> <li>8. राजगुरु सर्मथ रामदास, शं. दा. पेंडसे</li> <li>9. रामदास वाङ् मय आणि कार्य, न.र. फाटक</li> <li>10. श्री समर्थ चरित्र, न.र. फाटक</li> <li>11. श्रीसमर्थ आणि समर्थ संप्रदाय, अ.ब. कोल्हटकर, र.रा गोसावी</li> <li>12. समर्थांचे पदवाङ् मय- र.रा. गोसावी</li> <li>13. सर्मथ रामदासविरचीत मनाचे श्लोक, र.रा. गोसावी</li> </ol>





**GOA UNIVERSITY**  
**DEPARTMENT OF MARATHI**  
**Course code: MRC- 208**

**Title of the course:**

एका आधुनिक मराठी साहित्यिकाचा अभ्यास(बाळकृष्ण दत्तात्रेय सातोस्कर)  
(A Study of Morden Marathi Author) (Balkrishna Dattatreya Satoskar)

**Number of credits:4      Number of hours: 48**  
**Marks: 100      w. e .f. 2018-2019**

<u>आवश्यकता:</u>	वाङ् मयाच्या आकलनासाठी व वाङ् मयविषयक जाणिव वाढविण्यासाठी एका समग्र लेखकाचा साहित्यविषयक दृष्टीकोण समजणे आवश्यक आहे.
<u>उद्दिष्टे:</u>	एका लेखकाच्या साहित्यकृतींचा सर्वांगाने अभ्यास करणे.
<u>अभ्यासक्रम</u>	<p>श्रेयांकन क्रमांक 1:</p> <p>I. अभिराम II. जाई</p> <p>श्रेयांकन क्रमांक 2:</p> <p>I. प्रीतीची रीत व इतर कथा II. तारांबळ नाटक</p> <p>श्रेयांकन क्रमांक 3:</p> <p>I. द्वाक्षांच्या देशात (1944) II. पारिसचे भविष्य/ युलिसिसचा प्रवास (1946)</p> <p>श्रेयांकन क्रमांक 4:</p> <p>I. संशोधनपर साहित्यकृतींचा परामर्श II. प्रकाशक म्हणून मराठी वाङ् मयासाठी केलेले योगदान</p>
<u>अध्यापन पद्धती:</u>	व्याख्याने, चर्चासत्र, स्वाध्याय, पावर पॉईंट सादरीकरण इत्यादी.
<u>संदर्भ ग्रंथ-</u>	<ol style="list-style-type: none"> <li>अर्वाचीन गोव्याचा इतिहास खंड 1 ते 3 (1987)</li> <li>ओडिसी अर्थात ओडिसिसाचा प्रवास</li> <li>गोमंतक प्रकृती आणि संस्कृती खंड 1 (1979)</li> <li>गोमंतकीय मराठी साहित्याचे शिल्पकार (1975)</li> <li>ग्रंथ वर्गीकरण तात्त्विक (1960)</li> <li>जाई (1962)</li> <li>बादसायन (1993)</li> <li>बा.द. सातोस्कर स्मृतीग्रंथ- सुरेश वाळिंबे</li> <li>मराठी मासिकांचे पहिले शतक (1986)</li> </ol>





**GOA UNIVERSITY**  
**DEPARTMENT OF MARATHI**  
**Course code: MRo- 201**  
**Title of the course: लोकसाहित्याचा अभ्यास**  
**(A Study of Folk Literature)**

**Number of credits:4      Number of hours: 48**  
**Marks: 100      w. e. f. 2018-2019**

<b>आवश्यकता:</b>	प्राचीन काळापासून भारतीय लोकजीवनामध्ये निर्माण झालेली लोकवाङ् मयाची परंपरा जाणून घेण्याच्या दृष्टीने या विषयाची आवश्यकता आहे.
<b>उद्दिष्टे:</b>	लोकसाहित्यामध्ये असलेल्या अनेक प्रकारांचा तसेच त्याच्या आविष्कारांच्या स्वरूपलक्षणांची चर्चा या विषयामध्ये करणे.
<b>अभ्यासक्रम</b>	<p>श्रेयांकन क्रमांक 1: लोकसाहित्याची संकल्पना, प्रकार व वैशिष्ट्ये</p> <p>A. संस्कृतीचे प्रकार</p> <p>I. आदिम संस्कृती</p> <p>II. लोकसंस्कृती</p> <p>III. नागर संस्कृती</p> <p>IV. जनप्रिय संस्कृती</p> <p>V. भक्तिसंस्कृती</p> <p>B. लोकसाहित्याच्या निर्मितीत स्त्री वर्गाचा सहभाग</p> <p>C. लोकसाहित्यातील समाजजीवन आणि संस्कृतीचे दर्शन</p> <p>D. लोकोक्ती</p> <p>श्रेयांकन क्रमांक 2: लोकसाहित्य अभ्यासाच्या पद्धती आणि अभ्यास परंपरा</p> <p>श्रेयांकन क्रमांक 3: महाराष्ट्रीय व गोमंतकीय लोकसाहित्याचा स्थूल परिचय</p> <p>श्रेयांकन क्रमांक 4: पाठ्यपुस्तके</p> <p>I. काणी काणी कोतवा- पांडुरंग फळदेसाई</p> <p>II. गोव्यातील धालो- वसुधा माने</p> <p>III. दगडी जात्याच्या रेशमी गळा- भगवंत देशमुख</p> <p>IV. मराठी लोककथा- मधुकर वाकोडे</p>
<b>अध्यापन पद्धती:</b>	व्याख्याने, चर्चासत्र, स्वाध्याय, पावर पॉईंट सादरीकरण इत्यादी.
<b>संदर्भ ग्रंथ-</b>	<ol style="list-style-type: none"> <li>1. कोकणचा दशावतार- उदय खानोलकर</li> <li>2. कोकणी लोकगीते- प्र. श्री नेरूरकर</li> <li>3. गोमंतकीय लोकलला- विनायक खेडेकर</li> <li>4. मराठी लोककथा: स्वरूपमीमांसा-वैदेही कोळेकर</li> </ol>





GOA UNIVERSITY  
DEPARTMENT OF MARATHI

Course code: MRo- 202

Title of the course: गोमंतकीय मराठी साहित्य  
(Goan Marathi Literature)

Number of credits:4 Number of hours: 48

Marks: 100 w. e. f. 2018-2019

आवश्यकता:	गोमंतकाच्या भाषिक, सांस्कृतिक व साहित्यिक वारसा जपणे ही आपल्या काळाची गरज आहे.
उद्दिष्टे:	गोमंतकातील वेगवेगळ्या साहित्यकृतींच्या अभ्यासाद्वारे गोमंतकीय वैशिष्ट्यांचा अभ्यास करणे.
अभ्यासक्रम	श्रेयांकन क्रमांक 1: आभाळवाटा- शंकर रामाणी श्रेयांकन क्रमांक 2: महापर्व- सं. शं. देसाई श्रेयांकन क्रमांक 3: आठवणी माझ्या कारावसाच्या- पा.पु. शिरोडकर श्रेयांकन क्रमांक 4: आज इथे तर उद्या तिथे-उषा पाणंदीकर
अध्यापन पद्धती:	व्याख्याने, चर्चासत्र, स्वाध्याय, पावर पॉईंट सादरीकरण इत्यादी.
संदर्भ ग्रंथ-	1. आजचा व कालचा गोमंतक- धी गोवा हिंदू असोसिएशन 2. गोमंतकीय मराठी वाङ् मयाचा इतिहास (खंड-2)- संपादक एस.एस. नाडकर्णी, सो.द कोमरपंत 3. गोमंतकीय मराठी साहित्याचे आधुनिक शिल्पकार- बाळकृष्ण दत्तात्रेय सातोस्कर 4. गोमंतकीय मराठी साहित्याचे शिल्पकार (खंड 1)-बाळकृष्ण दत्तात्रेय सातोस्कर 5. गोमंतशारदा- सं. रामदास प्रभू 6. भारतकार हेगडे देसाई यांचे निवडक लेख खंड 1 व 2- संपादक शशिकांत नार्वेकर





GOA UNIVERSITY  
DEPARTMENT OF MARATHI  
Course code: MRo- 203

Title of the course: भाषांतरविद्या: सिध्दांत व उपयोजन  
(Translation: Theory and Application)  
Number of credits:4 Number of hours: 48  
Marks: 100 w. e.f. 2018-2019

आवश्यकता:	आजच्या युगात भाषांतरविद्येचे कौशल्य असणे हे महत्वाचे आहे.
उद्दिष्टे:	भाषांतरामध्ये भाषांतरविषयीची कौशल्ये सांगून भाषांतराचे वेगवेगळे प्रकार स्पष्ट करणे.
अभ्यासक्रम	<p>श्रेयांकन क्रमांक 1: भाषांतर: स्वरूप आणि उद्दिष्टे</p> <ol style="list-style-type: none"> <li>भाषांतराची आवश्यकता व महत्त्व</li> <li>भाषांतर: शास्त्र की कला?</li> </ol> <p>श्रेयांकन क्रमांक 2: भाषांतरप्रक्रिया</p> <ol style="list-style-type: none"> <li>भाषांतरसंहितेचे स्वरूप, मूळ संहितेचे पुनर्घटन</li> <li>स्रोतसंहितेचे अर्थग्रहण, विश्लेषण, अर्थांतरण व अर्थसंप्रेषणक्षमता</li> <li>भाषांतरप्रक्रियेतील समस्या</li> <li>भाषांतर, अनुवाद, रूपांतर, शाब्दिक अनुवाद व भावानुवाद</li> </ol> <p>श्रेयांकन क्रमांक 3: भाषांतर व भाषांतरकार</p> <ol style="list-style-type: none"> <li>भाषांतराची विविध क्षेत्रे व प्रकार</li> <li>कार्यालयीन: वैज्ञानिक, तांत्रिक, विज्ञापने</li> <li>साहित्यिक: गद्य-पद्य, वैचारिक, अन्य प्रकार</li> <li>भाषांतराची साधने: कोशवाङ्मय, परिभाषा, पर्यायी शब्दकोश, संगणक</li> <li>भाषांतराचे गुण</li> </ol> <p>श्रेयांकन क्रमांक 4: उपयोजनासाठी विद्यार्थ्यांकरवी स्वाध्याय व निबंधलेखन</p>
अध्यापन पद्धती:	व्याख्याने, चर्चासत्र, स्वाध्याय, पावर पॉईंट सादरीकरण इत्यादी.
संदर्भ ग्रंथ-	<ol style="list-style-type: none"> <li>कवितेचे भाषांतर- दिलीप चित्रे (आलोचना, 27.5 जानेवारी 1989)</li> <li>कवितेचे भाषांतर- दिलीप चित्रे (नवभारत, 36.7, एप्रिल 1983)</li> <li>तौलनिक साहित्यभ्यास- वसंत बापट</li> <li>भाषांतर- सदा कर्हाण्डे</li> <li>भाषांतर: काही प्रश्न- विलास सारंग (सत्यकथा, सप्टेंबर, 1974)</li> </ol>





**GOA UNIVERSITY**  
**DEPARTMENT OF MARATHI**  
**Course code: MRO- 205**

**Title of the course: 17 व्या शतकातील गोमंतकीय ख्रिस्ती मराठी साहित्याचा अभ्यास**  
**(A Study of 17<sup>th</sup> century Goan Christian Marathi Literature)**

**Number of credits:4      Number of hours: 48**

**Marks: 100      w. e. f. 2018-2019**

<b>आवश्यकता:</b>	गोव्याचा भाषिक व सांस्कृतिक इतिहास या दृष्टीने ख्रिस्ती धर्मोपदेशकांनी लिहलेल्या या वाङ् मयाचा अभ्यास करणे आवश्यक आहे.
<b>उद्दिष्टे:</b>	ख्रिस्ती साहित्याचा ऐतिहासिक वाङ् मयीन व भाषिक अभ्यासाच्या दृष्टीने विचार करणे -पोर्तुगीज पूर्वकालिन व पोर्तुगीजकालीन ग्रंथसंपदा जाणून घेणे.
<b>अभ्यासक्रम</b>	<p>श्रेयांकन क्रमांक 1:</p> <ol style="list-style-type: none"> <li>I. मराठीतील ख्रिस्ती वाङ् मयाची पूर्वपीठिका आणि परंपरा</li> <li>II. ख्रिस्ती मिशनर्यांनी मराठी वाङ् मयात घातलेली भर</li> </ol> <p>श्रेयांकन क्रमांक 2:</p> <ol style="list-style-type: none"> <li>I. ख्रिस्ती मराठी वाङ् मयविषयक संशोधन कार्याचे स्वरूप</li> <li>II. ख्रिस्ती मराठी वाङ् मयविषयक संशोधक</li> </ol> <p>श्रेयांकन क्रमांक 3: पाठ्यपुस्तके</p> <ol style="list-style-type: none"> <li>I. क्रिस्ताचे यातनागीत संपादक - प्रा. अ. का प्रियोळकर</li> <li>II. क्रिस्ताच्या वधस्तंभारोहणाची प्रसंगीचे विळाप संपादक- डॉ. वि. बा. प्रभुदेसाई</li> </ol> <p>श्रेयांकन क्रमांक 4:</p> <ol style="list-style-type: none"> <li>I. सांतु आंतोनिची जीवित्वकथा पाद्री आतोनियो द सालादाङ्ग्य</li> <li>II. फादर सिमांव गोंमिशविरचित 'सर्वेश्वराचा ज्ञानोपदेश' संपादक- डॉ. वि. बा. प्रभुदेसाई</li> </ol>
<b>अध्यापन पध्दती:</b>	व्याख्याने, चर्चासत्र, स्वाध्याय, पावर पॉईंट सादरीकरण इत्यादी.
<b>संदर्भ ग्रंथ-</b>	<ol style="list-style-type: none"> <li>1. Goan Christian Marathi Vilapika during the 17<sup>th</sup> century – S.M Tadkodkar</li> <li>2. कोंकणमित्र (दिवाळी अंक, 1966) मांडवी (ऑगस्ट, 1969)</li> <li>3. ख्रिस्ती मराठी वाङ् मय - गं. ना. मोरजे</li> <li>4. गोमंतकीय क्रिस्त्यांची मराठी परंपरा- प्रा. अनंत काकबा प्रियोळकर</li> <li>5. गोमंतकीय मराठी वाङ् मयाचा इतिहास (खंड-1)- सं. वि. बा प्रभूदेसाई, रवींद्र घवी</li> <li>6. जेजुइतांचे मराठी वाङ् मय कार्य (ओझरती ओळख) - प्रा. अनंत काकबा प्रियोळकर</li> <li>7. पाद्री थॉमस स्टीफन्स आणि त्याचे ख्रिस्तपुराण- स.गं. मालशे</li> <li>8. फ्रेंच कवींनी लिहलेली मराठी पुराणे- प्रा. अनंत काकबा प्रियोळकर</li> <li>9. मराठी वाङ् मयाचा इतिहास, खंड 4- प्रा. अ. ना देशपांडे</li> <li>10. सतराव्या शतकातील गोमंतकीय बोली- वि. बा प्रभूदेसाई</li> <li>11. सांतु आंतोनिची अर्चया- प्रा. अनंत काकबा प्रियोळकर</li> </ol>





**GOA UNIVERSITY**  
**DEPARTMENT OF MARATHI**  
**Course code: MRO- 206**

**Title of the course: साहित्याचा समाजशास्त्रीय अंगाने अभ्यास**  
**(Sociological Study of Literature)**

**Number of credits:4      Number of hours: 48**

**Marks: 100      w. e. f. 2018-2019**

<b>आवश्यकता:</b>	साहित्य हे सामाजिक व्यवस्थांशी जोडलेले असल्याने साहित्याचा सामाजिक अंगाने अभ्यास करणे महत्वाचे ठरते.
<b>उद्दिष्टे:</b>	साहित्यातील वैचारिकता, मूल्ये, शैली, भाषा, तंत्रे इत्यादींचा सामाजिक संदर्भ तपासून पाहणे.
<b>अभ्यासक्रम</b>	<p>श्रेयांकन क्रमांक 1: साहित्य व समाजशास्त्र</p> <ol style="list-style-type: none"> <li>I. साहित्याच समाजशास्त्र स्वरूप आणि हेतू</li> <li>II. सामाजिकता, कलामूल्ये व जीवनमूल्ये</li> </ol> <p>श्रेयांकन क्रमांक 2: साहित्य व साहित्याची सामाजिकता</p> <ol style="list-style-type: none"> <li>I. लेखकनिष्ठ विचार</li> <li>II. वाचकनिष्ठ विचार</li> <li>III. दलित व ग्रामीण साहित्याच्या प्रेरणा व स्वरूप</li> </ol> <p>श्रेयांकन क्रमांक 3: पाठ्यपुस्तके</p> <ol style="list-style-type: none"> <li>I. नवी मळवाट (कवितासंग्रह)- शरदचंद्र मुक्तिबोध</li> <li>II. ओझ (कथासंग्रह)- विठ्ठल गावस</li> </ol> <p>श्रेयांकन क्रमांक 4: पाठ्यपुस्तके</p> <ol style="list-style-type: none"> <li>I. धग (कादंबरी)- उध्दव शेळके</li> <li>II. देवनवरी (नाटक)- प्रेमानंद गजवी</li> </ol>
<b>अध्यापन पध्दती:</b>	व्याख्याने, चर्चासत्र, स्वाध्याय, पावर पॉईंट सादरीकरण इत्यादी.
<b>संदर्भ ग्रंथ-</b>	<ol style="list-style-type: none"> <li>1. साहित्य आणि समाज- संपादक नागनाथ कोत्तापल्ले (गो.मा. पवार गौरवग्रंथ)</li> <li>2. साहित्य आणि सामाजिक संदर्भ- रा. ग. जाधव</li> <li>3. साहित्य व संदर्भ- सदा कर्हागडे</li> <li>4. साहित्य, समाज व संस्कृती- वसंत आबाजी डहाके</li> <li>5. साहित्याचे सामाजिक संदर्भ- हरिश्चंद्र थोरात</li> </ol>





GOA UNIVERSITY  
DEPARTMENT OF MARATHI

Course code: MRO- 207

Title of the course: संशोधन पद्धती व तंत्र

(Research Methodologies and Techniques)

Number of credits:4 Number of hours: 48

Marks: 100 w. e. f. 2018-2019

आवश्यकता:	वाङ् मयाचा अभ्यास करताना त्यावर संशोधन होणे आवश्यक असते. त्यामुळे त्यावरील संशोधन पद्धती व तंत्र याचे ज्ञान करून देणे पाठ्यक्रमात आवश्यक आहे.
उद्दिष्टे:	-विद्यार्थ्यांना संशोधनाचे स्वरूप सांगून त्यामागील शास्त्रीय पद्धतीचे ज्ञान करून देणे -साहित्य संशोधनाची व्याप्ती दर्शविणे
अभ्यासक्रम	श्रेयांकन क्रमांक A: संशोधनाची संकल्पना I. परिचय, परीक्षा, संशोधन साम्यके II. वैज्ञानिक, सामाजिक व साहित्यिक संशोधन यांतील साम्यभेद, III. साहित्यसंशोधन, समीक्षा व साहित्याचा इतिहास यांतील परस्पर संबंध, IV. संशोधनाची विविध क्षेत्रे साहित्यकृती, लेखक व साहित्यप्रकार श्रेयांकन क्रमांक B: वाङ्मयीन कालखंडाच्या संशोधनाचे स्वरूप I. प्राचीन काल II. अर्वाचीन काल व III. लोकसाहित्याचे संशोधन श्रेयांकन क्रमांक C: साहित्यसंशोधन, समीक्षा व साहित्येतिहास यांतील परस्परसंबंध I. साहित्यसंशोधनाच्या विविध पद्धती आणि अभ्याससाधने, II. पाठचिकित्सा व साधनचिकित्सा, III. ऐतिहासिक कागदपत्रे, शिलालेख, ताम्रपट, चक्रमुदित प्रती, छायाप्रती, IV. स्फुमपट, संगणक यंत्रादींचा विचार श्रेयांकन क्रमांक 4: शोधनिबंधाची सिध्दता I. साधनसामुग्रीची सिध्दता II. लेखन III. तळटिपांचे माहात्म्य IV. शोधनिबंधलेखनाची सिध्दता
अध्यापन पद्धती:	व्याख्याने, चर्चासत्र, स्वाध्याय, पावर पॉईंट सादरीकरण इत्यादी.
संदर्भ ग्रंथ-	1. Elements of Research, Prentice-Hall, Mew York, 1954- F.L Whitney 2. दमयंती स्वयंवर (1935)- प्रा. अ. का प्रियोळकर 3. प्राचीन भारतीय लिपीमाला- राबबहादूर पंडित गो.हि. ओझा (मराठी अनुवाङ्मयीन नारायण) 4. भाषा व साहित्य संशोधन (खंड 1 ते 3) संपादक बसंत जोशी (महाराष्ट्र साहित्य परिषद, पुणे)





**GOA UNIVERSITY**  
**DEPARTMENT OF MARATHI**  
Course code: MRO- 208

Title of the course: **विज्ञान साहित्य**

(Science Fiction in Marathi)

Number of credits:4      Number of hours: 48

Marks: 100      w. e. f. 2018-2019

<u>आवश्यकता:</u>	पारंपरिक जाणिवेपेक्षा आधुनिक युगातील नव्या तंत्रज्ञानाची सांगड साहित्यामध्ये कशा घातली आहे याचा विचार करण्याची आवश्यकता आहे.
<u>उद्दिष्टे:</u>	विज्ञानाचा साहित्यामध्ये झालेला आविष्कारांचे स्वरूप तपासून पाहणे.
<u>अभ्यासक्रम</u>	<p>श्रेयांकन क्रमांक 1: विज्ञानसाहित्य: स्वरूप व इतिहास</p> <ol style="list-style-type: none"> <li>विज्ञानसाहित्याची संकल्पना</li> <li>विज्ञानसाहित्याची मराठी परंपरा</li> <li>विज्ञानसाहित्य आणि साहित्यसमीक्षा</li> </ol> <p>श्रेयांकन क्रमांक 2: पाठ्यपुस्तके:</p> <ol style="list-style-type: none"> <li>एप्सिलॉन - शिरीष गोपाळ देशपांडे (कवितासंग्रह)</li> <li>मृत्युदूत - निरंजन घाटे (कथासंग्रह)</li> </ol> <p>श्रेयांकन क्रमांक 3:</p> <ol style="list-style-type: none"> <li>आकाशभाकिते - सुबोध जावडेकर (कथासंग्रह)</li> <li>व्हायरस - जयंत नारळीकर (कादंबरी)</li> </ol> <p>श्रेयांकन क्रमांक 4:</p> <ol style="list-style-type: none"> <li>आघात - बाळ फोंडके (कादंबरी)</li> <li>विल्पवा - अरूण साधू (कादंबरी)</li> </ol>
<u>अध्यापन पद्धती:</u>	व्याख्याने, चर्चासत्र, स्वाध्याय, पावर पॉईंट सादरीकरण इत्यादी.
<u>संदर्भ ग्रंथ-</u>	<ol style="list-style-type: none"> <li>विज्ञानसाहित्य आणि संकल्पना- संपादक द. दि. कुलकर्णी व निरंजन घाटे</li> <li>मराठी विज्ञानसाहित्य- संपादक - म.सु. पगारे</li> <li>युगवाणी, ऑगस्ट 1984</li> <li>युगवाणी, मे 1985</li> </ol>





GOA UNIVERSITY  
DEPARTMENT OF MARATHI

Course code: MRO- 210

Title of the course: दलित साहित्यांचा अभ्यास  
(A Study of Dalit Literature)

Number of credits:4 Number of hours: 48

Marks: 100 w. e. f. 2018-2019

आवश्यकता:	मराठी साहित्यक्षेत्रात आशयाच्या व भाषेच्या दृष्टीने महत्वाचा ठरलेला हा प्रवाह अभ्यासणे आवश्यक आहे.
उद्दिष्टे:	पारंपरिक समाजव्यवस्थेपासून उपेक्षित राहूनही साहित्यामध्ये आपल्या वेगळ्या प्रकाराच्या निर्मितीची जाणिव करून देणार्या वेगवेगळ्या जाती-जमातींमधील वैशिष्ट्यांची ओशख करून देणे.
अभ्यासक्रम	<p>श्रेयांकन क्रमांक 1: दलित साहित्य: संकल्पना, प्रेरणा व प्रयोजन</p> <p>श्रेयांकन क्रमांक 2: दलित साहित्यातील विविध वाङ् मयप्रकारांचा विकास</p> <p>श्रेयांकन क्रमांक 3: पाठ्यपुस्तके</p> <p>I. विद्रोही कविता – संपादक: केशव मेश्राम</p> <p>II. माकडीचा माळ- अण्णाभाऊ साठे</p> <p>श्रेयांकन क्रमांक 4: पाठ्यपुस्तके</p> <p>I. तृतीय रत्न- ज्योतिबा फूले ( संपादक दत्ता भगत)</p> <p>II. डॉ. बाबासाहेब आंबेडकर यांचे निवडक लेख- गंगाधर पानतावणे</p>
अध्यापन पध्दती:	व्याख्याने, चर्चासत्र, स्वाध्याय, पावर पॉईंट सादरीकरण इत्यादी.
संदर्भ ग्रंथ-	<ol style="list-style-type: none"> <li>1. अक्षर भाकिते- केशव मेश्राम</li> <li>2. ग्रामीण- दलित साहित्य चळवळ आणि समीक्षा- मधुकर मोकाशी</li> <li>3. दलित रंगभूमी आणि नाट्य चळवळ- मधुकर मोकाशी</li> <li>4. दलित साहित्य: आजचे क्रांतिविज्ञान- बाबुराव बागूल</li> <li>5. दलित साहित्य: एक अभ्यास-अर्जुन डांगळे</li> <li>6. दलित साहित्य: एक आकलन- बाळकृष्ण कवठेकर</li> <li>7. दलित साहित्य: दिशा आणि दिशांतर- दत्ता भगत</li> <li>8. दलित साहित्य: प्रवाह व बाद- अविनाश सांगोलेकर</li> <li>9. दलित साहित्य: प्रवाह व प्रतिक्रिया- संपादक गो. म. कुलकर्णी</li> <li>10. दलित साहित्य: वेदना व विद्रोह- भालचंद्र फडके</li> <li>11. दलित साहित्याचा अभ्यास- म. सु. पगारे</li> <li>12. दलित साहित्याचे निराळेपण- प्रभाकर मांडे</li> <li>13. निळी पहाट- रा.ग. जाधव</li> <li>14. महाराष्ट्र साहित्य पत्रिका, दलित साहित्य विशेषांक, दिवाळी, 1987</li> <li>15. विदुषक (नाटक)- प्रभाकर दुपारे</li> <li>16. साहित्य: ग्रामीण आणि दलित (मदन कलकर्णी गौरवग्रंथ- ईश्वर नंदपुरे)</li> </ol>





GOA UNIVERSITY  
DEPARTMENT OF MARATHI  
Course code: MRO- 217

Title of the course: मराठीतील ऐतिहासिक साहित्याचा अभ्यास  
(Historic literature in Marathi)

Number of credits:4 Number of hours: 48  
Marks: 100 w. e .f. 2018-2019

आवश्यकता	विद्यार्थ्यांना ऐतिहासिक साहित्याचे महत्त्व समजणे आवश्यक आहे. मराठी ऐतिहासिक साहित्यातील परंपरा जाणून घेणे गरजेचे आहे.
उद्दिष्टे	इतिहास व ऐतिहासिक मराठी साहित्याचा सहसंबंध अभ्यासणे
अभ्यासक्रम	श्रेयांकन १ : ऐतिहासिक साहित्य, संकल्पना व स्वरूप. श्रेयांकन २ : मराठीतील ऐतिहासिक साहित्याची परंपरा श्रेयांकन ३ : (नाटक) इथे ओशाळला मृत्यू — वसंत कानेटकर, पॉप्युलर प्रकाशन, पुणे. श्रेयांकन ४ : (कादंबरी) सत्तावनचा सेनानी — वसंत वरखेडकर, मॅजेस्टिक प्रकाशन, मुंबई.
अध्ययन पध्दती	व्याख्यान, पावर पॉईंट सादरीकरण, श्राव्यमाध्यमांचा वापर, नाटक—चलचित्र
संदर्भ ग्रंथ	<ol style="list-style-type: none"> <li>१. राजवाडे लेखसंग्रह, भाग १, संपा. लक्ष्मणशास्त्री जोशी, साहित्य अकादमी, दिल्ली.</li> <li>२. भारतीय इतिहासाची मुलतत्त्वे, संपा. वि. का. राजवाडे, विद्यासेवक, पुणे.</li> <li>३. इतिहास स्वरूप आणि अभ्यास, हेन्री स्टील कॉमेजर, अनु. वळसंगकर, कृ. ना. मॅजेस्टिक प्रकाशन, मुंबई.</li> <li>४. बंदिवडेकर, चंद्रकांत, मराठी कादंबरी चिंतन आणि समीक्षा, मेहता पब्लिशिंग हाऊस, पुणे</li> <li>५. छत्रपती संभाजीमहाराजांची पत्रे, संपा. शिवदे, सदाशिव, स्नेहल प्रकाशन, पुणे.</li> <li>६. कुळकर्णी, अरविंद, साहित्यविचार, प्रतिमा प्रकाशन, पुणे.</li> <li>७. हेरवाडकर, रघुनाथ, मराठी बखर, व्हीनस प्रकाशन, पुणे.</li> <li>८. सानप, किशोर, मराठी कादंबरी: नव्या दिशा, निर्मल प्रकाशन, नांदेड.</li> <li>९. इनामदार, ना. सी., हरिनारायण आपटे व्यक्ती आणि वाङ्मय, आर्यभूषण प्रकाशन, पुणे.</li> <li>१०. देशपांडे, कुसुमावती, मराठी कादंबरी — पहिले शतक, मुंबई मराठी साहित्य संघ, मुंबई.</li> <li>११. आठवले, सदाशिव, इतिहासाचे तत्त्वज्ञान, प्रज्ञा शाळा मंडळ, वाई.</li> <li>१२. कुलकर्णी, भीमराव, ऐतिहासिक नाटके, जोशी लोखंडे प्रकाशन, पुणे.</li> </ol>





GOA UNIVERSITY  
DEPARTMENT OF MARATHI  
Course code: MRO- 218

Title of the course: उपयोजित समीक्षा

Applied Criticism

Number of credits:4 Number of hours: 48

Marks: 100 w. e. f. 2018-2019

आवश्यकता	समीक्षा आणि साहित्य यांचा परस्पर संबंध अभ्यासणे आवश्यक असल्याने उपयोजनाच्या अंगाने समीक्षा व्यवहाराची ओळख होणे गरजेचे आहे.
उद्दिष्टे	समीक्षायुववहारात नव्या संकल्पनांचा अभ्यास तसेच साहित्याचे उपयोजन विद्यार्थ्यांना समजून सांगणे.
अभ्यासक्रम	<p>श्रेयांकन १ : समीक्षेचे प्रकार आणि पद्धती</p> <p>श्रेयांकन २ : समीक्षा पद्धतीचे उपयोजन</p> <ol style="list-style-type: none"> <li>१. समाजशास्त्रीय समीक्षा</li> <li>२. स्त्रीवादी समीक्षा</li> <li>३. मानसशास्त्रीय समीक्षा</li> <li>४. आदिबंधात्मक समीक्षा</li> <li>५. रूपवादी समीक्षा</li> <li>६. काव्यात्म समीक्षा</li> </ol> <p>श्रेयांकन ३ : बॅरिस्टर — जयवंत दळवी</p> <p>सुहृदगाथा — पु. शि. रेगे</p> <p>श्रेयांकन ४ : आहे हे असे आहे — गौरी देशपांडे</p> <p>राघववेळ — नामदेव कांबळे</p>
अध्ययन पद्धती	व्याख्यान, पावर पॉईंट सादरीकरण, श्राव्यमाध्यमांचा वापर, नाटक—चलचित्र
संदर्भ ग्रंथ	<ol style="list-style-type: none"> <li>१. देशपांडे, वि. भा., गाजलेल्या रंगभूमिका, रोहन प्रकाशन, पुणे.</li> <li>२. बांदिवडेकर, चंद्रकांत, मराठी कादंबरी चिंतन आणि समीक्षा, मेहता पब्लिशिंग, पुणे.</li> <li>३. पाटील, गंगाधर, समीक्षेची नवी रूपे, मॅजेस्टिक प्रकाशन, मुंबई.</li> <li>४. कुळकर्णी, वा.ल., साहित्य स्वरूप व समीक्षा, पाँप्युलर प्रकाशन, पुणे,</li> <li>५. वाङ्मयीन शैली आणि तंत्र— संपादक म. द. हातकणंगलेकर, अभिजात प्रकाशन, कोल्हापूर.</li> <li>६. साहित्य : अध्यापन व प्रकार (वा.ल. कुलकर्णी गौरवग्रंथ)— (संपादक) श्री. पु. भागवत, सुधीर रसाळ, मंगेश पाडगावकर, शिल्पा तेंडुलकर, अंजली कीर्तने, पाँप्युलर प्रकाशन, पुणे,</li> <li>७. साहित्यवेध— के. रं. शिरवाडकर, मेहता पब्लिशिंग हाऊस, पुणे,</li> <li>८. पाटणकर, वसंत, साहित्यशास्त्र, स्वरूप व समस्या, पद्मगंधा प्रकाशन, पुणे.</li> <li>९. महाजन, वंदना, स्त्रीवाद आणि मराठी साहित्य, विजय प्रकाशन, नागपूर.</li> <li>१०. सद्दे, केशव, संपा., साठोत्तरी मराठी समीक्षा, लोकवाङ्मय गृह , मुंबई, १९९६</li> </ol>





GOA UNIVERSITY  
DEPARTMENT OF MARATHI

Course code: MRO- 219

Title of the course: सर्जनशील लेखन  
(Creative writing)

Number of credits: 4 Crative Number of hours: 48

Marks: 100 w. e. f. 2018-2019

आवश्यकता	लेखनक्षमतांचा विकास घडवून आणण्यासाठी सर्जनशील लेखन हा विषय महत्त्वपूर्ण आहे.
उद्दिष्टे	लेखनाविष्काराच्या नव्या विकसित शक्यता आजच्या काळात अभ्यासण्याची गरज आहे. विद्यार्थ्यांचे व्यक्तिमत्त्व सर्जनशील आणि उपयोजनाच्या अंगाने कसे विकसित होईल हे तपासता येईल.
अभ्यासक्रम	<p>श्रेयांकन १ : लेखनक्षमतेची विकसनशीलता</p> <p>१. सृजनात्म लेखनाचे स्वरूप</p> <p>२. सृजनात्मक लेखन प्रक्रिया</p> <p>श्रेयांकन २ : साहित्याचे घटक</p> <p>आशय, रचना व मांडणी, साहित्य प्रकार, भाषा</p> <p>श्रेयांकन ३ : अ. लेखनक्षमतेतील भावात्मकता आणि विचार</p> <p>१. पद्यरचना : कविता, गीत, गीतकाव्य, गझल</p> <p>२. गद्य लेखन : कथा, कादंबरी, नाटक, चरित्र</p> <p>श्रेयांकन : सर्जनशील लेखन</p> <p>१. कविता</p> <p>२. कथा</p> <p>३. ललितबंध</p> <p>४. एकांकिका</p>
अध्ययन पध्दती	व्याख्यान, पावर पॉईंट सादरीकरण, श्राव्यमाध्यमांचा वापर, नाटक-चलचित्र
संदर्भ ग्रंथ	<p>१. फडके, ना., सी., प्रतिभा साधन, व्हिनस प्रकाशन, पुणे.</p> <p>२. पाटील, आनंद, सृजनात्मक लेखन, पद्मगंधा प्रकाशन, पुणे.</p> <p>३. राजाध्यक्ष, विजया, संवाद,</p> <p>४. जोशी, चंद्रहास, मराठी लेखन दर्शन, मेहता पब्लिकेशन हाऊस, पुणे.</p> <p>५. मराठी भाषा उगम आणि विकास, मेहता पब्लिकेशन हाऊस, पुणे.</p> <p>६. लांडगे, संजय, उपयोजित मराठी, दिलीपराज प्रकाशन, पुणे.</p> <p>७. पाटील, आनंद, सृजनात्मक लेखन, पद्मगंधा प्रकाशन, पुणे.</p> <p>८. यादव, आनंद, साहित्य निर्मिती प्रक्रीया, मेहता पब्लिकेशन हाऊस, पुणे.</p> <p>९. भट, सुरेश, गझलनामा</p>





GOA UNIVERSITY  
DEPARTMENT OF MARATHI  
Course code: MRO- 221

Title of the course: मराठी विनोदी साहित्याचा अभ्यास

(Marathi Comedy Literature)

Number of credits:4 Number of hours: 48

Marks: 100 w. e .f. 2018-2019

आवश्यकता	विनोदी साहित्य हा साहित्याचा महत्वाचा प्रकार आहे. काळानुरूप विनोदी साहित्य नवनव्या शैली आणि रुपात प्रकट झाले. या प्रकाराचा झालेला विकास समजून घेणे आवश्यक आहे.
उद्दिष्टे	विनोदी साहित्याची परंपरा आणि त्याचे स्वरूपविशेष विद्यार्थ्यांना समजून सांगणे.
अभ्यासक्रम	श्रेयांकन १ : विनोदी साहित्य संकल्पना व स्वरूप श्रेयांकन २ : मराठीतील विनोदी साहित्याची परंपरा श्रेयांकन ३ : सुदाम्याचे पोहे — श्रीपाद कृष्ण कोल्हटकर श्रेयांकन ४ : व्यक्ती आणि वल्ली — पु. ल. देशपांडे
अध्ययन पध्दती	व्याख्यान, पावर पॉईंट सादरीकरण, श्राव्यमाध्यमांचा वापर, चलचित्र
संदर्भ ग्रंथ	१. गाडगीळ, गंगाधर, सात मजले हास्याचे, सुरेश एजन्सी, पुणे. २. पवार, गो.मा., विनोद तत्त्व आणि स्वरूप, मौज प्रकाशन गृह, मुंबई. ३. वाजपेय, अशोक, साहित्य विनोद, नॅशनल पब्लिशिंग हाऊस, नवी दिल्ली, घग्गं ह्य. ४. मराठी वाङ्मयाचा इतिहास, खंड सातवा, महाराष्ट्र साहित्य परिषद, पुणे.



**B. A. (History) Syllabus**

**HSC 101: History of Goa**

**(From Earliest Times upto  
1961)**

**4 Credits**

**Unit I**

Sources: Archaeological, Literary and Oral

- a. Etymology: The Land and People - *Gaunkari*
- b. Megalithic Sites: Kushavati and Mhadei

(10 lectures)

**Unit II**

Dynastic Phase: Prominent Rulers and Their Contributions

- a. Bhojas, Badami Chalukyas, Shilaharas, Kadambas, Vijayanagara, Bahamani, Adil Shahi
- b. Administration, Artisanal Crafts, Trade and Commerce
- c. Cultural contributions

(16 lectures)

**Unit III**

Portuguese Conquest of Goa: Old Conquests and New Conquests

- a. Religious Policies of the Portuguese
- b. Pombaline Reforms
- c. Liberal Constitutional Period (1821-1910), The Republic
- d. Dictatorship of Salazar

(16 lectures)

**Unit IV**

Impact of Portuguese rule

- a. Education
- b. Language
- c. Food and Dress
- d. Art and Architecture
- e. Economy
- f. Uniform Civil Code

(18 lectures)



**B.A. (History) Syllabus  
HSC 102: History of India**

**(From Earliest Times upto 8th century C. E.)**

**4 credits**

**Unit I**

- a. Sources for the study of Ancient Indian history
- b. Paleolithic, Mesolithic and Neolithic Cultures: Salient Features and Major Sites
- c. Harappan Culture: Major Sites, Town Planning, Religion, Script, Theories on Decline

**(15 lectures)**

**Unit II**

- a. Early Vedic Culture: Pastoralism, Agricultural Production, Social Stratification, Polity, Religion
- b. Later Vedic Age: Expansion of Agriculture, Trade, Society
- c. Second Urbanisation in the Gangetic Valley in the 6th Century BCE, Rise of Territorial States
- d. Jainism and Buddhism: Rise, Doctrines, Main Sects

**(20 lectures)**

**Unit III**

- a. Mauryan Empire: Chandragupta Maurya, Ashoka
- b. Nature of the Mauryan State: Administration, Mauryan Art
- c. The Gupta Empire: Contributions to Religion, Literature, Sciences, Art and Architecture
- d. Harsha Vardhana: Contributions to Religion and Literature

**(15 lectures)**

**Unit IV**

- a. South India: Sangam, The Pallavas and Rise of the Cholas: Contributions
- b. Extension of Indian Culture to Southeast Asia: Factors Responsible for Extension and Impact

**(10 lectures)**



**B. A. (History) Syllabus**  
**HSC 103: History of Medieval India**  
**(9th to 18th Centuries)**

**4 Credits**

**Unit I**

- a. Sources: Literary – Persian, Indian languages and European
- b. The Entry of Christianity and Islam in India
- c. Rajput society

(05 lectures)

**Unit II**

Political Developments

- a. Delhi Sultanate: Turks, Khaljis, Tughlaqs, Sayyids and Lodis
- b. Mughal Dynasty: Establishment, Stages of Expansion and Consolidation, Decline
- c. Deccani Sultanates: Bahamani and Its Successor States →
- d. Vijayanagar Empire - 3

(20 lectures)

**Unit III**

Administration and Economy

- a. Administration: North India and Peninsular India
- b. Economic: Agriculture, Industry, Trade and Commerce
  - (i) Delhi Sultanate to Mughals
  - (ii) Bahamani to Vijayanagar

(20 lectures)

**Unit IV**

Society and Cultural life

- a. Social Stratification, Position of Women and Learning
- b. Art and Architecture
- c. Sufism, Bhakti Movement and Sikhism

(15 lectures)



Programme: B. A. History (General)

Course Code: HSD 101

**Title of the Course: History of Goa (From the Phase of Resistance to Statehood and Beyond)**

Number of Credits: 4

Effective from AY: 2019-20

<b><u>Pre-requisites for the course:</u></b>	No pre-requisites required for this course.	
<b><u>Objectives:</u></b>	<p>This course intends to:</p> <ul style="list-style-type: none"><li>• Acquaint students with the local history of Goa and its various phases</li><li>• Learn indigenous responses to colonial challenges since the 16th century</li><li>• Gain insight into post-liberation issues faced by the State of Goa.</li></ul>	
<b><u>Content:</u></b>	<p><b>Unit I</b> Resistance to Colonial Hegemony in Goa</p> <ul style="list-style-type: none"><li>a. Cuncolim Revolt, Mateus de Castro</li><li>b. Pinto Revolt of 1787</li><li>c. Rane Revolts</li></ul> <p><b>Unit II</b> Struggle for Freedom</p> <ul style="list-style-type: none"><li>a. Contribution of Tristão de Bragança Cunha</li><li>b. 18<sup>th</sup> June Movement</li><li>c. <i>Satyagrahas</i> of 1954 and 1955, <i>Azad Gomantak Dal</i></li><li>d. <b>Women's contribution to the Freedom Struggle</b></li><li>e. Operation Vijay</li></ul> <p><b>Unit III</b> Goa since Liberation</p> <ul style="list-style-type: none"><li>a. Military Rule</li><li>b. MGP Rule</li><li>c. Opinion Poll</li></ul>	<p>10 Lectures</p> <p>20 Lectures</p> <p>15 Lectures</p>



	<b>Unit IV</b> Towards Statehood and Beyond a. Congress Rule from 1980-87 b. Statehood c. Agitations: ZACL, Ramponkars, Students' Bus Concession, Language Issue	15 Lectures
<b><u>Pedagogy:</u></b>	Lectures/Field Trips/Self Study/Presentations/ Group discussions	
<b><u>References / Readings:</u></b>	1. Ali, B. Sheikh, ed. <i>Goa Wins Freedom Reflections and Reminiscences</i> . Panaji: Goa University Publication, 1986.  2. Boxer, C. R. <i>The Portuguese Seaborne Empire 1415-1825</i> . London: Hutchinson, 1969.  3. Costa, Anthony da. <i>The Christianisation of the Goa Islands 1510-1567</i> . Bombay: Heras Institute, 1965.  4. Cunha, T. B. <i>Goa's Freedom Struggle</i> . Bombay: Dr. T. B. Cunha Memorial Committee, 1961.  5. de Souza, T. R., ed. <i>Essays in Goan History</i> . New Delhi: Concept Publishing Co., 1989.  6. _____, ed. <i>Goa Through the Ages: Economic History</i> . Vol. II. New Delhi: Concept Publishing Co. 1990.  7. _____, <i>Medieval Goa</i> . New Delhi: Concept Publishing Co., 1979.  8. D' Souza, B.G. <i>Goan Society in Transition: A Study in Social Change</i> . Bombay: Popular Prakashan, 1975.  9. Esteves, Sarto. <i>Politics and Political Leadership in Goa</i> . New Delhi: Sterling, 1986.  10. Fernandes, Aureliano. <i>Cabinet Government in Goa, 1961-93</i> . Panaji: Maureen & Camvet Publishers, 1997.  11. Fonseca, Jose Nicolau da. <i>An Historical and Archaeological Sketch of the City of Goa</i> . New Delhi:	



Effective from AY: 2019-20

<b><u>Pre-requisites for the course:</u></b>	No pre-requisites required for this course.	
<b><u>Objectives:</u></b>	<p>This course intends to introduce the students to:</p> <ul style="list-style-type: none"> <li>• Europe's exploration and early colonisation</li> <li>• Understand the forces of change unleashed by Renaissance, Reformation and the Counter-Reformation</li> <li>• The shift from an agrarian to industrial economy.</li> </ul>	

[illegible]



	<b>Unit III</b> <b>The Reformation</b> a. Origin, Main Reformers: Martin Luther, Huldrych Zwingli and John Calvin b. Consequences, Counter Reformation  <b>Unit IV</b> Europe in the 17th and 18th Centuries a. Absolute and Enlightened Monarchy Monarchy: Louis XIV & Frederick the Great b. Industrial Revolution – Causes and Consequences	15 Lectures       15 Lectures
	<b>Pedagogy:</b> Lectures/Visual presentation, Role play, Critical analysis/Assignments/Tests/Quiz.	

<b>Reference s/ Readings:</b>	1. Benton, R. H. <i>Here I Stand: A Life of Martin Luther</i> . Peabody, MA: Hendrickson Publishers, 2009. 2. Bruce, S. and Steinberger, R., eds. <i>The Renaissance Literature Handbook</i> . Annotated Edition. London: Continuum, 2010. 3. Calvin, John. <i>The Necessity of Reforming the Church</i> . Dahalonega, GA: Old Paths Publications, 1994. 4. Cheney, S. <i>A World History of Art</i> . New York: The Viking Press, 1937. 5. Cobban, Alfred. <i>In Search of Humanity: The Role of the Enlightenment in Modern History</i> . Whitefish, MT: Literary Licensing LLC, 2013. 6. Collins, R. W. <i>A History of Medieval Civilisation</i> . Boston: Ginn & Co. 1936. 7. Dickens, A. G. <i>The English Reformation</i> . Pennsylvania: Penn State University Press, 1990. 8. Dietz, D. <i>The Story of Science</i> . New York: Dodd Mead &	
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## SEMESTER VI

Programme: B. A. History (General)

Course Code: HSC 108

Title of the Course: India Since Independence (1947-2000)

Number of Credits: 4

Effective from AY: 2019-20

<b><u>Pre-requisites for the course:</u></b>	No pre-requisites required for this course.	
<b><u>Objective s:</u></b>	<p>This course intends to make the students:</p> <ul style="list-style-type: none"><li>• Study the building of Independent India with regard to its domestic policy</li><li>• Understand India's Foreign Policy vis-à-vis NAM and wars fought post-Independence</li><li>• Learn the challenges faced by India in the late 20th Century and beyond.</li></ul>	
<b><u>Content:</u></b>	<p><b>Unit I</b> Establishment of the Republic</p> <ol style="list-style-type: none"><li>a. Integration of Princely States - Junagadh, Hyderabad, Kashmir</li><li>b. <b>Features of the Constitution</b></li><li>c. Nehru's Domestic and Foreign Policy: Five Year Plans, India's Role in NAM</li><li>d. Linguistic Reorganisation of States</li></ol> <p><b>Unit II</b> Consolidation and growth</p> <ol style="list-style-type: none"><li>a. Lal Bahadur Shastri - Domestic and Foreign Policy</li><li>b. Indira Gandhi - Domestic Policy, Emergency</li><li>c. Janata Party - Jayaprakash Narayan</li><li>d. Indo-Pak Wars - 1965, 1971</li></ol> <p><b>Unit III</b> Late 20th Century Challenges</p> <ol style="list-style-type: none"><li>a. Rajiv Gandhi - Domestic Policy: New Economic</li></ol>	<p>15 Lectures</p> <p>15 Lectures</p> <p>15 Lectures</p>



	<p>Policy(1991), Educational Policy, 73<sup>rd</sup> and 74<sup>th</sup> Constitutional Amendments</p> <p>b. Coalition Politics: Causes and Impact</p> <p>c. Indo-Pak Relations - Kargil War 1999, India's Role in SAARC.</p> <p><b>Unit IV</b></p> <p>Globalisation and the 21<sup>st</sup> Century</p> <p>a. India towards Nuclear Power - Pokharan</p> <p>b. Social and Environmental Movements: <i>Narmada Bachao Andolan</i>, Green Revolution, Gender and Dalit Movements</p>	15 Lectures
<b><u>Pedagogy:</u></b>	Lectures/Visual presentation, Role play, Critical analysis Assignments/Tests/Quiz.	

<b><u>References</u></b> <b><u>/ Readings:</u></b>	<ol style="list-style-type: none"> <li>1. Appadorai, A. <i>Contemporary India: Essays in Domestic and Foreign Policy</i>. New Delhi: South Asia Books, 1989.</li> <li>2. Appadorai, A. and M. S. Ranjan. <i>India's Foreign Policy and Relations</i>. New Delhi: South Asian Publishers, 1985.</li> <li>3. Basu, D. D. <i>Introduction to the Constitution of India</i>. XXI<sup>st</sup> Edition. New Delhi: Lexis Nexis, 2013.</li> <li>4. Benevalensky. <i>Non-Aligned Movement: From Belgrade to Delhi</i>. New Delhi: Vikas Publishing House, 1997.</li> <li>5. Brass, Paul R. <i>Politics of India Since Independence</i>. New York: Cambridge University Press, 1992.</li> <li>6. Chakravorthy, Sukhamoy. <i>Development Planning: The Indian Experience</i>. Oxford: Clarendon Press, 1987.</li> <li>7. Chandra, Bipin and others. <i>India After Independence</i>. New Delhi: Penguin, 1999.</li> <li>8. Chandra, Bipin. <i>Essays on Contemporary India</i>. New Delhi: Viking, 1993.</li> <li>9. Chopra, Surendra, ed. <i>Studies in India's Foreign Policy</i>. Amritsar: Guru Nanakdev University, 1980.</li> <li>10. De Souza, Peter Ronald, ed. <i>Contemporary India - Transitions</i>. New Delhi: Sage Publications, 2000.</li> </ol>	
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Effective from AY: 2019-20

<b><u>Pre-requisites for the course:</u></b>	No pre-requisites required for this course.	
<b><u>Objectives:</u></b>	<p>This course intends to:</p> <ul style="list-style-type: none"> <li>• Promote an understanding of the regional history and its connection to mainstream developments in India</li> <li>• To appreciate historiography related to the Contemporary World</li> <li>• Learn traits of leadership and selfless devotion discernible from Contemporary World heroes.</li> </ul>	
<b><u>Content:</u></b>	<p><b>Unit I</b> World Order Since 1945 a. UNO – Establishment, Role in Global Peace and Security: Success and Shortcomings b. Cold War: Origin, Bi-Polar Competition, NATO, Warsaw Pact, Nuclear Rivalry</p> <p><b>Unit II</b> Role of Global and Regional Organisations a. IMF, World Bank, International Trade (GATT, WTO, G-20), Nuclear Non-Proliferation and Disarmament (NPT, CTBT, NSG) b. European Union, ASEAN, SAARC, OAU</p> <p><b>Unit III</b> Post Cold War International Developments a. Disintegration of Soviet, New-Age Terrorism, US Intervention in Afghanistan and Iraq</p> <p><b>Unit IV</b> Global Concerns: a. Refugees and Migration b. Global Warming and Climate Change (Rio Earth Summit and Copenhagen Summit)</p>	<p>15 Lectures</p> <p>15 Lectures</p> <p>15 Lectures</p> <p>15 Lectures</p>



B. A. (History) Syllabus  
Generic Elective Course

HSG 101: Goan Heritage

4 Credits

Unit I

- a. Heritage: Meaning, Scope and Uses of Oral History
- b. Land and People

(08 Lectures)

Unit II

Brief Political History of Goa (From Earliest Times to 1987)

- a. Earliest times to 1000 AD
- b. Kadamba Rule to 1510
- c. Colonial Period to Liberation
- d. From 1961 to Statehood

(16 Lectures)

Unit III

- a. Natural and Environmental Heritage of Goa: Flora, Fauna, Sacred Groves, Water Bodies, Hills, Salt Pans and Khazan Lands
- b. Historical Heritage: Megalithic Sites, Caves, Houses, Forts, Palaces, Prominent Temples and Churches, Mosques, Art and Sculpture

(18 Lectures)

Unit IV

- a. Socio-Cultural Heritage: Food, Dress, Language, Customs, Manners
- b. Performing Arts: Natak, Tiatr, Cantaram, Geetam, Mando, Konkani Cinema
- c. Folk Heritage of Goa: Folklore, Dance, Drama, Music, Songs and Festivals

(18 Lectures)

\* Field trips constitute a part of this paper. Reports of such field trips may be given as ISA Assignments.

\* \* This course is to be taught by a teacher of History.



B. A. (History) Syllabus

Generic Elective Course

HSG 102: Indian Culture and Heritage

4 Credits

Unit I

- a. Culture and Heritage: Meaning and Significance
- b. Influence of Geography on Indian Culture
- c. Unity in Diversity

(10 Lectures)

Unit II

Spiritualism and Reform Movements

- a. Harappan Beliefs and Practices
- b. Vedic Period: *Upanishads, Varnashrama Dharma, Purusharthas, Theory of Karma*
- c. *Bhakti and Sufi Movements*
- d. Socio-Religious Reform Movements in the 19<sup>th</sup> Century
- e. Social and Ethical Views of M. K. Gandhi and B. R. Ambedkar

(20 Lectures)

Unit III

Literature, Science, Art and Architecture

- a. *Epics, Jatakas, Arthasastra*
- b. Nationalist Literature: Works of Rabindranath Tagore, Subramanya Bharathi, T.B. Cunha
- c. Ancient Scientific Works: Medicine, Mathematics and Astronomy.
- d. Art and Architecture: Harappa, Mauryan and Indo-Islamic

(15 Lectures)

Unit IV

Education:

- a. *Gurukul* system
- b. Takshashila, Nalanda and Kanchi Universities
- c. *Muqtabas* and *Madrasah*
- d. Impact of Western education

(15 Lectures)

\* This course is to be taught by a teacher of History.



**B. A. (History) Syllabus**  
**Generic Elective Course**  
**HSG 103: History of Human Civilisation**

**4 Credits**

**Unit I: Basis of Civilisation**

- a. Village Settlements: Primitive Agriculture, Food production
- b. Ancient Civilisations in Latin America - Maya, Aztec and Inca
- c. Ancient Civilisations in East and Southeast Asia: China and Java

**Unit II: Age of Geographical Explorations**

(15 Lectures)

- a. Motivating Factors
- b. Explorers and Voyages: Christopher Columbus, Bartolomeu Dias, Vasco da Gama, Amerigo Vespucci, Ferdinand Magellan
- c. Consequences of the Explorations

(15 Lectures)

**Unit III: Scientific Discoveries**

- a. Contributions: Nicolaus Copernicus, Andreas Vesalius, William Gilbert, Galileo Galilei, Johannes Kepler, and Isaac Newton
- b. Impact of the Scientific Discoveries

(15 Lectures)

**Unit IV: Modern Age**

- a. Modern Ideologies: Nationalism, Marxism, Fascism, Satyagraha
- b. Challenges of the Modern Age: Poverty, Population, Religious Fundamentalism and Terrorism, Environmental issues

(15 Lectures)

\* This course is to be taught by a teacher of History.



**B. A. (History) Syllabus**  
**Generic Elective Course**

**HSG 104: History of World Religions**

**4 Credits**

**Unit I**

Evolutionary Framework of Religion

- a. Animism, Totemism and Shamanism
- b. Mother Goddess and Ancestor Worship

(10 Lectures)

**Unit II**

Hinduism, Jainism and Buddhism

- a. Hinduism: *Bhagvad Gita*: Concepts of *Atman*, *Brahman*, *Jnana*, *Karma* and *Bhakti*
- b. Shaivism, Vaishnavism and Shaktism
- c. Jainism: *Tirthankaras*, Tenets, *Digambaras* and *Shwetambaras*
- d. Buddhism: Main Tenets; *Hinayana* and *Mahayana*

(20 Lectures)

**Unit III**

Confucianism, Taoism and Zoroastrianism

- a. Confucianism: Analects, Fundamentals of Ethics, Golden Rule
- b. Taoism: *Tao Te Ching*, Ethical Principles, Concepts of Yin and Yang
- c. Zoroastrianism: Teachings, Ahura Mazda, Avesta

(15 Lectures)

**Unit IV**

Abrahamic Religions: Judaism, Christianity and Islam

- a. Judaism: Ten Commandments
- b. Christianity: Teachings of Jesus Christ
- c. Islam: Quranic Teachings

(15 Lectures)

\* This course necessarily entails class discussion and debates on Inter-Faith Dialogue and Communal Harmony.

\*\* This course is to be taught by a teacher of History.



**B.COM**  
**SEMESTER I**  
**General Management (CC 1)**  
**(100 Marks – 60 Lectures)**

**Objective:** To acquaint students with the important aspects of management.

**Unit I Introduction to management** (25 Marks-15 Lectures)

Meaning, features and importance of management. Management and Administration, levels of management, functional areas of management – Materials, Production, Personnel, Purchase, Finance, Sales & Marketing (an overview)

Modern approaches to management - Quantitative, Systems, Contingency approach (an overview) Japanese, American, European Styles of management.

**Unit II Decision Making** (25 marks-15 Lectures)

Meaning, features, advantages of effective decision making.

Types of Managerial Decisions, Steps in decision making process,

Guidelines for effective decision making, Difficulty in effective decision making,

Rationality and decision making- Meaning, Benefits and Limitations,

Creativity in Decision Making- Meaning, Features, Steps and how to introduce creativity in decision making.

**Unit III Managing Change and Conflict Management** (25 marks-15 Lectures)

Meaning, Features, Reasons for Change, Change process,

Resistance to Change, Factors effecting Resistance to Change (Individual and Organisational)

Overcoming Resistance to Change.

Organisational Conflicts- Individual Conflicts and Inter group Conflicts.

Conflict Management - meaning and process.

**Unit IV Emerging areas in Management** (25 marks-15 Lectures)

Green Management – Concept and Importance.

Stress Management- Meaning, Types, Causes and Measures taken.

Supply Chain Management- Meaning, Process.

Logistics Management- Meaning, Features.

**References:**

- 1) Hannagan, Tim. *Management Concepts and Practices*. Macmillan India Ltd.
- 2) Prasad, L.M. *Principles and Practice of Management*. Sultan Chand and Sons.
- 3) Mamoria, C.B. *Personnel Management*. Himalaya Publishing House.



**B.COM**  
**SEMESTER I**  
**Financial Accounting (CC 2)**  
**(100 Marks – 60 Lectures)**

**Objectives:**

- To acquaint the students on the practical aspects of single entry and depreciation accounting.
- To familiarize the students with advanced accounting procedures for equity and preference shares

**Unit I Single Entry**

**(20 Marks – 12 Lectures)**

Meaning, features, advantages, limitations, difference between single entry system and double entry system. Computation of profit or loss under Single entry system—under Conversion Method. Preparation of Total Debtors Account, Total Creditors Account, Bills Receivable Account, Bills Payable Account, Trading and Profit & Loss Account and Balance Sheet.

**Unit II Depreciation Accounting**

**(20 Marks – 14 Lectures)**

Meaning, causes, need for providing depreciation, **AS 6** Methods of depreciation.

Methods of depreciation for practical problems:

- a) Change in Method of depreciation (from Straight Line Method to Reducing Balance Method or vice-versa)
- b) Sinking Fund Method
- c) Insurance Policy Method

Methods for depreciation for theory only:

- a) Annuity Method
- b) Machine Hour Rate Method
- c) Service Hour Method
- d) Depletion Method
- e) Revaluation Method
- f) Sum of Digits Method

**Unit III : Issue and Buy-Back of Equity Shares**

**(40 marks, 22 Lectures)**

- (a) **Issue of Shares:** Meaning, Kinds of Shares, **terms of issues, SEBI guidelines of issue of shares**, accounting entries, issue of shares at par and at premium. Under subscription, Oversubscription, pro rata allotment. Calls in arrears, calls in advance, and interest on calls in advance. Forfeiture and re-issue of forfeited shares. Issue of bonus shares and right shares, Book building process (Only theory)

**(b) Buy-Back of Equity Shares**

**Company Law/ Legal Provisions and SEBI guide lines** (including related restrictions, power, Notice of the meeting, transfer to capital redemption reserve account and prohibitions of buy back and financial assistance), **Compliance of conditions including sources**, maximum limits. Accounting for buy back of shares.



#### **Unit IV: Redemption of Preference shares**

**(20 marks, 12 Lectures)**

**Company Law / Legal Provisions for redemption of preference shares in Companies Act.** Sources of redemption including divisible profits and proceeds of fresh issue of shares. Redemption of shares at Par and Premium. Capital Redemption Reserve Account, Bonus issue. Journal entries and the relevant items in the balance sheet

#### **References:**

1. Jain, & Narang. *Advanced Accountancy*. New Delhi: Kalyani Publishers.
2. Mukherjee, A., & Hanif, M. (2002). *Modern Accountancy* (Vol. II). New Delhi: Tata McGraw Hill.
3. Raman, A. *Advanced Accountancy*. New Delhi: Himalaya Publishing House.
4. Shukla, M. C., & Grewal, T. S. *Advanced Accounts*. New Delhi: S. Chand & Co .
5. Tulsian, P. C. *Accountancy*. New Delhi: S. Chand & Co.
6. Vinayakam, N., & Charumati, B. *Financial Accounting*. New Delhi: S. Chand.

#### **Guidelines for Question Paper**

- One question each from Unit I, Unit II, Unit III and Unit IV.
- One additional question from Unit II and Unit III each.



**B.COM.**  
**SEMESTER I**  
**Commercial Arithmetics – I (CC 4)**  
**(100 marks - 60 Lectures)**

**Objectives:**

- To provide basic knowledge of mathematics and its applications in the field of commerce and industry.
- To acquaint the students with wide ranging applications of mathematical techniques to commerce, economics and practical situations.

**Unit I Mathematical Logic and Set Theory**

**(a) Mathematical Logic (10marks - 7 Lectures)**

- Logical Statement, Truth value.
- Compound Statement, Negation, Conjunction, Disjunction
- Conditional and Bi-conditional statement
- Truth tables
- Logical equivalence
- Tautology and Contradiction
- Argument, Validity of an argument (using truth table for 2 statements only)

**(b) Set Theory (10marks - 6 Lectures)**

- Quadratic equation, Solution of general quadratic equation  $ax^2 + bx + c = 0$
- Sets: Definition, Representation of sets
- Types of sets: Finite and infinite sets, null sets, singleton set, examples
- Venn diagrams
- Subset, Complement of a set, Union, Intersection and Difference of sets, Power sets
- De Morgan's Law, Verification by examples and Venn diagrams
- Number of elements of a set, Results involving number of sets (upto three sets) and problems based on these results

**Unit II Permutations and Combinations**

**(20marks - 15 Lectures)**

- Fundamental Principle – examples
- Factorial notation
- Definition of Permutation
- Number of permutations of  $n$  different things taken  $r$  at a time
- Permutations with repetition
- Definition of Combination
- Number of combinations of  $n$  different things taken  $r$  at a time (no proof for results)



## Unit II Progressions and Mathematics of Finance

### (a) Progressions

( 20marks - 10 Lectures)

- Arithmetic Progression (A.P.)
- Definition of A.P.
- Formula for nth term of an A.P.
- Sum of the first n terms of an A.P.
- Business applications of A.P.
- Geometric Progression (G.P.)
- Definition of G.P.
- Formula for nth term of a G.P.
- Sum of the first n terms of a G.P.
- Business applications of G.P.

### (b) Mathematics of Finance

(25marks - 12 Lectures)

- Simple Interest
- Compound Interest – compounded annually, six monthly, quarterly, monthly and daily
- Nominal and Effective rate of interest
- Present and future value
- Ordinary annuity, Present value of ordinary annuity
- EMI using Interest on reducing balance and Flat Interest rate

## Unit IV Determinants and Matrices

(15marks - 10 Lectures)

- Determinant - Meaning , Order Minor , Co-factor, Expansion (Order 2 and 3)
- Cramer's Rule
- Matrices - Definition, Notation, Types of matrices
- Algebra of Matrices – Negative, Transpose, Equality, Addition and Subtraction, Scalar multiplication, Matrix multiplication.
- Applications to Business Problems



**B.COM**  
**SEMESTER II**  
**Introduction to Marketing (CC 5)**  
**(100 Marks- 60 Lectures)**

**Objective:** To develop an understanding of the marketing environment and relevant decisions.

**Unit I Introduction to marketing** (25 Marks 15 Lectures)

Market concepts-- place concept, area concept demand concept.

Kinds of goods—convenience goods, shopping goods speciality goods.

Marketing concepts - product concept, selling concept, marketing concept, societal marketing concept. Scope of marketing - goods, services, events, organisations etc.

**Unit II Marketing Environment and Segmentation** (25 Marks 15 Lectures)

Marketing Environment- concept, major environmental forces.

Market segmentation- concept, Bases for segmenting markets.

Consumer behaviour and marketing research

Consumer buying behaviour, factors influencing consumer buyer behaviour.

Marketing research and its importance.

**Unit III Marketing decisions** (25 Marks 15 Lectures)

Marketing mix decisions-product, price, promotion and physical distribution (in brief).

Sales force management-selection, training, compensation. Areas in physical distribution- Order processing, Inventory, Warehousing and Transportation. Global marketing- Alternative marketing entry strategies.

**Unit IV Trends in Marketing** (25 Marks 15 Lectures)

Consumerism and need for consumer protection. Social aspects of marketing—social responsibility of marketing, ecological and ethical aspects of marketing. Marketing of Services and its scope.

Direct marketing—Catalog marketing, Kiosk marketing, Telemarketing and On-Line marketing.

**References:**

- 1) Kotler, Philip. *Marketing Management*. Prentice Hall.
- 2) Kotler, P., Keller, K.L. Koshy, A. & Jha. M. (2009). *Marketing Management: A South Asian Perspective*. (Thirteenth Ed). Pearson Education, New Delhi.
- 3) Gandhi, J.C. *Marketing a Managerial Introduction*. Tata McGraw Hill.
- 4) Maheshwari, R.P., Jindal, Lokesh, (2011). *Marketing Management Theory and Practice*.
- 5) Sherlekar, S.A. *Marketing Management*. Himalaya Publishing House.
- 6) Saxena, Rajan. *Marketing Management*.
- 7) Ramaswamy & Kumari Nama. *Marketing Management*.



**B.COM**  
**SEMESTER II**  
**Financial Statement Analysis & Interpretation (CC 6)**  
**(100 Marks – 60 Lectures)**

**Course objectives**

To develop skills in students to analyze and interpret financial statements from viewpoint of liquidity, solvency, profitability and cash flow of entities and apply the same for decision making.

**Unit I Company Final Accounts (Elementary Level)**

**(20 Marks, 15 Lectures)**

Preparation of "Statement of Profit and Loss account" and "Balance sheet" as per Schedule III of the Companies Act 2013.

**Unit II Nature and Techniques of Financial statement analysis (40 Marks, 18 Lectures)**

Nature and Component of Financial Statement, Meaning and Need for Financial Statement Analysis, Traditional & Modern approaches to Financial Statement Analysis, Parties interested in Financial Statement Analysis. Techniques of Financial Statement Analysis:

a) **Common-size statement analysis**

Meaning, **preparation**, interpretation, uses, merits and demerits

b) **Comparative statement analysis** (restricted to 2 years for intra-company and 2 companies for inter-company problems)

Meaning, **preparation**, interpretation, uses, merits and demerits

c) **Trend analysis**

Meaning, determination, interpretation uses, merits and demerits

Practical problems to include **preparation of Profit & Loss Statement and Balance Sheet as per Schedule III of Companies Act 2013** from the Trial Balance given and prepare common size or Comparative statement.

**Unit III Ratio Analysis and Economic Value Added Analysis**

**(20 Marks, 15 Lectures)**

**(a) Ratio analysis**

Meaning, Objectives, Nature of Ratio analysis, Importance & Limitations of ratio analysis, Classification of Ratios - Balance Sheet ratios, Income statement ratios, and Combined ratios, **Computation, Analysis and Interpretation of important ratios for measuring – Liquidity, Solvency, Capital Structure, Profitability and Managerial Effectiveness.** Overview of ratio analysis in service organization.

**(b) Economic Value added (EVA)**

Evolution of EVA concept, EVA concept, Market value added, Calculating EVA: The conceptual issues, calculating Net operating profit after tax (NOPAT), Capital employed (CE), weighted average cost of capital (WAC), Importance of EVA, Advantages of EVA, Limitations of EVA

**Unit IV Cash Flow Statement**

**(20 Marks, 12 Lectures)**



Meaning, Objectives of Cash Flow Statement, Non-cash transactions, Activity classification, Cash and cash equivalents, Direct and indirect method, Preparation and presentation of Cash Flow Statement as per indirect method and IND AS 7

#### References:

1. Bhurud, S., & Naphade, B. *Management Accounting*. Pune: Diamond Publications.
2. Gupta, S., & Sharma, R. *Financial Management*. New Delhi: Kalyani Publishers.
3. Jain, & Narang. *Advanced Accountancy*. New Delhi: Kalyani Publishers.
4. Madegowda, J. *Management Accounting*. New Delhi: Himalaya Publishing House.
5. Mukherjee, A., & Hanif, M. (2002). *Modern Accountancy* (Vol. II). New Delhi: Tata McGraw Hill.
6. Raman, A. *Advanced Accountancy*. New Delhi: Himalaya Publishing House.
7. Shukla, M. C., & Grewal, T. S. *Advanced Accounts*. New Delhi: S. Chand & Co .
8. Shukla, M., Grewal, T., & Gupta, S. *Advanced Accounts*. New Delhi: S. Chand & Co.
9. Tulsian, P. C. *Accountancy*. New Delhi: S. Chand & Co.

#### Journals for Study and Reference:

1. The Chartered Accountant: The Institute of Chartered Accountants of India
2. The Management Accountant: The Institute of Cost Accountants of India
3. The Accounting World : ICAI Hyderabad

#### Guidelines for setting Question Paper

1. The question paper shall have total of 6 questions of 20 marks each
2. Four questions of 20 marks each to be answered
3. Question No. 1 to be compulsory (should be a practical question)
4. A question may be sub-divided if necessary
5. One question each from Unit I, Unit II, Unit III and Unit IV
6. Two questions each to be asked on unit II and unit III



**B.COM.**  
**SEMESTER II**  
**Commercial Arithmetic – II (CC 8)**  
**(100 marks - 60 Lectures)**

**Unit I The Straight Line**

**(25marks - 12 hours)**

- Rectangular Cartesian Co-ordinate System
- Distance formula, Section formula (Simple problems only)
- Slope and intercepts of a straight line
- Equations of lines parallel to the axes.
- Equations of lines in slope point form, two point form, slope intercept form, two intercept form
- General equation of a line, Parallel and perpendicular lines
- Intersection of lines
- Graphs of linear equations and inequalities
- Graphical solution of Linear Programming Problems with two variables only

**Unit 2 Calculus I**

**(a) Relations and Functions**

**(5marks - 4 Lectures)**

- Ordered pair
- Cartesian product
- Relation, Function – Domain, Co-domain, Range.

**(b) Limits and Continuity**

**(5marks - 4 Lectures)**

- Definition
- Operations of finding limits
- Algebra of limits
- Concept of continuity and examples

**(c) Derivatives and their Applications**

**(25 marks - 12 Lectures)**

- Concept of derivatives
- Standard forms
- Algebra of derivatives
- Derivatives of composite functions
- Higher order derivatives
- Applications – Total revenue function, Total cost function, Elasticity of demand and supply
- Increasing and decreasing function/sign of derivative (economic applications)
- Maxima and Minima (economic applications)

**Unit III Calculus II**

**(a) Integration and its Applications**

**(15marks - 12 Lectures)**

- Definition
- Standard forms  $x^n$ ,  $e^x$ ,  $a^x$ ,  $1/x$



- Integral of  $f(x) + g(x)$  and  $kf(x)$
- Integral of  $(ax+b)^n$ ,  $e^{ax+b}$ ,  $k^{ax+b}$ ,  $1/ax+b$
- Applications – Total revenue function, Total cost function
- Definite integration
- Area under a curve (formula only)
- Consumer's Surplus and Producer's Surplus

(b) **Partial Derivatives**

(5marks - 4 Lectures)

- Definition
- Partial derivatives of first and second order
- Economic applications: Demand function, Utility function, Production function

**Unit IV Commercial Mathematics**

(20marks - 12 Lectures)

- Ratio
- Proportion
- Percentage
- Discount – Trade Discount, Cash discount, Discount and profit.

**References**

1. Joshi N. and Chitale S.G., *A New Approach To Mathematical Techniques*, Sheth Publishers
2. Vaidya M.L., Deshpande A.V., Kumtha A.P., *Elementary Business Mathematics*, Vipul Prakashan
3. DikshitAmarnath, Jain Jinendra Kumar, *Business Mathematics*, Himalaya Publishing House
4. GoelAjayand GoelAlka, *Mathematics and Statistics*, Taxmann Allied Services
5. Vaidya M.V., KumthaA. P., *Business Mathematics*, Vipul Prakashan
6. ShahS., *Business Mathematics(for ICWAI International Course)*, New Central Book Agency.
7. Abranches, M.E, *Mathematical Techniques*, Gracias Print Arts.



**B.COM**  
**SEMESTER III**  
**Fundamentals of Cost Accounting (CC 10)**  
**(100 Marks, 60 Lectures)**

**Objective:** To familiarize students to elements and methods of cost accounting

**Unit I Introduction to Cost Accounting (10 Marks, 6 Lectures)**

Concept of cost, Costing, Cost accounting, Objectives, Importance of cost accounting, Cost unit, Cost centre, Classification of cost, Distinction between cost accounting and financial accounting.

**Unit II Unit costing (30 Marks, 18 Lectures)**

Accounting and control of Waste, Scrap, Spoilage and Defective works Cost sheet and Estimated cost sheet

**Unit III Contract costing (30 Marks, 18 Lectures)**

Introduction to relevant Accounting Standard, preparation of contract account for one year, more than one year and contract account with balance sheet.

**Unit IV Process costing (30 Marks, 18 Lectures)**

Features and application of Process Costing, Elements of Production Cost, Accounting for normal loss, abnormal loss, scrap and abnormal gain. Joint – products and by – products.

**References:**

1. Jain S. P and K.L. Narang- *Cost Accounting Principles and practice* – Kalyani Publishers, Ludhiana.
2. Bhar, B.K. *Cost Accounting- Methods & Problems*, Academic Publishers Calcutta 700073.
3. Kishore R. *Cost Accounting- Taxmann Allied Service Pvt.Ltd.*New Delhi.
4. Iyenger, S. P. *Cost Accounting*. S. chand & Co. New Delhi
5. Khana, B. S. & J. M. Pandey- *Practical costing*. S. Chand & Co. New Delhi
6. Khan, M. Y. & P.K. Jain- *Theory and Problems of Management and Cost Accounting- Tata McGraw Hill Publishing co. Ltd.* New Delhi
7. Lal, J. *Cost Accounting*. Tata McGraw –Hill Publishing co. Ltd. New Delhi
8. Nigam, B. & J.C. Jain. *Cost Accounting Principles & Practice*. Prentice- Hall of India Pvt. Ltd., New Delhi



**B. COM**  
**SEMESTER III**  
**Entrepreneurship Development (CC 11)**  
**(100 Marks- 60 Lectures)**

**OBJECTIVE:** To motivate the students to be self employed. From the syllabus they will get theoretical knowledge on how to start an enterprise of their own. Practical knowledge can be obtained through assignments like writing a project report to obtain finance or interviewing existing entrepreneurs.

(40 Marks-24 Lectures)

**UNIT I Introduction**

a) Definition and concept of entrepreneur

Qualities, Skills and Functions of entrepreneur

b) Origin and development of entrepreneurship.

Theories of entrepreneurship

Role of entrepreneur in economic development

Entrepreneur V/s Intrapreneur, features of Intrapreneurs.

Types of entrepreneurs

Recent trends-sociopreneur, edupreneur, ecopreneur, and agropreneur

Women entrepreneurs. Self Help Groups.

(20Marks-12 lectures)

**UNIT II Identification of Business Opportunities**

**SWOT analysis**

Environment scanning-meaning and benefits

Factors considered for environment scanning- socio-cultural, economic, technical,

demographic, legal and political, geographical and international factors.

Sources and steps involved in identification of business opportunities.

Market research- meaning, need for market research, techniques in market research- field survey techniques, test marketing, Delphi technique, desk research, observation method and experiment method.

(20 Marks-12 lectures)

**UNIT III Project formulation**

Meaning and concept of project formulation

Stages in project formulation

a) Elements of project formulation-feasibility analysis, techno-economic analysis, project design and network analysis, input analysis, financial analysis.

b) Project Appraisal-concept and features, methods of appraisal-break even analysis, cost benefit analysis, social cost benefit analysis and profitability analysis.

c) Project Selection-meaning,

Factors to be considered for project selection-rawmaterials, credit facilities, market forces, competition, government policy, incentives and subsidies, labour force, capital requirements, infrastructure, profitability .

d) Project report-meaning importance and contents of project report.

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#### UNIT IV Innovation in Entrepreneurship

(20 Marks-12 lectures)

Purposeful innovation-unexpected success/failure, process, need, change in demography, industry and market structure, incongruities, change in perception, new knowledge

Principles of purposeful innovation

Incubation Centres-meaning, services and role of incubation centres, study of incubation centres in Goa.

#### References:

1. Desai, Vasant. *Dynamics of Entrepreneurship Development*
2. Drucker, Peter. *Innovation and Entrepreneurship-Practice and Principles*
3. Mascarenhas, Romeo. *Entrepreneurship Management*. Vipul Prakashan
4. Paul, Jose; Kumar, Ajith. *Entrepreneurship Development and Management*. Himalaya publishing house
5. Khanka, S.S. *Entrepreneurial Development*. Sultan Chand publication
6. Gordon, Natarajan. *Entrepreneurship Development*. Himalaya publishing house
7. Gupta, C.B., Srinivasan *Entrepreneurial Development*. Sultan Chand
8. Pednekar, Achut P. *Entrepreneurship Management*. Himalaya publishing house



**B.COM.**  
**SEMESTER III**  
**Business Statistics– I (GE 3)**  
**(100 Marks - 60 Lectures)**

**Unit I Data Analysis**

**(15 Lectures -24 marks)**

Introduction: Meaning and definition of Statistics, function, scope and limitation of Statistics, Basic Statistical concepts: Population, sample, variate, attribute, parameter and Statistic.

Types of data-Primary and secondary data, Sources and methods of collecting data, classification-univariate frequency distribution and questionnaire design.

Graphs and diagrams-Frequency polygon, frequency curve and ogives, Simple, multiple, subdivided bar diagram, pie chart.

**Unit II Summarisation Measures**

**(24 Lectures -40 marks)**

Measures of Central Tendency: Meaning, objectives and requirement of a good measure of central tendency, Arithmetic Mean, Mode and Median (with & without grouping), Harmonic Mean (ungrouped data), Quartiles, deciles and percentiles.

Measures of Dispersion: Meaning, objectives and requirement of a good measure of dispersion, absolute and relative measure, Range, quartile deviation, mean deviation, standard deviation, Coefficient of range, Coefficient of quartile deviation, Coefficient of mean deviation, Coefficient of variation, Skewness- Karl Pearson's and Bowley's measure and coefficient of Skewness.

**Unit III Index Numbers**

**(13 Lectures -18 marks)**

Meaning, types, uses and limitations of index numbers, Methods of constructing price and quantity Index numbers by weighted and unweighted methods, Weighted aggregative- Laspeyre's, Paasche's, Fishers and Value index numbers, Weighted average of price relatives, fixed base, chain base, shifting of base, deflating and splicing of Index numbers, cost of living Index numbers.

**Unit IV Analysis of Time series**

**(8 Lectures -18 marks)**

Components and models of Time series, Measurement of trend-semi averages, moving averages, freehand and least square method (linear and non linear).

**References:**

1. Gupta S.P., *Statistical Methods*, Sultan Chand & sons.
2. Gupta C.B., *Fundamentals of Statistics*, Himalaya Publishing House.
3. Shah, R.J., *Statistical Methods*.
4. Mazumdar Neeta, *Statistical Techniques*, Rajhauns Vitaran.



**B.COM**  
**SEMESTER III**  
**Economics of Resources (GE 4)**  
**(100 Marks, 60 Lectures)**

**Objectives:**

1. To familiarize the students with concepts and issues in the realm environmental economics and sustainable development.
2. To introduce the students to economics of resources and their use against the background of growing global concerns over the future of the world economy due to the rapid depletion of natural resources
3. To help the students understand the significance of the management of environment and resources for business.
4. To introduce the students to the economics of human resource development

**Unit I Economics of the Environment**

**(25 Marks, 15 Lectures )**

Environmental Economics- definition and meaning; linkages between economy and environment, relevance of environmental economics for business, trade-off between conventional economic output and environmental quality (what is the trade-off, why it occurs, what can be done). Economic efficiency and markets-meaning of economic efficiency and social efficiency, relation between markets and economic and social efficiency, external costs, private and social cost, external benefits, externalities and market failure, over-use of open-access resources. The market approach to environmental problems- internalization of external cost, pollution charges, environmental subsidies, carbon credits (meaning of each, how they work through the market mechanism) Environmental Impact Assessment (EIA) of projects- meaning, benefits.

**Unit II Economics of Resources**

**(20 Marks, 12 Lectures)**

Definition of resource, classification, meaning and importance of each, Economic development and resource use- optimist and pessimist models- their major conclusions, Sustainable development- definition and meaning.

**Unit III Economics of Energy and Water**

**(25 Marks, 15 Lectures)**

Economics of energy: meaning of energy; Energy and economic growth, criticality of energy as a resource, energy security, dependence on imports, inflation; Energy availability at the global and national levels, demand-supply gaps, implications, measures to reduce the gap; energy pricing in India; energy audit- meaning, importance; current energy scenario in India .

Economics of water: Economic importance of water; Demand for water- domestic and commercial ( industry, agriculture); Global water scarcity; Water scarcity in India- extent, causes, attempted solution; Pricing of water -importance, water pricing in India; Challenges in the water sector-scarcity, sharing of water, pollution, groundwater issues, pricing, water quality.....; National Water Policy- proposed measures to meet challenges.



#### Unit IV Human Resource Economics

(30 Marks ,18 Lectures)

Human resource development- role of education and health in human resource development; Link between education and economic growth and development (productivity, earnings, family size, family health, improved standards of living, adoption of new technology...); benefits of education-direct, indirect, private and social benefits; education as a merit good; expenditure on education in India and its composition (primary, secondary and higher education; public and private).

Link between health and economic growth and development (productivity, earnings, money saved can be spent elsewhere, saving and capital formation, better educational performance of children, smaller families....); determinants of health (income and social status, education, physical environment, health services...) ; health status indicators in India- birth rate, death rate, life expectancy, mortality (infant, child and maternal mortality rates), morbidity; recent trends in health status in India; economic dimension of healthcare - demand and supply of health care; challenges to public health in India; financing of health services - private and public expenditure on health; health insurance.

#### References:

1. Field, Barry. C. & Field, M. K. 2002. Environmental Economics: An Introduction. McGraw Hill, Singapore.
2. Field, Barry. C. 2001. Natural Resource Economics: An Introduction. McGraw Hill, Singapore.
3. Bhattacharya, R.N. 2001. Environmental Economics: An Indian Perspective. Oxford University Press, New Delhi.
4. Bromley, D. W. 1986. Natural Resource Economics, Policy problems and Contemporary Analysis. Kluwer, Boston.ed.
5. Dorfman, M. R. 1972. Economics of the Environment. W.W. Norton & Co. New York.
6. Dutt, R. and Sundharam, K.P.M. (most recent edition). Indian Economy. Sultan Chand and Co. New Delhi.
7. Hanley, N., J. F. Shogren & B. White. 2001. Environmental Economics in Theory and Practice. Macmillan. London.
8. Hartwick, J. M. & Olewiler, N.D. 1998. The Economics of Natural Resource Use. Harper & Row, Mass., USA. 2<sup>nd</sup> ed.
9. Hussen, A. 2004. Principles of Environmental Economics. Routledge. London.
10. Karpagam, M. 2001. Environmental Economics. Sterling Publishers. New Delhi.
11. Merret, S. 1997. Introduction to the Economics of Water Resources: An International Perspective. UCL Press.
12. Perman, R. Ma, Y., McGilvray, J. and Common, M. 2003. Natural Resource and Environmental Economics. Pearson Education Ltd. 3<sup>rd</sup> ed.
13. Shankar, U. 2001. Environmental Economics. Oxford University Press. New Delhi.ed.
14. Singh, K. 1994. Managing Common Pool Resources: Principles and Case Studies. Oxford University Press. New Delhi.
15. Singh, K. & Shishodia, A. 2007. Environmental Economics: Theory and Applications. Sage. New Delhi.
16. Thompson, D. 2003. The Economics of Environmental Protection. Winthrop Publishers. Cambridge, Mass.



**B.COM**  
**SEMESTER IV**  
**Fundamentals of Investment (CC 12)**  
**(100 Marks, 60 Lectures)**

**Objective:** To familiarize the students with different investment alternatives, introduce them to the framework of their analysis and valuation and highlight the role of investor protection.

**Unit I Investment Environment**

**(30 Marks, 20 Lectures)**

The investment decision process, Types of Investments – Commodities, Real Estate and Financial Assets (Equity, Mutual funds, Debt), the Indian securities market, the market participants (Stock exchanges, Stock brokers, Clearing House, Depositories, Depository Participants, FIs, Domestic institutional investors, Individual investors), Online and offline trading in securities, security market indices, sources of financial information, Concept of return and risk, Impact of Taxes and Inflation on returns.

**Unit II Analysis of Equity and Debt Instruments**

**(30 Marks, 20 Lectures)**

**(a) Fixed Income Securities**

Bond features, types of bonds, estimating bond yields, Bond Pricing, types of bond risks, default risk and credit rating, Bond market indices.

**(b) Approaches to Equity Analysis**

Introduction to Fundamental Analysis, Technical Analysis, dividend capitalisation models, and price-earnings multiple approach to equity valuation, Intrinsic value, Price to Book value ratio.

**Unit III Portfolio Analysis and Financial Derivatives**

**(20 Marks, 10 Lectures)**

Portfolio and Diversification, Portfolio Risk and Return; Mutual Funds; Introduction to Financial Derivatives; Financial Derivatives Markets in India

**Unit IV: Investor Protection**

**(20 Marks, 10 Lectures)**

Role of SEBI and stock exchanges in investor protection; Investor grievances and their redressal system, insider trading, investor awareness and activism.

**References:**

1. Jones, C.P. Investments Analysis and Management, Wiley, 8th ed.
2. Chandra, Prasanna. Investment Analysis and Portfolio Management. McGraw Hill Education
3. Rustogi, R.P. Fundamentals of Investment. Sultan Chand & Sons, New Delhi.
4. Vohra N.D. & Bagri B.R., Futures and Options, McGraw Hill Education
5. Mayo. An Introduction to Investment. Cengage Learning.



**B.COM**  
**SEMESTER IV**  
**Income Tax (Direct Tax) (CC 13)**

**Marks: 100**

**Lectures: 60**

**Learning Objective:** To provide basic knowledge of concepts, principles and provisions of Income-tax Act, 1961 and the relevant Rules

**Unit I : INTRODUCTION**

**(20-25marks, 12 lectures)**

**a) BASIC CONCEPTS:**

Income-u/s 2(24), Person -u/s 2(31), Assessee- u/s 2(7), Assessment- u/s 2(8), Assessment Year- u/s 2(9), Previous Year- u/s 3, Business- u/s 2(13), Company -u/s 2(17), Gross Total Income u/s. 80 (B) (5), Permanent Account Number (PAN)-u/s 139A.

**b) SCOPE OF INCOME & RESIDENTIAL STATUS:**

Scope of Total Income u/s 5.

Apportionment of Income between spouses governed by Portuguese Civil Code u/s 5A.

Residential Status in India u/s 6: Sections 6(1), 6(6) (a), 6(2), 6(6) (b), 6(3), 6(4).

Practical problems to cover determination of residential status of Individuals only

**c) EXEMPTIONS & EXCLUSIONS U/s 10:**

1. Leave Travel Concession - u/s 10(5).
2. Gratuity-u/s 10(10)(only for theory).
3. Compensation received at the time of Voluntary Retirement - u/s 10(10C).
4. Amount received under Life Insurance Policy - u/s 10(10D).
5. Payment received from Provident Fund-u/s 10(11), (12).
6. Payment received from approved superannuation fund- u/s 10(13).
7. House Rent Allowance - u/s 10(13A).
8. Special allowance - u/s 10(14):  
Conveyance, Daily, Uniform, Helper, Research, Transport, Travelling, Children's Education, & Children's Hostel Expenditure Allowance.
9. Interest on Securities- u/s 10(15).
10. Dividends & Interest on Units - u/s 10(34), (35).

**Unit II : COMPUTATION OF INCOME FROM SALARIES: (30-35 Marks, 15 lectures)**

Sections 15, 16 & 17 Inclusive of allowances (exclusive of valuation of perquisites)

(Only elementary problems on computation of income from salaries of an individual assessee)

**Unit III: COMPUTATION OF PROFITS & GAINS OF BUSINESS OR PROFESSION:**

**(30-35 Marks, 20 lectures)**

Sections: 28,29,30,31,32(excluding Depreciation Rates)

Section 36: Restricted to following clauses:

- i. Section 36 (1)(i)- Insurance premium
- ii. Section 36 (1)(ii)- Bonus/Commission to employees.
- iii. Section 36 (1)(iii)- Interest on Borrowed Capital



**B.COM**  
**SEMESTER IV**  
**ACCOUNTING**  
**Accounting For Service Organizations (CC 14)**  
**(100 Marks – 60 Lectures)**

**Objectives:** To familiarize the students with practical aspects of accounting for service organizations such as banks, general insurance companies, underwriters and hotels

**Unit I Accounting for Banking Companies**

**(40 Marks, 18 Lectures)**

Meaning of Banking and Banking Company, Brief idea about- Important Legal Provisions affecting the accounts, Different types of Deposits, Different types of Advances, Other Facilities extended to Customers.

Practical problems to cover preparation of Balance Sheet (Form A) and Profit and Loss Account (Form B) in Vertical Form with Separate Schedules.

**Unit II Accounting for General Insurance Companies**

**(20 Marks, 18 Lectures)**

Types of Insurance, Accounts of General Insurance Company. Final accounts to be prepared as per IRDA and shall comply with the requirement of Schedule B.

Revenue account to be prepared under FORM B-RA.

Profit & Loss A/C to be prepared under FORM B-PL.

Balance Sheet to be prepared under FORM B-BS.

Revenue a/c, P/L A/C Balance sheet to be prepared as per information provided.

**Unit III Accounting for Underwriting of Shares and Debentures**

**(20 Marks, 12 Lectures)**

Meaning, types of underwriting, Calculation of liability of Underwriter-Full underwriting – Partial underwriting – Sole underwriters – Joint underwriters – underwriting commission – Journal entries and Ledger Accounts.

**Unit IV Accounting for Hotels**

**(20 Marks, 12 Lectures)**

Concepts, Visitors Ledger (theory only) and final Accounts of Hotels under sole proprietorship, partnership and joint stock company (in case of company-as per Schedule III, Companies Act 2013).

**References:**

1. Chowdhary, Chopde, & Pednekar, M. *Financial Accounting, Auditing & Taxation*. Mumbai: Sheth Publishers.
2. Jain, & Narang. *Advanced Accountancy*. New Delhi: Kalyani Publishers.
3. Monga, J. R., & Ahuja, G. *Advanced Accounting* (Vols. I, II). Noida: Mayoor Paperback.
4. Mukherjee, A., & Hanif, M. (2002). *Modern Accountancy* (Vol. II). New Delhi: Tata McGraw Hill.
5. Paul, S. K. *Accountancy* (Vols. I, II). Calcutta: New Central Book Agency.



**B.COM.**  
**SEMESTER IV**  
**Business Statistics – II (GE 5)**  
**(100 Marks - 60 Lectures)**

**Unit I Correlation and Regression Analysis**

**(14Lectures -30marks)**

Meaning, Types and Methods of studying Correlation, Scatter Diagram, Karl Pearson's Coefficient of Correlation, Spearman's Rank Coefficient of Correlation, Properties of Coefficient of correlation, Linear Regression, Lines of regression and regression coefficients.

**Unit II Probability Theory**

**(21Lectures -36 marks)**

Elements of Probability-Random Experiments, events, definition of probability, conditional probability, addition and multiplication theorem, Mathematical expectation.  
Theoretical Distribution - Random variable, Binomial, Poisson and Normal Distribution.

**Unit III Sampling Theory**

**(14Lectures -16 marks)**

Methods of sampling- Census and Sample enumeration, Methods of Sampling: Simple Random Sampling, Systematic Sampling, Stratified Sampling, Cluster Sampling, Purposive Sampling, Quota and multi stage sampling (with examples).

Test of Hypothesis and Estimation- Sampling distribution, Standard error, Sample mean and Sample proportion, confidence limits, population mean and population proportion, Procedure for testing of hypothesis, Type I and Type II error, critical region, level of significance, test of significance for large samples.

**Unit IV Interpolation and Extrapolation**

**(11Lectures -18marks)**

Finite differences, Forward and Backward differences, Forward and Backward difference table, Newton-Gregory forward and backward difference formula for equidistant values of the argument (only applications), Lagrange's Interpolation formula for unequally spaced points (only applications), Shift Operator, Binomial Expansion method to find missing values (maximum 2 missing values).

**References:**

1. Gupta S.P., *Statistical Methods*, Sultan Chand & sons.
2. Gupta C.B., *Fundamentals of Statistics*, Himalaya Publishing House.
3. Shah R.J., *Statistical Methods*.
4. Mazumdar Neeta, *Statistical Techniques*, RajhaunsVitaran.
5. Sastry S.S., *Introductory Methods of Numerical Analysis*



**B.COM**  
**SEMESTER IV**  
**Indian Economy (GE 6)**  
**(100Marks, 60 Lectures)**

**Objectives:**

1. To enable the students to grasp the current economic problems in India.
2. To highlight the important economic sectors and challenges faced by them in the recent years.
3. To acquaint students with the major policy regimes of government to resolve problems in agriculture, industry and service sector of India.
4. To enable students to understand the change in policy focus from central planning to process of market integration of the Indian Economy with other markets in the world.

**Unit I Basic Issues in Economic Development (20 Marks, 10 Lectures)**

Concept and Measures of Development and Underdevelopment; The concept of economic growth and development, India's recent position in the world economy (based on World Bank GNI per capita), Human Development- concept, the Human Development Index – interpretation of indicator and value & rank of the indicator for India in the world context.

**Unit II Basic Features of the Indian Economy (20 Marks, 10 Lectures)**

Composition of national income and occupational structure, per capita income, inflation, unemployment, income distribution, poverty; India's population demographics [ infant mortality rate, literacy rate, gender composition-female male ratio(issue of missing women) and age structure- concept of demographic dividend]

**Unit III Policy Regimes, Growth, Development & Structural Change (30 marks, 20 Lectures)**

- a) Review of Planning Policy Experience in India.
- b) Policies for Agricultural and Rural Development (since Green Revolution till recently).
- c) Major Industrial policies under planning- Nehru-Mahalanobis Model and Liberalization, Globalization and Privatization (LPG) model of industrial growth. Evolution of Disinvestment policy of Government.
- d) Economic Reforms since 1991 – in banking sector (Narasimham Committee report main suggestions), capital markets, in the external sector, managed exchange rate system, rupee convertibility, in Government's policy on IT services, FDI, FPI entry in domestic sectors.
- e) The experience of Growth, Development and Structural Change in different phases of growth and policy regimes across sectors and regions.

**Unit IV Sectorial Trends and Issues**

**(30 Marks, 20 Lectures)**

**a) Agriculture Sector:**

Nature of Indian Agriculture; Brief evaluation of the agricultural sector (achievements and problems); Agricultural Finance (organized-NABARD, Cooperative and Commercial banks, Micro finance institutions, unorganized sources- moneylenders, landlords, traders etc.); Agricultural Marketing (defects and corrective measures); Government Policy Measures : Minimum Support



**B. COM**  
**SEMESTER V**  
**Industrial Management (CC 15)**  
**(100 Marks- 60 Lectures)**

**Objective:** To enable the students to gain understanding of concepts and environment of industrial management.

**Unit I Introduction to Industrial Management, Factory Location and Plant Layout**  
**(25 Marks-15 Lectures)**

Concept of Industrial Management – Industrial Management Process – Importance of Industrial Management. Scientific approach to Industrial Management- Concept, principles and significance of scientific management.

Meaning and factors determining factory location.

Concept, objectives and importance of plant layout, factors influencing layout, types of layout, problems of layout.

**Unit II Industrial Productivity and Work Environment** (25 Marks-15 Lectures)

Meaning of Productivity: Factors affecting Industrial Productivity – Significance of higher Industrial Productivity — Suggestions for Productivity improvement-Role of National Productivity Council.

Work environment- Factors affecting Work Environment - Lighting, air, ventilation, temperature, water, sanitation and noise.

Occupational Hazards- Meaning and types - Biological Hazards, Chemical Hazards and Psychological Hazards. Measures to minimize occupational hazards.

**Unit III Total Quality Management** (25 Marks-15 Lectures)

Concept of TQM – Principles of TQM – Benefits of TQM.

Methods of TQM – Management methods (i) Benchmarking - Meaning, Types of Benchmarking, Steps in Benchmarking Process(ii) Deming Wheel – Steps in Deming Wheel(iii) Just in time- Objectives and Characteristics of Just in Time (iv) Quality Circles-Concept and features of Quality Circles, (v) Six Sigma

Analytical methods – (i) Critical Path Method – Process and advantages of Critical Path Method(ii) Force Field Analysis – Driving and restraining forces, decision making(iii) Failure Mode and Effect Analysis –Meaning and steps in Failure Mode and effect Analysis

ISO-9000-Concept, Standards and guidelines.

**Unit IV Industrial Safety and Occupational Health** (25 Marks – 15 Lectures)

Definition of safety – Objectives of Safety Management.

Industrial Accidents – Causes of Accidents (a) Mechanical causes (b) Human Causes

Effects of Industrial accidents on employers, workers and society.

Code of practices for accident prevention.

Occupational Health- Concept- Health program in industries – Role of National Institute of Occupational Health(NIOH) - legal provisions regarding health- OHSAS 18000- (Occupational



**B.COM**  
**SEMESTER V**  
**Cost Accounting – I (DSE 1)**  
**(100 Marks, 60 Lectures)**

**Objective:** To familiarize students to the basic concepts of cost accounting and elements of cost.

**Unit I Cost Concepts and Terminology (20 Marks: 10 Lectures)**

Concepts of Cost, Costing, Cost accounting – objectives, principles, Importance, Advantages and Limitations of cost accounting system, Role of cost accounting in managerial decisions, Cost classification, Installation of costing system, Distinction between cost accounting and financial accounting.

**Unit II Material cost and control (20 Marks, 10 Lectures)**

**a) Material cost:** Meaning of material, Types of material, Procedure for purchase of materials, Calculation of material Purchase price, Types of purchase system – centralised and decentralised, Accounting for material losses – defective, spoilage and pilferage.

**b) Material control:** Meaning of material control, Dimensions of material control – cost and quantity, Need for control of materials, Essentials of material control, Advantages of material control.

**Unit III Stores control (30 Marks, 20 Lectures)**

Location and organisation of stores department, Store keeper and functions of store keeper, Classification and Codification of material, Inventory control system, Perpetual inventory system-Bin card and Stores ledger, Stores register, ABC Method of stores control, Calculation of Stock levels, Economic ordering quantity.

**Unit IV Material Issue Pricing and Control (30 Marks, 20 Lectures)**

Methods of pricing of material – Specific price method, First in First out, Last in First out, Average pricing methods (Simple average method, Weighted average method), Standard price method, Highest in first out method, Market price method.

**References :-**

9. Jain S. P and K.L. Narang- *Cost Accounting Principles and practice* – Kalyani Publishers, Ludhiana.
10. Bhar, B.K. *Cost Accounting- Methods & Problems*, Academic Publishers Calcutta 700073.
11. Kishore R. *Cost Accounting-* Taxmann Allied Service Pvt.Ltd.New Delhi.
12. Iyenger, S. P. *Cost Accounting*. S. chand& Co. New Delhi
13. Khana, B. S. & J. M. Pandey- *Practical costing*. S. Chand & Co. New Delhi



**B.COM**  
**SEMESTER V**  
**International Marketing Management (DSE 1)**  
**(100 Marks 60 Lectures)**

**Objective:** To develop an understanding of the basic concepts of International marketing

**Unit 1 Introduction to International Marketing Management (25 Marks 15 Lectures)**

Meaning, Features of International Marketing, Distinction between International and Domestic Marketing, Objectives and Importance of International Marketing, Challenges in International Marketing, Importance of International Marketing Research. International Marketing Environment.

**Unit 2 Developing International Marketing. (25 Marks 15 Lectures)**

International market entry strategies—Licensing, Joint Ventures and Direct Investment Export Promotion Organisations- Trade Blocks, Free Trade Zones, Special Economic Zones, Export Processing Zones.

**Unit 3 International Product and Price Policy. (25 Marks 15 Lectures)**

Global Branding, Trademarks, Packaging and Labelling. International Pricing Strategies, Factors affecting International Product Pricing, Dumping and types of Dumping, Price Quotations.

**Unit 4 International Distribution and Promotion Policy. (25 Marks 15 Lectures)**

Types of International market Intermediaries, Export Marketing Communication Mix. Importance of Export Marketing Communication, International Advertising, Trade Fairs and Exhibitions.

**References:**

- 1 Rao, P. S.. *International Business- Text and Cases*. Himalaya Publishing House.
- 2 Cherunilam, Francis. *International Trade and Export Management*. Himalaya Publishing House.
- 3 Kotler, Philip; Keller, Kevin Lane et al. *Marketing Management- A South Asian Perspective*. By Pearson Education.
- 4 Ramaswamy, V.S. & Namakumari. S. *Marketing Management*. MacMillan.
- 5 R, Philip & Graham, Cateora John. *International Marketing*. Sage Publications.
- 6 Ahmed, Mehtab et al. *Export Management*. Sheth publishers.
- 7 Madan, Pankaj et al. *Marketing Management*. Global Vision Publishing House.
- 8 Sherlekar, S.A. & Sherlekar, V.S. *Global Marketing Management*. Himalaya Publishing House.



**B. COM.**  
**SEMESTER V**  
**DISCIPLINE SPECIFIC ELECTIVE**  
**ACCOUNTING**  
**Auditing –I (DSE 2)**  
**(100 Marks – 60 Lectures)**

**Objective:**

The course aims at imparting knowledge about the principles, methods, techniques of auditing and their applications to understand the objective and concepts of auditing to gain working knowledge of generally accepted auditing procedures and of techniques and skills.

**Unit I Introduction:**

**(20 Marks-10 Lectures)**

- Evolution of audit
- Meaning and Definition
- Scope of Auditing
- Auditing V/s. Accountancy
- Objectives of Auditing – Primary & Secondary
- Various classes of audit (Based on authority, time and scope )
- **Qualities of an Auditor**
- **Basic Principles governing an audit.**
- Benefits and limitations of Auditing

**Unit II Internal Control System**

**(20 Marks-10 Lectures)**

- Meaning – Nature and Objectives of internal Control System
- Procedure for Evaluation of Internal Control System
- Methods for evaluation of internal control system,
  - Internal Control Questionnaire – Meaning, illustrations, merits and demerits
  - Flow chart – meaning, illustrations , merits and de-merits
- Internal Check – Meaning, objectives, merits and demerits
- Internal Audit – Meaning and Significance

**UNIT III Audit Process**

**(40 Marks-25 lectures)**

**(a) Basic Preparations**

- **Audit plan** – Meaning and steps in audit planning
- **Audit Programme** – Meaning, objectives, contents, merits and limitations.
- **Audit evidence** - Procedures for obtaining evidence, Sources of evidence, Reliability of audit evidence, Methods of obtaining audit evidence, Physical verification, documentation, direct confirmation, re-computation, Analytical review techniques, and representation by management.
- Audit Working Papers – Purpose, contents, working files – permanent and temporary files, ownership & confidentiality of working papers.



- Audit Note Book- Purpose, content and benefits
- Routine checking
- Audit Sampling - Judgmental and statistical sampling
- Test checking

**(b) Vouching, Verification and Valuation**

- Vouching – Meaning, objectives
- General procedure for vouching
- General Considerations in audit of payments, receipts, purchases and sales
- Verification-meaning, objectives, verification V/s Vouching
- Valuation-meaning, objectives, Verification V/s. Valuation
- Procedure for Verification & Valuation in general – Verification of inventories with case laws.

**(c) Audit Report**

- Types of audit report, distinction between report and certificate
- Reporting under CARO.

**Unit IV Developments in Auditing**

**(20 Marks, 15 lectures)**

Tax audit

**Management audit**

Cost audit

VAT audit

Forensic audit

Audit in computerized environment

Peer review

**Note.**

1. Relevant auditing standards to be covered wherever applicable
2. Syllabus will be revised on regular basis at the beginning of the year to accommodate changes made in auditing standards

**References:**

1. Aruna Jha, Students guide to auditing. Taxman publication New Delhi.
2. Gupta Kamal: Contemporary Auditing, Tata McGraw-Hill, New Delhi
3. Tandon B. N. Principles of Auditing: S. Chand & Co, New Delhi.
4. Pagare Dinkar: Principles & Practice of Auditing: Sultan Chand, New Delhi
5. Sharma T.R.: Auditing Principle & Problems: Sahitya Bhavan, Agra.
6. Sekhar & Sekhar: Auditing: Vikas Publishing House Ltd., New Delhi.
7. Saxena R. G. & Others: Practical Auditing: Himalaya Publishers, Mumbai.
8. S.D Sharma: Auditing Principles, Taxman publication New Delhi
9. Ravinder Kumar & Virender Sharma: Auditing Principles & Practice: Prentice Hall of India, New Delhi.



**B.COM**  
**SEMESTER II**  
**Cost Accounting-II (DSE 2)**  
**( 100 Marks , 60 Lectures )**

**Objective:** To familiarize the students to the basic concepts and element of cost - labour cost and overhead.

**Unit I Labour cost and Control ( 20 Marks , 10 Lectures )**

Meaning, classification of labour, Time keeping and Time booking, Payroll Accounting Monetary benefit, Fringe benefits, Overtime Premium, Holiday and Vacation Pay, Idle time Labour Turnover.

**Unit II Labour remuneration (30 Marks , 20 Lectures )**

Methods of labour remuneration, Incentive Schemes-Individual and Group, profit sharing Calculation of Gross wages and Net wages, Individual incentive schemes and Group bonus schemes and Labour cost per unit.

**Unit III Overhead classification, Allocation and Apportionment ( 30 Marks , 20 Hours )**

Direct and indirect cost, Classification of overhead cost, Departmentalisation, Allocation and Apportionment of overhead to cost centres, Primary distribution of overhead secondary distribution of overhead-Direct distribution method, step ladder method Repeated distribution method, Simultaneous equation method.

**Unit IV Overhead absorption ( 20 Marks , 10 Lectures )**

Procedure for accounting of overhead cost, Overhead absorption rates, Actual and predetermined overhead rate, Methods of absorption, Accounting for under- absorption and over- absorption of overhead.

**References :-**

1. Jain S. P and K.L. Narang- *Cost Accounting Principles and practice* – Kalyani Publishers Ludhiana.
2. Bhar, B.K. *Cost Accounting- Methods & Problems* , Academic Publishers Calcutt 700073.
3. Kishore R. *Cost Accounting-* Taxmann Allied Service Pvt.Ltd.New Delhi.
4. Iyenger, S. P. *Cost Accounting*. S. chand& Co. New Delhi
5. Khana, B. S. & J. M. Pandey- *Practical costing*. S. Chand & Co. New Delhi
6. Khan, M. Y. & P.K. Jain- *Theory and Problems of Management and Cost Accounting-* Tata McGraw Hill Publishing co. Ltd. New Delhi
7. Lal, J. *Cost Accounting*. Tata McGraw –Hill Publishing co. Ltd. New Delhi
8. Nigam, B. & J.C. Jain. *Cost Accounting Principles & Practice*. Prentice- Hall of India Pvt Ltd., New Delhi.



**B.COM**  
**SEMESTER – V**  
**Retail Management Strategies (DSE 2)**  
**(100 Marks – 60 Lectures)**

**Objective:** To acquaint students with retail management strategies.

**Unit I Retail Major Decisions (25 Marks-15 Lectures)**

Product Decisions - 1. Types of Goods 2. Life Cycle of Goods 3. Quality.

Pricing– Price v/s value – Meaning, factors affecting retail pricing

Promotion decisions – Need, objectives and forms.

**Unit II Understanding the Retail Consumer (25 Marks-15 Lectures)**

Identifying and responding to changing customer profiles

Retail Shopper – Meaning and factors influencing retail shopper. Customer decision-making process. Changing trends among the Indian consumers – Factors responsible.

**Unit III Servicing the Retail Consumer (25 Marks-15 Lectures)**

Customer Service – Meaning. Standardisation v/s Customisation. Importance of service in retailing, Product enhancement through services – Principles for delivering distinctive services. Managing customer expectations and handling complaints – Meaning, process of handling complaints. Customer loyalty – Meaning. Customer Loyalty Programmes – Meaning and essential features.

Concept of Customer Relationship Management.

**Unit IV: Retail Strategy and Implementation (25 Marks-15 Lectures)**

Growth strategies: Development, Diversification. Market penetration, Market expansion, Retail format.

Implementing Retail Strategies process- Define the business mission, conduct a situation Audit, Identify strategic opportunities, Evaluate strategic alternatives, Establish specific objectives and allocate resources, Develop a retail mix to implement strategy, Evaluate performance and make adjustments.

Retail Logistics Management – Meaning, importance.

Concept of supply chain management – Retail logistics – Push logistics v/s pull logistics.

**References:**

1. Pradhan, Swapna. *Retail Management – Text and Cases*. Tata McGraw Hill Publishing, New Delhi.
2. Levy, Michael & Weiz, Barton A. *Retailing Management*. Tata McGraw Hill Publishing, New Delhi.
3. Gilbert, David. *Retail Marketing Management*. Pearson Education, Delhi.
4. Lucas, George H.; Bush, Robert & Gresham, Larry. *Retailing*. All India Publishers and Distributors, Chennai.



**B.COM**  
**SEMESTER V**  
**DISCIPLINE SPECIFIC ELECTIVE**  
**ACCOUNTING**  
**Government Accounting (DSE 3)**  
**(100 Marks – 60 Lectures)**

**Objective:** To familiarize the students with concepts and practical aspects of government accounting.

**Unit 1: Introduction to Indian Government Accounting (25 Marks, 15 Lectures)**

Difference between commercial accounting and government accounting, Objectives of government accounting, Terminology in government finance, Basic principles of government accounting in India, Classification of government accounting in India, Government financial administration, Accounting procedure for government expenditure, General outlines of the system of government accounts.

**Unit 2: Accounting for Local Self-Government (20 Marks, 15 Lectures)**

Meaning, Major revenues and expenses of local self-governing bodies, Budgeting and accounting for local self-governing bodies – Municipalities and city corporations, Panchayats and Zilla Panchayats, Limitations of the present accounting system, Financial control in government.

**Unit 3: Accounting and Audit of Works Expenditure (30 Marks, 15 Lectures)**

General outline of the public works system of accounts, accounting and audit of projects, accounting and audit of stores and stock, Tendering and works expenditure, Capital budgeting for project evaluation, New areas of contracting, Management contracts, leasing, service contracts, BOOT, BOO, BLO, Turnkey contracts, Project management – CPM and PERT.

**Unit 4: Accounts of Statutory Corporations (25 Marks, 15 Lectures)**

Meaning of statutory corporations, Accounts of electricity corporations, Accounting for state transport corporations, Practical problems.

**References:**

1. Bharadwaj, K. K. (2002). *Public Accounting and Auditing*. New Delhi: Mittal Publication.
2. Mahajan, A. P., & Mahajan, S. K. (2014). *Financial Administration in India*. Delhi: PHI Learning.
3. Mukherjee, A., & Hanif, M. (2002). *Modern Accountancy* (Vol. II). New Delhi: Tata McGraw Hill.
4. Pandey, I. M. *Financial Management*. New Delhi: Vikas Publishing House.
5. Premchand, A. (1995). *Effective Government Accounting*. Washington D C: International Monetary Fund.

**Websites:**

[www.cag.gov.in](http://www.cag.gov.in)  
[www.icaai.org](http://www.icaai.org)



**B.COM**  
**SEMESTER V**  
**DISCIPLINE SPECIFIC ELECTIVE**  
**COST AND MANAGEMENT ACCOUNTING**  
**Techniques of Costing (DSE 3)**  
**(100 Marks , 60 Lectures )**

**Objective:** To provide the students an understanding of the application of techniques of costing

**Unit I Marginal Costing**

**(30 Marks, 20 Lectures)**

Meaning , definition and objectives of marginal costing, comparison between absorption costing and marginal costing , preparation of marginal cost statement , marginal cost equation , P/V ratio ,break even analysis , margin of safety ,angle of incidence .(Theory and practical problems) .

**Unit II Application of Marginal Costing in Decision Making**

**(20 Marks , 10 Lectures)**

Profit planning, key factor analysis, pricing decision, product decision, market decision, sales mix, make or buy decision.

**Unit III Standard Costing and Variance analysis**

**(30 Marks , 20 Lectures)**

Meaning of standard cost and standard costing , merits and limitation of standard costing, standard cost v/s estimated cost , variance analysis - Different types of variances – Material, Labour and overhead variances(theory and problems)

**Unit IV Management Control**

**( 20 Marks , 10 Lectures )**

Meaning , Need of management control system, Designing of management control system, Performance budgeting, Balanced score card, Transfer Pricing, Management Reporting – General principles of reporting, classification of Reports.

**References:**

1. Patkar, M.G. *Management Accounting*.
2. Prasad, N. K. *Principles and practice of cost Accounting*
3. HiNgorani, Ramanathan & Grewal, *Management Accounting*.
4. Saxena, U. K. & C.D. Vashist, *Advanced Cost & Management Accounting*
5. Drury & Taxmann, *Management & Cost Accounting*.
6. Jain S. P and K.L. Narang- *Cost Accounting Principles and practice* – Kalyani Publishers, Ludhiana.
7. Bhar, B.K. *Cost Accounting- Methods & Problems* , Academic Publishers Calcutta 700073.
8. Kishore R. *Cost Accounting- Taxmann Allied Service Pvt.Ltd.*New Delhi.



**B.COM**  
**SEMESTER V**  
**Advertising Management – I (DSE 3)**  
**(100 Marks - 60 Lectures)**

**Objectives:** To acquaint the students with fundamentals of advertising, media planning and effectiveness of advertising.

**Unit I Introduction**

**(25 Marks-15 Lectures)**

Advertising – Meaning, Benefits and limitations of advertising. Factors influencing the growth of advertising. Types of Advertising- (a) Product/Service/Brand (b) Institutional, (c) Cause marketing. Future of advertising. Advertising Media – Meaning & types, factors influencing choice of media. Types of Internet advertising. Advertising ethics and social responsibility. Advertising and consumer protection. Integrated Marketing Communication – concept.

**Unit II Building the Advertisement**

**(25 Marks-15 Lectures)**

- a) Layout – Meaning, elements of an advertisement, Principles of effective layout.
- b) Illustration- functions and types
- c) Copywriting – Meaning, types and essential components of copy, Principles for effective copywriting for Posters, Print, Radio, Television & Web/ Internet.

**Unit III Advertising Agency**

**(25 Marks-15 Lectures)**

Advertising Agency – Meaning, functions, factors influencing the choice of an advertising agency, types of advertising agencies.

Client Agency Relationship – Meaning and principles. Client Turnover – Meaning & reasons. Advertising Agency compensation – Meaning and types.

Career options available in Advertising field- Advertising agencies, media, production house, research and allied field (printing, graphics and animation, modeling & dubbing).

**Unit IV Advertising Effectiveness**

**(25 Marks-15 Lectures)**

Measuring advertising effectiveness - Meaning & importance.

Research in Advertising- importance and types (copy research & behavioural research). Limitations of research, Pre-testing and Post-testing methods, DAGMAR- concept, merits & demerits

**References:**

- Arens, William. *Contemporary Advertising*. Tata McGraw Hill, N. Delhi
- Dunn, Watson & Barbon Arnold. *Advertising- Its role in Modern Marketing*. Holt Saunders International Ed, New York.
- Shankar Amita. *Advertising*. Seth Publishers, Goa.
- Albert C. & Schick, C. Dennis. *Fundamentals of copy and layout*. NTC Publishing Group, U.S.
- Bennett, Anthony G. *The Big Book of Marketing*. Tata McGraw-Hill



**B.COM**  
**SEMESTER V**  
**DISCIPLINE SPECIFIC ELECTIVE**  
**ACCOUNTING**  
**Financial Reporting (DSE 4)**  
**(100 Marks – 60 Lectures)**

**Objective:** To familiarize the students with concepts and practical aspects of corporate financial reporting.

**Unit 1: Corporate Financial Reporting System (25 Marks, 15 Lectures)**

Concept, Users, Objectives of financial reporting, Qualitative characteristics of financial report, Disclosure – Concept, motives and problems, Regulatory framework of Indian financial reporting system, Components of financial reporting, Mechanisms of setting financial reporting standards, Current corporate reporting practices of Indian companies, Corporate social responsibility reporting, Case study on financial reporting.

**Unit 2: Accounting Pronouncements (30 Marks, 20 Lectures)**

Framework for preparation and presentation of financial statements – Purpose and Scope, Generally Accepted Accounting Principles (GAAP) – Meaning, Significance, Difference between Indian GAAP and US GAAP; Accounting Standards – Meaning, Significance, Accounting standards in India , AS-1 (Accounting Policies), AS-18 (Related Party Disclosures), Practical problems in Accounting Standards – AS-9 (Revenue Recognition), AS-10 (Accounting for Fixed Assets), AS-16 (Borrowing Costs), AS-20 (Earnings Per Share), Guidance Notes – Meaning and Significance.

**Unit 3: Developments in Financial Reporting (25 Marks, 15 Lectures)**

Value Added Statement - Meaning of VAS, Need and Importance, Concepts, Practical problems in VAS, Limitations of VAS; Segment Reporting - Meaning of segment reporting, Need and importance, Practical problems as per relevant Accounting Standard; Human Resource Reporting – Meaning, Need, Models, Practical problems on Lev and Schwartz model, Interim financial reporting.

**Unit 4: International Financial Reporting Standards and IND-AS (20 Marks, 10 Lectures)**

IFRS concept and need, IFRS foundation and IASB, IFRS adoption and convergence, IFRS converged IND-AS, Concept of fair value, Difference between IFRS and IND-AS, Practical problems in measurement of fair value, revenue and property, plant and equipment using relevant IFRS/IND-AS.

**References:**

1. Ghosh, T. P. (2007). *Accounting Standards and Corporate Accounting Practices* (Eighth ed.). New Delhi: Taxmann.
2. Ghosh, T. P. (2011). *Indian Accounting Standards (IND-AS) and IFRSs* (Second ed.). New Delhi: Taxmann.



**B.COM**  
**SEMESTER V**  
**DISCIPLINE SPECIFIC ELECTIVE**  
**COST AND MANAGEMENT ACCOUNTING**  
**Management Accounting (DSE 4)**  
**(100 Marks, 60 Lectures)**

**Objective:** This course provides the students an understanding of the application of accounting techniques for management.

**Unit I Introduction to Management Accounting (20 Marks, 10 Lectures)**

**Management Accounting:** meaning , nature ,scope and functions of management accounting – advantages, limitations of management accounting, Principles of management accounting, Role and status of management accountant management accounting v/s financial accounting , tools and techniques of management accounting .

**Unit II : Budgetary Control (30 Marks , 20 Lectures)**

Meaning of budget , budgeting and budgetary control , objectives , merits and limitations ,Classification of Budgets, Preparation of functional budgets – sales budgets, production budget, cost of production budget – Direct material, Direct Labour and Overhead budget, cash budget ,Flexible budget and Master budget ( theory and practicals)

**Unit III: Capital Budgeting (30 Marks ,20 Lectures)**

Meaning, Methods and Evaluation of projects, traditional Methods :- Pay Back Period/Accounting Rate of Return (practical), Scientific methods / Discounted cash flow method-Net Present Value, Internal Rate of Return, , Profitability Index, (Internal Rate of Return Only theory)

**Unit IV: Target costing and ERP (20 Marks, 10 Lectures)**

Concept – stages involved in target costing – objectives of target costing – target costing process- advantages of target costing.

Enterprise Resource Planning (ERP) –features of enterprise resource planning, need for ERP, scope of ERP and Benefits of ERP

**References:**

1. Arora M N : *Cost Accounting – principles and practices* , vikas , new Delhi.
2. Anthony , Robert & Reece ,et,al : *Principles of management Accounting* ; Richard Irwin Inc.
3. Horngren , Charles , Foster and Datar et al: *Cost Accounting – A Managerial Emphasis* ; Prentice Hall , New Delhi.
4. Khan M. Y and Jain P.K : *Management Accounting* ; Tata McGraw Hill , New Delhi.
5. Kaplan R.S. and Atkinson A.A :*Advanced Management Accounting* :Prentice Hall India, New Delhi.



**B.COM**  
**SEMESTER V**  
**BUSINESS MANAGEMENT (DSE 4)**  
**Services Marketing - II**  
**(100 Marks - 60 Lectures)**

**Objective:** To familiarize the students with the diversity in the services sector and the unique challenges faced by the managers in these services.

**Unit I Tourism and Hospitality Services (25 marks 15 Lectures)**

Tourism Services, Tourism product – meaning and components (attraction, accommodation, transport, support and auxiliary services).

Demand factors for tourism product.

Role of tour operators and travel agents.

Hospitality Services, hospitality product – meaning and components (location, facilities, services, image, price), major decisions in marketing of hotels, classification of hotels.

Airlines Services – meaning and feature of airline product, marketing mix for airlines.

Indian Railways – Brief profile, pricing considerations for Indian railways.

Emerging trends in tourism: i) eco tourism – meaning, concept

ii) adventure tourism - meaning, concept

iii) health tourism - meaning, concept

**Unit II Banking Services (25 marks 15 Lectures)**

Bank marketing – meaning and importance.

Bank Services – types of bank products available in the Indian context – savings account, current account, recurring deposit, fixed deposit.

Forms of lending (advances) - over draft, bill discounting, retail loans, bank credit,

ATM cum debit cards, Credit cards, benefits of credit cards to all concerned parties.

Mutual funds – meaning, definition, advantages of mutual fund investments, types of mutual funds. Systematic Investment Plan – meaning and importance.

**Unit III Insurance Services (25 marks 15 Lectures)**

Insurance – meaning, nature; basic principles of insurance – utmost good faith, insurable interest, indemnity, causa proxima, mitigation of loss, contribution, subrogation, period of insurance

Types of insurance –i) Life insurance – meaning, procedure and settlement.

ii) Non-life insurance –a) Marine insurance (meaning and types of marine insurance policies)

b) Fire insurance (meaning, and types of fire insurance policies) c) Concept of motor insurance, health/medical insurance, crop insurance, burglary insurance.

Insurance marketing in India – need, landmark developments.

Trends in insurance - cross selling, banc assurance, their meaning, merits and demerits.

Reinsurance – concept and importance.



#### Unit IV Emerging trends in Services

(25 marks 15 Lectures)

Green marketing – meaning, green marketing practices in service sector.

Health care services – concept, providers of health care services.

Media services – concept, buyers

BPOs, KPOs and LPOs – meaning, merits and limitations.

Courier services – concept, major players, SWOT analysis of courier industry in India.

Web marketing- concept, benefits.

#### References:

- 1) Zeithaml, Valarie & Bitner, Mary Jo. *Services Marketing*. Tata McGraw Hill.
- 2) Clow, Kenneth E. & Kurtz, David L. *Services Marketing- Operation, Management and Strategy*, (Second ed). Biztantra.
- 3) Woodruffe, Helen. *Services Marketing*. MacMillan.
- 4) Srinivasan, R. *Services Marketing – The Indian Context*. Prentice Hall.
- 5) Rust, Roland; Zahorik, Anthony & Keiningham, Timothy. *Services Marketing*. Eastern Press, Bangalore.
- 6) Shankar, Ravi. *Services Marketing – The Indian Perspective*. Excel Books.
- 7) Venugopal, Vasanti. *Services Marketing*. Himalaya Publications.
- 8) Indian Institute of Banking and Finance. *Banking Products and Services*. Taxmann Publications.
- 9) Somashekar Ne Thi. *Money Banking, International Trade and Public Finance*.
- 10) Gupta, Amitabh. *Mutual Funds in India – A Study of Investment Management*. Anmol Publications.
- 11) Indian Institute of Banking and Finance. *Insurance Products (including pension products)*. Taxmann Publications.
- 12) Tripathy, Nalini Prava & Pal, Prabin. *Insurance – Theory and Practice*. Prentice hall.



**B. COM**  
**SEMESTER VI**  
**Human Resource Management (CC 17)**  
**(100 Marks- 60 Lectures)**

**Objective:** To enable the students to understand and comprehend the vital issues of HRM in a dynamic environment.

**Unit I Introduction to Human Resource Management (25 Marks-15 Lectures)**

**Human Resource Management** – Meaning and importance, Human resource planning (HRP) defined, objectives and importance of HRP.

**Job Analysis and Design** - Process of Job analysis, methods of data collection, concept of job design, factors affecting job design, methods/ techniques of design.

**Recruitment, Selection and Placement**

Meaning, sources of recruitment and recruitment process, meaning of selection, meaning of placement, Business Process Outsourcing, need for outsourcing, HR Outsourcing Opportunities in India.

**Unit II Employee Compensation, Empowerment and Participation (25 Marks-15 Lectures)**

**Employee Compensation:** Concept of Wage - Factors determining Wage Rates- Essentials of a sound Wage system – System of wage payment- (i) Time wage system (ii) Piece wage system, Individual wage incentive plans - Meaning - (i) Halsey Premium Plan (ii) Rowan Plan (iii) Taylor's Differential Piece rate Plan.

**Group incentive plans** - Meaning- (i) Profit sharing scheme-features, advantages and disadvantages (ii) Co-partnership – features, advantages and limitations. Payment of Bonus, ESOPs.

**Employee Empowerment:** Meaning, forms of empowerment, barriers to empowerment, empowerment in India: An overview.

**Workers Participation in Management:** Definition and objectives, forms of workers participation in management.

**Unit III Labour Welfare and Trade Union (25 Marks-15 Lectures)**

**Labour Welfare:** Concept and objectives. Labour welfare agencies –Government, Employers and Trade Unions. Labour Welfare Programmes in Industries –Statutory and Non Statutory measures.

**Trade Union:** Definition and functions of Trade Union - weaknesses and problems of Indian Trade Union- suggestions for healthy growth of Trade Unions in India – Challenges faced by Trade Unions in the light of globalization.



Labour Turnover and Labour Absenteeism: Meaning of labour turnover and absenteeism. Causes and effects of labour turnover and absenteeism, measures to minimize labour turnover and absenteeism.

#### Unit IV Trends in HRM

(25 Marks-15 Lectures)

HRM in a changing environment – Changing environment and Challenges before HR manager  
Competencies and learning organizations: Employee branding, The need for innovation, creating an innovative organization, managerial roles, creating the innovation culture.  
Re - Engineering: The role of HR in Business Process Re-engineering.

#### References:

- 1) Lepak, David & Gowan, Mary. *Human Resource Management*. Dorling Kindersley (India).
- 2) Khanna, S.S. *Human resource Management (Text and Cases)*. S. Chand, New Delhi.
- 3) Sadri.J, Sadri.S, Nayak.N, *A Strategic Approach to Human Resource Management*, JAICO Publishing House.
- 4) Davar, R. S. *Personnel Management and Industrial Relations*. Vikas Publication, Noida.
- 5) Robbins, Stephen P. *Organisational Behaviour*. Pearsons Education, New Delhi.



**B.COM**  
**SEMESTER VI**  
**DISCIPLINE SPECIFIC ELECTIVE**  
**COST AND MANAGEMENT ACCOUNTING**  
**Cost and Management Audit (DSE 6)**  
**(100 Marks, 60 Lectures)**

**Objectives:** To provide in-depth knowledge of cost and management audit

**UNIT I COST AUDIT**

**(20 Marks, 10 Lectures)**

Meaning, nature, objectives and scope of cost audit, Concepts of efficiency audit, Propriety audit, Management Audit, Social audit, Operational Audit, Energy Audit, VFM audit, Performance Audit, Difference between cost audit and financial audit. Advantages and limitations of Cost Audit.

**UNIT II COST AUDIT AND COMPANIES ACT**

**(30 Marks, 15 Lectures)**

Important sections of Companies Act 2013 relating to Cost Audit, Books of Accounts to be maintained, Qualification, Disqualification, ceiling on Number of cost audit, Appointment of cost auditor, rights and responsibilities, status, relationship and duties and liabilities- professional and legal under the companies act 2013 and the cost and the Works accountants Act 1959, professional ethics and code of conduct for cost auditor.

**UNIT III PLANNING AND TECHNIQUES OF COST AUDIT (20 Marks , 15 Lectures)**

Familiarization with the industry, the organisation, the production process, the system, and procedure- list of records and reports, preparation of the audit program, audit notes and working papers, techniques of cost audit, procedure, meaning and importance, Internal control, internal check, internal audit.

**UNIT IV: COST RECORDS AND AUDIT RULES**

**(25 Marks , 15 Lectures )**

- (a) Cost Accounting Record Rules-meaning -list of cost accounting records essential records and statistical record-application of CAAR and maintenance of record important cost accounting records such as Raw Materials, wages, overheads, depreciation production records, sales records consumable stores & spares R&D Expenses Benefits derived from cost accounting records preservation of cost accounting records.
- (b) Cost Audit Report Rules-contents-annexure to cost audit reports types of report- distinctions between notes and qualifications to the report. Report and opinion, special emphasis on Cost auditors observation Necessity of cost audit, End use of cost Audit Report. Cost audit as an aid to management.

**References :**

1. Ramnathan, A. R., *Cost and Management Audit*. Tata McGraw Hill Publishing, New Delhi.



**B.COM**  
**SEMESTER VI**  
**DISCIPLINE SPECIFIC ELECTIVE**  
**BUSINESS MANAGEMENT**  
**Supply Chain & Logistics Management (DSE 7)**  
**(100 Marks – 60 Lectures)**

**Objective:** To develop a basic understanding of the key concepts and processes of Supply Chain & Logistics Management.

**Unit I Introduction to Logistics Management (25 Marks- 15 Lectures)**

Logistics- nature & concepts. Evolution of the logistics concept.  
Functions of logistics management. Importance of Logistics Management.  
The Integrated Logistics System.  
Logistics in India.

**Unit II Fundamentals of Supply Chain Management (25 Marks- 15 Lectures)**

Supply chain- nature & concept; Importance of Supply Chain Management. Value chain.  
Functions & contributions of Supply chain management. Managing the supply chain.  
Outsourcing- reasons. Process tools for Supply Chain Management- (a) Make or buy decision, (b) Supplier scheduling, (c) Value analysis/engineering, (d) Supplier certification/ evaluation.

**Unit III Demand Management & Customer Service (25 Marks- 15 Lectures)**

Demand Management- concept. Demand forecasting- types of forecasts. Forecasting techniques- Qualitative & Quantitative.  
Customer- Concept & Nature. Components of customer service. Establishing a customer service strategy- methods-(a) Customer reactions to stock outs, (b) Cost/Revenue trade-off, (c) ABC analysis/Pareto's law, (d) Customer service audit.

**Unit IV Components of Supply Chain & Logistics Management (25 Marks- 15 Lectures)**

Information Technology systems in Supply chain & Logistics – Types (concepts only) –(i) Bar coding, (ii) Electronic Data Interchange, (iii) XML, (iv) Data Management, (v) Imaging, (vi) Artificial Intelligence, (vii) RF technology, (viii) Computers on board & Satellite tracking, (ix) Intranet/Extranet, (x) E-commerce.

Order processing – Elements of Order Cycle -Order preparation, Order transmittal, Order entry, Order filling, Order status reporting, Order transportation, Customer delivery & unloading.  
Inventory management process and Materials handling – Handling systems/considerations- Mechanised handling system, Semi-automated handling system and Automated handling system.

Transportation- Functions- Product Movement and Product Storage.

Warehousing - Primary handling activities- Receiving, In-storage handling, and Shipping.

Packaging- Types of packaging- Consumer and Industrial.



## COMMERCE ELECTIVES SEMESTER – I

B.COM.

SEMESTER I

Banking I (GE 1)

(100 Marks- 60 Lectures)

**Objectives:** To acquaint students with basics of banking and structure of banking business in India.

### Unit I Introduction to Banking in India

(25 Marks-15 Lectures)

Evolution of Banking, Origin of Modern Banking in India, Meaning and Definition of Banking, Structure of Commercial Banking in India- Scheduled and Non-scheduled Banks, Public Sector Banks, Private Banks, Foreign banks and Regional Rural Banks. Systems of Banking - Group and Chain Banking, Unit & Branch Banking, Investment Banking, Mixed Banking and Universal Banking. Central Banking – Reserve Bank of India, Origin and growth – Functions, Bank Nationalization in India.

### Unit II Functions of Banks

(30 Marks 18 Lectures)

**Accepting Deposits**-Importance of deposits, Classification & features of deposits-Demand deposits, (Current account deposits, Saving account deposits, Pigmy deposits and Call deposits) Term deposits, (Fixed deposits, Recurring deposits) and Hybrid deposits or Flexi-deposits. **Loans and Advances**-Importance of lending, Principles of lending and Credit Management, Different types of lending facilities in brief -Cash credit, Overdraft. Loans: (Demand loans, Medium term loan and Long term loans) Bills purchased and Bills discounted, project finance, Loan syndication and Bridge loan, Agency and miscellaneous services.

### Unit III Types of Customers and their Accounts

(25 Marks-15 Lectures)

Types of Individual Customers: Minor, Married Women, Illiterate persons, Hindu Undivided Family. Opening of deposits accounts, Need for identity proof and proof of residence, Know your customers (KYC) norms, Guidelines of the RBI, Introduction, Specimen Signature, Nomination, Pass book, Statement of accounts, Bank slips and documents, Demand draft, Cheque book and Closing of accounts, Non-Resident Accounts- Features of NRO, Foreign Currency Non-Resident (FCNR) account and Non-Resident (External) (NRE) accounts.

### Unit- IV Retail Banking & Customer Relationship Management (20 marks 12 lectures)

Introduction to Retail Banking – objectives and importance, different retail products offered by banks. Pricing of Retail banking products, Customer Relationship Management in Banking: concept, objectives and importance. Principles of Customer Relationship and customer relationship building strategies.

#### Reference:

1. Indian Institute of Banking and Finance, Principles and Practices of Banking, (2nd Edition) Macmillan Publication India Limited, New Delhi.



**B.COM**  
**SEMESTER II**  
**Customer Relationship Management (GE 2)**  
**(100 marks- 60 Lectures)**

**Objective:** To acquaint students to the analytical and strategic aspects of CRM.

**Unit I Introduction to CRM**

**(25 marks- 15 Lectures)**

Consumer behaviour and organizational buying behaviour - concept and differences.

Relationship Marketing - concept, CRM - Meaning, overview of CRM process, benefits to customer and organization. Relationship Value of customers- factors influencing relationship value.

Customer Service/Sales Profile- Customer Pyramid, Hourglass, Hexagon.  
Pitfalls of Customer Service/ Sales Profile.

CRM typical business touch points, CRM capabilities and customer life cycle.

**Unit II Creating Customer Value and Loyalty**

**(25 marks- 15 Lectures)**

Customer Lifetime Value - Meaning and measurement concepts, Customer Equity -concepts.

Customer Loyalty, Customer Profitability, Customer Pyramid-concepts.

The 4 A's framework and Customer Focus.

Customer Complaints-nature of consumer action, types of complainers.

**Unit III Customer Databases & Database Marketing**

**(25 marks- 15 Lectures)**

Collecting customer data- Customer databases – sources. Data warehouses and data mining.

Identifying information- Privacy and CRM programmes.

Analysing customer data and identifying target customers. Limitations of database marketing and CRM.

E-CRM, operational CRM (a) Sales Force Automation (SFA), (b) Customer Service and Support (CSS), (c) Enterprise Marketing Automation (EMA), (d) Integrated CRM.

E-CRM Technology Dimensions - Utility.

**Unit IV Developing CRM Programmes**

**(25 marks- 15 Lectures)**

Increasing the value of customer base - Strategies.

Steps in attracting and retaining customers.

Customer Retention - strategies and levels -financial, social, customization and structural bonds.

Internal Marketing- concept.

**References:**

1. Kotler; Keller; Koshy & Jha. *Marketing Management-A South Asian Perspective*. Pearson Education.
2. Zeithaml, Valarie & Bitner, Mary Jo. *Services Marketing - Integrating Customer Focus Across The Firm*. McGraw Hill.
3. Karunakaran. *Marketing Management-Text and Cases in Indian Context*. Himalaya Publishing House.



**B.COM**  
**SEMESTER II**  
**Services Marketing – I (GE 2)**  
**(100 MARKS - 60 LECTURES)**

**Objective:** To familiarize the students with the concepts and processes in Services Marketing.

**Unit I Introduction to Services**

**(25 marks 15 Lectures)**

Services- meaning and definition, Role of service sector in an economy, Service sector in India- an overview, importance of service sector in India  
Service components- physical product, service product, service environment and service delivery,  
Difference between goods and services, Classification/ types of services,  
Factors responsible for growth of service sector,

**Unit II Marketing Mix for Services**

**(25 marks 15 Lectures)**

Product Mix- service product- meaning, levels of service product (core level, expected level, augmented level and potential level)  
Price Mix- meaning, special issues of pricing in a service sector  
Place Mix- meaning, major issues-  
i. Choice of location – meaning and factors.  
ii. Choice of channels- Direct channels, Indirect channels- role of service intermediaries -agents and brokers, franchising, Electronic channels.  
Promotion Mix- meaning, **guidelines for managing service promotion.**  
People Mix- meaning, types of service personnel.  
Process Mix- meaning, types of service processes.  
Physical Evidence- meaning, components.

**Unit III Customer Satisfaction**

**(25 marks 15 Lectures)**

Customer Expectations- meaning, types.  
The Zone of Tolerance – meaning, variability.  
Customer Satisfaction- meaning, States of satisfaction, **Factors affecting customer satisfaction.**

**Unit IV Service Delivery and Customer Retention**

**(25 marks 15 Lectures)**

Service Delivery- i) Service culture- meaning, ii) Critical importance of service employees in service delivery- Services Triangle- meaning and concept; **employee satisfaction.**  
iii) Major roles played by customers in service delivery.  
Service Quality-meaning, components of service quality, service quality dimensions  
Gap model of service quality- 5 gaps and strategies for each gap.  
Service Encounters- meaning, importance, types of encounters.  
Customer retention- meaning  
Service Failure and recovery – meaning, service recovery strategies.  
Service Guarantees – meaning and benefits.



## COMMERCE ELECTIVES SEMESTER – III

B.COM

SEMESTER II

Business Environment –I (GE 3)

(100 Marks-60 Lectures)

**Objective:** To familiarize students about different aspects of business environment and its impact on business activities.

### Unit I Business and its Environment

(25 marks -15 Lectures)

Meaning, definition, scope, nature and goals of business; contemporary characteristics of modern business; Business environment – meaning, importance and features; Components of business environment– micro and macro; Social responsibilities of business

Internal environment- value system, vision, mission and objectives, nature and structure of management, internal power relationship, company image.

External environment –Micro - Consumer / Customer , Competitors , Organization , Market , Suppliers , Intermediaries , Public. Macro – Demographic, Economic, Political, Legal, Socio – Cultural , Technological , physical and Global environment.

### Unit II Socio-Cultural and Demographic Environment

(30 marks -18 Lectures)

Culture- meaning, definition and characteristics- Organizational Culture – meaning and importance-Effect of socio-cultural environment on Business-Family system, marriages, Religion and caste, ethics, purchases, attitude to work, languages and global business.

Social groups such as caste, class & nouveau riche - their impact on business; Customs, traditions and values and their impact on business

Demographic environment - meaning and composition; Need of demographic studies for business

Migration - meaning, reasons for migration, impact of migration (positive and negative)

### Unit III Natural and Technological Environment

(20 marks -12 Lectures)

Natural environment – meaning and composition; impact of natural environment on business.

Technological Environment- Technology- modern and Indigenous technology -meaning and importance – Innovation and technology-sources of technological dynamics- Features of technology-status of technology in India- management of technology in India-Impact of technology on business-globalization and transfer of technology- Information technology-role of Information technology in development of global business, E-business in India, Technology Park – meaning & objectives.

### Unit IV Political Environment

(25 marks -15 Lectures)

Meaning, Role of Government in Business (regulatory, entrepreneurial, planning and promotional) Components of political environment - political systems, political stability, international relations, government bureaucracy and its role, special interest groups and their



**B.COM**  
**SEMESTER IV**  
**Business Environment –II (GE 5)**  
**(100 Marks-60 Lectures)**

**Objective:** To introduce the students to elements and composition of economic, legal and international environment of business and also aims to bring about awareness of business environment in Goa.

**Unit I Economic Environment of Business** (30 Marks – 18 Lectures)  
Meaning and components of economic environment of business, - Economic systems, Economic planning, Economic policies, Economic legislation, controls and regulations  
Economic systems -capitalism, socialism and mixed economy- meaning and features  
Economic planning in India- Objectives of planning and main provisions of current five Year plan, NITI Ayog.  
Economic policies -fiscal, monetary, industrial policy, Import-Export policy, investment policy (including foreign investment policy) and employment policy –meaning and objectives.  
Make in India policy and business.

**Unit II Legal Environment of Business** (20 Marks – 12 Lectures)  
Meaning and components of legal environment; impact of legal environment on business  
Environment Protection Act 1986 – objectives and major provisions  
Consumer Protection Act 1986 – Objectives and major provisions, Consumer Redressal Agencies; Jurisdiction and powers  
Right to Information Act (RTI) 2005- Definition and meaning of information, public Authority, right to information and record- objectives of the Act- scope of right to information— exemption—public Information officer - procedure for seeking information, fees and response time, appeals, penalty provisions, case studies.

**Unit III International Environment and India** (20 Marks – 12 Lectures)  
Overview of Industrial policy of India till 1990- new industrial policy-objectives and features, globalization- liberalization- privatization (meaning) and - Foreign capital- meaning, need - Multi-national Corporation-merits and demerits-case studies on MNCs in Goa.  
International events and its impact on Indian industry

The International Finance Corporation's Ease of Doing Business Index - composition of the index; India's performance on the index and each of the components.

**Unit IV Business Environment in Goa** (30 Marks – 18 Lectures)  
Brief introduction of industrialization in Goa- Current Status of the Goan economy- Goa's current performance on important economic and socio-economic indicators-Industrial policy in Goa - Introduction, objectives and thrust areas- Industrial Estates in Goa -Industry associations- meaning and need- Goa Chamber of Commerce and Industry (GCCI) and Goa State Industries Association (GSIC) -objectives and functions and major activities.  
Environmental issues and Goan Industry

Goa University, Taleigao Plateau, Goa



**B.COM**  
**SEMESTER IV**  
**Event Management (GE 5)**  
**(100 Marks – 60 Lectures)**

**Objective:** To introduce to the students the concepts and operations in event management industry.

**Unit 1: Introduction to Event Management**

**25 Marks, 15 Lectures**

Introduction, Growth of event management industry, Event management industry in India, Principles of event management, Size of Events – Mega events, Regional events, Major events, Minor events; Types of Events – Sporting, Entertainment, art and culture, Commercial, marketing and promotion events, Meetings, Exhibitions, Festivals, Family and Fund raising events; Issues in event management, Event evaluation, Event risks and laws.

**Unit 2: Event Planning**

**25 Marks, 15 Lectures**

Concept and designing of events, Preparing event proposal, Critical path and function sheets, Event pricing and management fees, Client meetings and event contracts, Planning and management of event team and crew, Planning event resources, Event protocol, Event itinerary, Event planning tools and emerging technology.

**Unit 3: Event Production**

**25 Marks, 15 Lectures**

Event production concepts and requirements, Identifying event vendors, Negotiations and contracts with vendors, Scheduling and Checklists, Venue management – Selection, Staging, Lights and sound, Audio-Visual, Event safety and security.

**Unit 4: Event Marketing and Financing**

**25 Marks, 15 Lectures**

Event marketing mix, Event branding, Event publicity, public relations and communication, Event sponsorship, Event budgets and cost sheet, Financial control in events, Profit analysis of events, Computer applications in event financing and control.

**References:**

1. Allen, J. (2009). *Event Planning* (Second ed.). Ontario: John Wiley & Sons.
2. Bowdin, G., Allen, J., O'Toole, W., & McDonnell, I. (2011). *Events Management* (Third ed.). New York: Routledge.
3. Chaturvedi, A. (2009). *Event Management: A Professional and Developmental Approach*. New Delhi: Global India Publications.
4. Gaur, S. S., & Saggere, S. V. (2003). *Event Marketing and Management*. Noida: Vikas Publishing House.



## **B.A. (GENERAL / HONOURS) ECONOMICS (Semester-V)**

### **Indian Economy - I**

**[Course Code: ECC 105]**

**Credits: 04**

**Lectures: 60 (1 hour each)**

**Objective:** To familiarize students on the paradigm shifts and ground realities related to the Indian and Goan economy with special focus on the post-reforms period.

#### **1. Economic Development of Indian Economy (15 lectures)**

Major features of the economy at Independence; growth and development (in brief); Income & Non-Income Indices (GDP, standard of living, foreign trade, PQLI and HDI).

#### **2. Population and Human Development (15 lectures)**

Demographic trends and issues; National Population Policy (2000); Education, Health and Malnutrition.

#### **3. Poverty, Inequality and Unemployment (15 lectures)**

Meaning, causes, trends, effects, policies and inter-relationship; Regional characteristics of income distribution and poverty.

#### **4. Goan Economy (15 lectures)**

Demographic features of Goan population (comparison between 1961 and 2011); Agriculture (including fisheries), Industry (including mining), Service Sector (with special reference to tourism); State Public Finances.

#### **Main Text**

Datt Gaurav & Mahajan Ashwani (2016). *Indian Economy*. S. Chand & Company, New Delhi.

Government of Goa (2016-17), *Economic Survey*.

#### **References**

- Agarwal A N & Agarwal M K (2017) *Indian Economy: Problems of Development and Planning*, Wishwa Prakashan, New Delhi.
- Basu, Kaushik and A. Maertens (Eds) (2013). *The New Oxford Companion to Economics*, Oxford University Press.
- Dhingra, Ishwar C (2014). *Indian Economy*. Sultan Chand, New Delhi.
- Dreze, Jean and Amartya Sen (2013). *An Uncertain Glory: India and its Contradictions*, Princeton University Press.
- Misra, S.K. and Puri, V.K. (2014). *Indian Economy*. Himalaya Publishing House, Mumbai.



## **B.A. (GENERAL / HONOURS) ECONOMICS (Semester VI)**

### **Indian Economy - II**

**[Course Code: ECC 106]**

**Credits: 04**

**Lectures: 60 (1 hour each)**

**Objective:** *To provide an overview on the policies and outcomes related to the Indian economy with special focus on the post-reforms period.*

#### **1. Policies and Performance of the Agricultural Sector**

**(15 lectures)**

Significance of agriculture in Indian economy; growth and productivity; role of technology; pricing; marketing.

#### **2. Policies and Performance of the Industrial Sector**

**(15 lectures)**

Significance of industry in Indian economy; Industrial Policy of 1991; structural composition of Indian industrial sector; small scale industries (case for and against); public sector (role and performance); competition policy.

#### **3. Policies and Performance of the Service Sector**

**(30 lectures)**

Significance of services in the Indian economy; Banking and Finance: Role, forms and trends; Trends, composition and performance of health, education, IT, transport, energy, communication and tourism sectors.

#### **Main Text**

Datt Gaurav & Mahajan Ashwani (2016). *Indian Economy*. S. Chand & Company, New Delhi.

Government of Goa (2016-17), *Economic Survey*.

#### **References**

Agarwal A N & Agarwal M K (2017) *Indian Economy: Problems of Development and Planning*. Wishwa Prakashan, New Delhi.

Basu, Kaushik and A. Maertens (Eds) (2013). *The New Oxford Companion to Economics*, Oxford University Press.

Dhingra, Ishwar C (2014). *Indian Economy*. Sultan Chand, New Delhi.

Dreze, Jean and Amartya Sen (2013). *An Uncertain Glory: India and its Contradictions*, Princeton University Press.

Misra, S.K. and Puri, V.K. (2014). *Indian Economy*. Himalaya Publishing House, Mumbai.

*\*Editions to be updated every year to the latest one available.*



## **B.A. (GENERAL / HONOURS) ECONOMICS (Semester V)**

### **Public Finance - I**

[Course Code: Honours - ECC107; General - ECD107]

**Credits: 04**

**Lectures: 60 (1 hour each)**

**Objective:** *To introduce students to the preparation of the budget and its role in macroeconomic management, and to expose them to the financial transfers between different tiers of the government in the Indian context.*

#### **1. Nature and Scope of Public Finance (10 lectures)**

Definition and scope: normative and positive aspects; Distinction between public and private finance; Public and private goods: features and dissimilarities; Merit goods (concept); Market failure: market failure due to non rival consumption, non-excludability and combined causes; Role of public sector; Maximum Social Advantage: theory and limitations.

#### **2. Fiscal Policy (10 lectures)**

Objectives: Full Employment, Economic Stabilization, Economic Growth, Price Stability, Balance of Payments; Functional Finance: concept; Tools of Fiscal Policy: Keynesian Demand side fiscal policy - Automatic fiscal stabilizers, Discretionary fiscal stabilizers; Supply side fiscal policy – basic approach.

#### **3. Budgeting Techniques (10 lectures)**

Concept of Budget: Meaning, features and importance/purpose of budget; Budgeting (concept); Programme Budgeting (concept); Performance Budgeting (concept, principles, advantages and disadvantages; comparison of performance and programme budgeting); Incremental budgeting (concept, significance and limitations); Zero based budgeting (meaning, methodologies and limitations).

#### **4. Budgetary Process (15 lectures)**

Process of preparation and passing of budgets in India; Structure of a Budget in India: Revenue and Capital account of Central Govt., Balanced and unbalanced budgets: Types of unbalanced budgets (surplus and deficit budgets) - concept and implications; Concept of fiscal imbalance: Revenue, Fiscal, Primary and Budgetary deficits; Budgetary Reforms: Expenditure reforms, Tax reforms, FRBM Act 2013.

#### **5. Fiscal Federalism in India (15 lectures)**

Centre-State Financial Relations: Division of powers and division of resources under the Constitution of India; Finance Commission of India and sharing of resources as per the latest Finance Commission; Local finance: Local bodies and their functions, finances of local bodies; State Finance Commission.

#### **Main texts**

Musgrave, R.A. and P.B. Musgrave (2015). *Public Finance in Theory and Practice*. 16<sup>th</sup> Reprint edition, Tata Mc-Graw Hill, New Delhi.

#### **References**



1. Adam, Everette (1997), Production and Operations Management, Prentice Hall India, New Delhi
2. Baker, Michael J. (1996), Marketing: An Introductory Text, Macmillan, London.
3. Colombo Plan Staff College for Technical Education, Manila (1999): Entrepreneurship Development, Tata McGraw Hill, New Delhi.
4. Chandra, Prasana (1995), Projects: Planning, Analysis, Selection, Implementation & Review, Tata McGraw Hill, New Delhi.
5. Davies M. M.; Aquilano N. J.; Chase R. B. (1999), Fundamentals of Operations Management, Irwin-McGraw Hill, Boston.
6. Dessai, Vasant (1996), Dynamics of Entrepreneurial Development and Management, Himalaya, Mumbai.
7. Government of Goa, Daman and Diu (Law and Judiciary Department) (1973): The Goa, Daman and Diu Shops and Establishments Act
8. Horngren, Charles (1997), Cost Accounting: A Managerial Emphasis, Prentice Hall India, New Delhi.
9. Kuriloff, A. H.; Hemphill J. M. (1988), Starting and Managing the Small Business, McGraw Hill, New York.
10. Kazmi, Azhar (1997), Business Policy, Tata McGraw Hill, New Delhi.
11. Kotler, Philip (1997), Marketing Management, Prentice Hall India, New Delhi
12. Kossek, Ellen Ernst; Block Richard N. (2000), Managing Human Resources in the 21<sup>st</sup> Century: From Core Concepts to strategic Choice, South-Western College Publishing, USA
13. Kanka, S. S. (2005), Entrepreneurship Development, S. Chand, New Delhi
14. Mishra, S. K. (2002), Labour and Industrial Law, Allahabad Law agency, Faridabad (Haryana).
15. Patel, J. B.; Modi S. S. (1995), A Manual on Business Opportunity Identification and Selection, Entrepreneurship Development Institute of India, Ahmedabad.
16. Pandey, I. M. (1998), Management Accounting, Vikas, New Delhi.
17. Pandey, G. N. (1995), A Complete Guide to Successful Entrepreneurship, Vikas, New

**B.A. in Economics  
(General/Honours)**

**Demography and Population Studies I  
(Course Code- ECG 103)**

**Credits: 04**

**Lectures: 60 (1 hour each)**

**Objective:** *To study population dynamics at the national and international levels and also to focus on various concepts, theories related to population studies in the context of economic development of India*

**1. Introduction to Demography:**

**(Lectures 10)**

Nature, Scope and importance of Demography, relation of Demography with other social sciences, Demography and Population Studies. Demographic analysis: some basic concepts. Demographic Data - nature, methods and sources of data collection.

**2. Determinants of Population Change:**

**(Lectures 12)**



Fertility: Concepts and measures of fertility. Factors affecting fertility. Mortality: Concepts and measures of mortality, Sex and age differentials in mortality. Infant mortality. Causes of Death. Global HIV / AIDS epidemic. Migration: Terms and concepts, measures, determinants and consequences.

### **3 Population Structure and Characteristics:**

**(Lectures 12)**

Population structure, age and sex structure, sex ratio's in developed and developing countries, factors affecting sex ratio. Age structure, Problem of aging of populations. Factors determining age structure. Effects of migration on age structure. Marital Status - literacy and educational attainment - Religion. Population distribution by Residence: Rural - Urban Population, Concepts, terms and measures of urbanization, factors affecting rural - urban population distribution.

### **4 Population Growth and Economic Development:**

**(Lectures 8)**

Effects of population growth on Economic Development. Factors Promoting Economic Development. Factors Retarding Economic Development. Population and development issues in less developed economies.

### **5 Theories of Population:**

**(Lectures 10)**

Malthusian Theory of Population, Criticisms and applicability. Optimum Theory of Population. Its superiority over Malthusian Theory, criticisms, The Theory of Demographic Transition.

### **6 Population Policies:**

**(Lectures 8)**

Mortality influencing policies. Migration influencing policies. Fertility influencing policies.

### **References:**

- Ahmad, Noina Sharma (1997), Demographic Transition, Rawat Publications, New Delhi,  
Alfred Savvy (1974), General Theory of Population, Nethuen & Co Ltd, London.  
Bhende & Kanitkar (1982). Principles of population Studies , Himalaya Publishing Home, Mumbai.  
Bhende A.A & Tara Kanitkar (2004), Principles of Population Studies, Himalaya Publishing House  
Christopher Wilson (1985), Dictionary of Demography, Blackwell reference, UK  
COX, PR (1993), Demography, Fifth edition. Universal Book Stall, New Delhi  
Hans Raj (1998), Fundamentals of Demography Population Studies with Specific reference to India, Surjeet Publicaions, Delhi.  
Jhingan, Bhatt B.K & J.N. Desai (2003), Demography, Vrinda Publications (P) Ltd. Delhi.  
Pande G.C. (1990), Principles of Demography, Anmol Publications, New Delhi  
Patnak & Ram(1998), Technique of Demographic analysis, Himalaya Publishing House, Mumbai.  
Prestan, Heuveline, Guillot (2003), Demography, Blackwell Publishers, UK



Shrivastava O.S. (1995), Demography and Population Studies, Vitens Publishing House Pvt Ltd., New Delhi.

Youkey D (1985), Demography: Study of Human Population, St Martins Press, New York

**B.A. in Economics (Semester-II)**  
**(General/Honours)**  
**Demography and Population Studies II**  
**(Course Code- ECG 104)**

**Credits: 04**

**Lectures: 60 (1 hour each)**

**Objective:** *To expose students to various concepts concerning population of India and to provide an in-depth understanding of the same and also to make aware the population problems and various measures to tackle it.*

**1. Demographic Studies in India:**

**(Lectures 10)**

Development of Demography in India, Teaching of Demography, Demand for Demographers in India. Scope for population research in India. Sources of Demographic Data in India. Census, Registration, Sample Surveys. Errors in Demographic Data. Census of India- Methodology of census, concept used, improvements made and problems faced.

**2. Growth and Distribution of India's Population:**

**(Lectures 10)**

Size and growth of India's population, state wise distribution, population density, Causes of population growth, future projections, urban - rural population in India, growth of urban population, characteristics of urban population, causes of urbanization in India.

**3. India's Population Structure and Characteristics:**

**(Lectures 8)**

Sex Structure, Age structure, occupational structure, marital status – literacy- Religion in India- Qualitative aspects of India's population.

**4. Fertility and Mortality in India:**

**(Lectures 14)**

Birth rates in India- Methods of estimation. Causes of high birth rate.

Age specific fertility rate - Fertility and family size in India - Differential fertility - Differential fertility in India -Age Specific fertility rate index- Fertility in urban-rural areas- Education and fertility - Economic status and fertility -Caste and fertility- Net Reproduction rate - Some important facts about fertility in India- Factors effecting fertility.

Mortality concept, Declining Death Rate of mothers and children in India- Expectation of life at birth- Regional variations in death rate- Age specific death rate- Infant mortality-Infant mortality rate in India- Expectation of life at birth- Expectation of life in states - Death rate by cause- Steps in checking mortality rate.

**5. Migration in India:**

**(lectures 6)**

Migration from and to other countries, Internal migration, Rural-Urban migration in India, Marriage migration, Life-time Migration, Migration by Age , Reasons for Migration.



## SYLLABUS OF FYBA (MARATHI)

### Semester : I

GOA UNIVERSITY  
Department of Marathi  
गोवा विद्यापीठ

मराठी विभाग

Syllabus of F.Y.B.A. (General) Course as per CBCS w. & f. 2017-2018  
स्नातकस्तरीय सी. बी. सी. एस्. अभ्यासक्रम

प्रथम सत्र - 1<sup>st</sup> Semester  
CORE COURSE (C) DSC 1A  
MRC 101

लघुकथा : एक वाङ्मयप्रकार  
(SHORT STORY : A FORM OF LITERATURE)  
(4 Credits, 60 hours, 100 Marks)

प्रथम श्रेयांकन	- कथा या साहित्यप्रकाराची संकल्पना व स्वरूप	15 hours
द्वितीय श्रेयांकन	- मराठी मौखिक कथेचा प्रवास	15 hours
तृतीय श्रेयांकन	- मराठी लघुकथेचा प्रवास	15 hours
चतुर्थ श्रेयांकन	- पाठ्यपुस्तक: निवडक मराठी कथा	
संपादक :	गीता मांजरेकर, सरोज पाटणकर, स्नेहा देऊसकर, शब्दालय प्रकाशन, श्रीरामपूर.	
		15 hours
पुरवणी वाचन :	१. ओझ - विठ्ठल गावस , गोमंतक मराठी अकादमी, गोवा. २. आमूरी - नारायण महाले ३. अलकण्याचो डोंगर - मिलिंद महामल ४. अवसर - उदय नाईक	

— Human Values



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० / ०।

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स्नातकस्तरीय सी. बी. सी. एस्. अभ्यासक्रम

प्रथम सत्र - 1<sup>st</sup> Semester

ABILITY ENHANCEMENT COMPULSORY COURSE (AEC)

MODERN INDIAN LANGUAGE COMMUNICATION - MRA 101

संप्रेषण कौशल्य : सूत्रसंचालन

(COMMUNICATION SKILLS : COMPARING)

(4 Credits, 60 hours, 100 Marks)

प्रथम श्रेयांकन - सूत्रसंचालनाची संकल्पना, स्वरूप, तंत्र, व्याप्ती आणि मर्यादा 15 hours

द्वितीय श्रेयांकन - सूत्रसंचालनात कविता, कथा, सुभाषिते, म्हणी, वाक्प्रचार इ. वापर. संदर्भानुसार मराठी, इंग्रजी, कोंकणी, हिंदी, उर्दू इ. भाषेतील अवतरणांचा वापर. 15 hours

तृतीय श्रेयांकन - भाषण सारांश लेखन 15 hours

प. के. अत्रे, बॅ. नाथ पै, डॉ. बाबासाहेब आंबेडकर, पु. ल. देशपांडे यांच्या भाषणांचा सारांश तयार करणे.

चतुर्थ श्रेयांकन - प्रत्यक्ष कार्यक्रम नियोजन व सूत्रसंचालन 15 hours

(विविध विषयावर आधारित कार्यक्रमाचे संचालन व संयोजन करणे आणि वक्तृत्व कौशल्य, निवड व समयसूचकता या कौशल्यांचा विकास करणे.)



**Semester : II**

**GOA UNIVERSITY**  
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गोवा विद्यापीठ

मराठी विभाग

Syllabus of F.Y.B.A. (General) Course as per CBCS w. e. I. 2017-2018

स्नातकस्तरीय सी. बी. सी. एस्. अभ्यासक्रम

द्वितीय सत्र - II<sup>nd</sup> Semester

CORE COURSE (C) DSC 1B

MRC102

नाटक : एक वाङ्मयप्रकार

(DRAMA : A FORM OF LITERATURE)

(4 Credits, 60 hours, 100 Marks)

प्रथम श्रेयांकन - नाटक या वाङ्मयप्रकारची संकल्पना व स्वरूप 15 hours

द्वितीय श्रेयांकन - मराठी रंगभूमीचा उदय (विष्णुदास भावे यांच्यापर्यंत) 15 hours

तृतीय श्रेयांकन - मराठी संगीत नाटक (विष्णुदास भावे ते अण्णासाहेब किर्लोस्कर) 15 hours

चतुर्थ श्रेयांकन - आधुनिक मराठी नाटक (कृ. प्र. खाडिलकर ते महेश एलकुंचवार) 15 hours

पुरवणी वाचन - सौभद्र, कुलवधु, हिमालयाची सावली, कमला, पळा पळा कोण पुढे पळे तो,  
विच्छा माझी पुरी करा.

**संदर्भग्रंथ :**

१. कानेटकर वसंत, नाटक: एक चिंतन, मॅजेस्टिक प्रकाशन, मुंबई.
२. देशपांडे वि. भा., मराठी नाटक आणि रंगभूमी पहिले शतक, मॅजेस्टिक प्रकाशन, मुंबई.
३. कुलकर्णी अरविंद वामन, प्रतिमा प्रकाशन, पुणे.



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द्वितीय सत्र - II<sup>nd</sup> Semester

ABILITY ENHANCEMENT COMPULSORY COURSE (AEC)  
MODERN INDIAN LANGUAGE COMMUNICATION - MRA 101

संप्रेषण कौशल्ये : सूत्रसंचालन

(COMMUNICATION SKILLS : COMPARING)

(4 Credits, 60 hours, 100 Marks)

प्रथम श्रेयांकन - सूत्रसंचालनाची संकल्पना, स्वरूप, तंत्र, व्याप्ती आणि मर्यादा 15 hours

द्वितीय श्रेयांकन - सूत्रसंचालनात कविता, कथा, सुभाषिते, म्हणी, वाक्प्रचार इ. वापर.  
संदर्भानुसार मराठी, इंग्रजी, कोंकणी, हिंदी, उर्दू इ. भाषेतील अवतरणांचा वापर. 15 hours

तृतीय श्रेयांकन - भाषण सारांश लेखन 15 hours

प्र. के. अत्रे, बॅ. नाथ पै, डॉ. बाबासाहेब आंबेडकर, पु. ल. देशपांडे यांच्या भाषणांचा सारांश तयार करणे.

चतुर्थ श्रेयांकन - प्रत्यक्ष कार्यक्रम नियोजन व सूत्रसंचालन 15 hours

(विविध विषयावर आधारित कार्यक्रमाचे संचालन व संयोजन करणे आणि वक्तृत्व कौशल्य, निवड व समयसूचकता या कौशल्यांचा विकास करणे.)



## Annexure II

### Bachelor of Arts - Honours

Programme : B.A. Konkani - Honours (DSC)

Course Code : KOC-105

Semester : V

Title of the Course : कोंकणी भास आनी साहित्याचो इतिहास (10 व्या ते 19 व्या शेंकड्या मेरेन)

Number of Credits : 04

Effective From AY : 2019- 2020

Prerequisites for the Course :	कोंकणी भाशेचें आनी साहित्याचें गिन्यान आसचें	
Objectives :	<ol style="list-style-type: none"><li>कोंकणी भास आनी साहित्याच्या इतिहासाची वळख जाता.</li><li>कोंकणींतल्या मुखेल साहित्यिकांचे त्या त्या साहित्यप्रकारांतलें योगदान कळटा.</li><li>कोंकणी भाशेंतल्या व्याकरण आनी कोश साहित्याच्या इतिहासाचो अभ्यास जाता.</li></ol>	
		वरां
Content:	<ol style="list-style-type: none"><li>कोंकणी भाशेचो उगम, लिखित कुरवो, उतरावळ आनी उल्लेख : अ. 9 वो ते 13 वो शेंकडो : फातरपटे आनी ताम्रपटे आ. लिळाचरित्र आनी ज्ञानेश्वरींत मेळपी कोंकणी उतरावळ इ. नामदेव गाथा ई. कोंकणी रामायण आनी महाभारताचीं हातबरपां (सोळाव्या शेंकड्या आदलें कोंकणी रामायण, सोळाव्या शेंकड्यांतलें कोंकणी महाभारत - आदिपर्व) 2. 16 व्या आनी 17 व्या शेंकड्यांत मिशनरी पाद्रीनीं केल्लो वावर : अ. जेजुइत आनी फ्रांसिस्कन पाद्रीनीं केल्लो भाशीक आनी साहित्यीक वावर.</li></ol>	15



	<p>आ. व्याकरणां, उतरावळीक आनी शब्दकोशीक वावराचेर इतिहासीक नदरेंतल्यान अभ्यास</p> <p>3. कोंकणीची देवती वाट : अ. इन्क्विजिश्नाचो कोंकणी भास आनी साहित्याचेर जाल्लो परिणाम</p> <p>आ. कोंकणी भाशेच्या मरणाचें फर्माण</p> <p>4. कोंकणी भाशेच्या पुनरुत्थानाचो काळ : अ. कुन्ह रिवार (1800-1879) : कोंकणी शिक्षणीक मळावयली नदर आनी हेर वावर.</p> <p>आ. एदुआर्द जुझे ब्रून द सौजा (1835-1905) : कोंकणींतलें पयलें नेमाळें आनी हेर वावर</p> <p>इ. मों. सेबस्तियांव रुदोल्फ दाल्गाद (1855-1922) : कोंकणी- पुर्तुगेज आनी पुर्तुगेज- कोंकणीशब्दकोश आनी हेर वावर</p>	<p>15</p> <p>15</p> <p>15</p>
	वट्ट	60
Pedagogy	व्याख्यान, अभ्यासिकागटचर्चा, स्वाध्याय, स्व-अध्ययन.	
References/Readings	<p>1. वेरेंकार, श्याम. संपा. कोंकणी भास, साहित्य आनी संस्कृताय, मडगांव गोंय:कोंकणी भाशा मंडळ, 2003.</p> <p>2. गोमिश, ऑलिव्हीन्यु. कोंकणी सरस्पतिचो इतिहास (एक सुपुल्लो नियाळ) : चान्दर, गोंय: कोंकणी सरस्पत प्रकाशन, 1989</p> <p>3. गोमिश, ऑलिव्हीन्यु. सोळाव्या शेंकड्या आदलें कोंकणी रामायण, ताळगांव, गोंय:गोंय विद्यापीठ. 1996</p> <p>4. गोमिश, ऑलिव्हीन्यु. संपा. कोंकणी मानसगंगोत्री चान्दर, गोंय, कोंकणी सरस्पत प्रकाशन, 2000</p> <p>5. पेरेरा, जुझे. कोंकणी मंदाकिनी, पणजी, गोंय: गोवा कोंकणी अकादेमी, 1996.</p> <p>6. नायक, प्रताप. संपा. सोळाव्या शेंकड्या आदलें कोंकणी महाभारत आदिपर्व, परवरी, गोंय: तॉमास स्टीवन्स कोंकणी केंद्र. 1990</p> <p>7. सौंदे, नागेश. कोंकणी भाशेचो इतिहास- मुंबय: वासंती प्रकाशन, 1982</p>	



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(अभ्यासक्रमांत आशिल्ल्या चारूय घटकांचेर आदारून टिपो.)

## Bachelor of Arts - Honours

Programme : B.A. Honours - Konkani (DSC)

Course Code : KOC-106

Semester : V

Title of the Course : भारतीय काव्यशास्त्र

Number of Credits : 04

Effective From AY : 2019- 2020

Prerequisites for the Course :	साहित्याचें गिन्यान आसचें	
Objectives :	4. भारतीय काव्यशास्त्राची वळख जातली 5. भारतीय काव्यशास्त्राची सिद्धांतीक फांटभूंय कळटली	
		वरां
Content:		



	<p>1. काव्यलक्षण : भामह, दण्डी, वामन, रुद्रट, आनंदवर्धन, कुंतक, लोल्लट, जगन्नाथ, अभिनव गुप्त, मम्मट हांचीं काव्यलक्षणां विशींचीं मतां</p> <p>2. काव्य प्रयोजन: भामह, दण्डी, वामन, रुद्रट, आनंदवर्धन, कुंतक, लोल्लट, जगन्नाथ, अभिनव गुप्त, मम्मट हांणी सांगिल्लीं काव्य प्रयोजनां</p> <p>3. काव्य कारण :</p> <p>अ. प्रतिभा - स्वरूप आनी कार्य</p> <p>आ. व्युत्पत्ती</p> <p>इ. अभ्यास</p> <p>4. शब्दशक्ती : अभिधा, लक्षणां, व्यंजनां</p> <p>5. रसविचार : भरतमुनी, शंकूक, लोल्लट आनी अभिनव गुप्त हांचीं रसविचारा संदर्भातीलीं मतां</p> <p>6. अलंकार :</p> <p>अ. शब्दालंकार ( यमक, अनुप्रास, श्लेष)</p> <p>आ. अर्थालंकार ( उपमा, रूपक, अतिशयोक्ती)</p>	<p>10</p> <p>10</p> <p>10</p> <p>10</p> <p>10</p> <p>10</p>
Pedagogy	व्याख्यान, गट चर्चा, स्वाध्याय, स्व-अध्ययन, अभ्यासिका	
References/Readings	<p>1. फडके शं. भारतीय साहित्य विचार, मडगांव ,गोंय: सोशल रिसर्च इस्ट्यूट 1997</p> <p>2. जोग रा.श्री. काव्यप्रकाश</p> <p>3. तडकोडकार प्रियदर्शिनीअण. देशपांडे गं त्र्य. भारतीय साहित्यशास्त्र, नवी दिल्ली: साहित्य अकादेमी, 2016</p> <p>4. कुलकर्णी वा. ल साहित्य स्वरूप आणि समिक्षा</p> <p>5. गाडगीळ स. रा. काव्यशास्त्र प्रदीप</p>	
Learning Outcomes	1. भारतीय काव्यशास्त्राची सिद्धांतीक नदरेंतल्यान वळख घडटा.	



## Bachelor of Arts - Honours

Programme : B.A. Honours - Konkani (DSC)

Semester : V

Course Code : KOC- 107

Title of the Course : वेंचीक कोंकणी कादंबरेचो अभ्यास

Number of Credits : 04

Effective From AY : 2019- 2020

Prerequisites for the Course :	कादंबरी ह्या साहित्य प्रकाराचें वाचन केल्लें आसचें.	
Objectives :	‘कादंबरी’ ह्या साहित्य प्रकाराची सिद्धांतीक म्हायती मेळची. कोंकणी कादंबरेचो इतिहासीक नियाळ मेळचो. वेंचीक कोंकणी कादंबरेचो अभ्यास जावचो.	
		वरां
Content:	1. कादंबरी : शास्त्रीय अध्ययन अ. व्याख्या, स्वरूप, संकल्पना आ. कादंबरेचे घटक इ. कादंबरेचे प्रकार	10
	2. कोंकणी कादंबरेचो इतिहास : देवनागरी, कन्नड, मल्याळम आनी रोमी लिपयांतल्या स्वतंत्र कादंबरेचो उडटो नियाळ	10
	3. वेंचीक कोंकणी कादंबरेचो अभ्यास: काळी गंगा- महाबलेश्वर सैल	40



Programme : B.A. Konkani – Honours (DSE)

Semester : V

Course Code : KOD- 101

Title of the Course : प्रशासकीय वेव्हारांतली कोंकणी

Number of Credits : 04

Effective From AY : 2019- 2020

Prerequisites for the Course :	प्रशासकीय वेव्हाराचेंमुळावें गिन्यान आसचें	
Objectives :	2 कोंकणी भाशेच्या प्रशासकीय वेव्हाराची जाण जावची. 3 राजभास कायद्यांतले तरतुदीक धरून विविध कार्यालयीन कामकाजांत मजत जावची. 4 प्रशासकीय पावंड्यार कोंकणी भाशेचो उपेग करतना मजत जावची.	
		वरां
Content:	2. कार्यालयीन पत्रवेव्हार: अ. परिपत्रक आ. आदेश इ. उगडासपत्र ई. इतिवृत्त उ. नेमणूक पत्र ऊ. अहवाल बरप  3. अर्ज लिखाण अ. निवेदकाचे / शिक्षक / अधिकाऱ्याचे सुवाते खातीर अर्ज आ. रजे खातीर अर्ज (अवचीत रजा, दुयेंत रजा, असामान्य रजा, अभ्यास रजा इ. म्हायती अधिकारा कायद्या खाला अर्ज  4. छापील प्रसारमाध्यमां खातीर बरप अ. खबर/ बातमी आ. सुचोवणी इ. आवाहन ई. जायरात (सरकारी येवजणो, नोकरे	15  15  15



	<p>खातीर, जागृताये खातीर उजवाडाक येवपी प्रशासकीय पावंड्या वयल्यो जायराती)</p> <p>5. परिभाशीक उतरावळ</p> <p>अ. मंत्रीपदां</p> <p>आ. कांय गिन्यानाचे फांटे</p> <p>इ. संचालनालयां</p> <p>ई. महामंडळां</p> <p>उ. आस्थापनां</p>	15
	वट्ट	60
Pedagogy	व्याख्यान, अभ्यासिका, स्वाध्याय, स्व-अध्ययन, गट, चर्चा कार्यशाळा.	
References/Readings	1. भावे, भूषण .संपा कारबारी कोंकणी, पणजी गोंय: राजहंस वितण 2012	
Learning Outcomes	<p>1. कोंकणींतल्यान प्रशासकीय पावंड्या वयल्यापत्रवेव्हाराची जाण जाता.</p> <p>2. साबार तरांचीं परिपत्रकां, आदेश, अर्ज लिखाण, उगडास पत्रां, इतिवृत्तां, नेमणूक पत्रां, अहवाल आदी मसुद्यांचें आकलन जाता.</p> <p>3. मंत्रीपदां, संचालनालयां, महामंडळां, आस्थापनां आनी कांय गिन्यानाचे फांटे हांच्या परिभाशीक उतरावळी विशीं गिन्यान मेळटा.</p>	

### QUESTION PAPER MODEL

Paper: KOD – 101 : प्रशासकीय वेव्हारांतली कोंकणी

Semester: V

Max. Marks: 80

सुचोवण्यो:

1. सगळे प्रस्न सक्तीचे आसात.



2. प्रस्ना सामकार दरेकाचे गूण दिल्यात.

प्र. 1. सकयल विचारिल्ल्या खंयच्याय दोन प्रस्नाच्यो जापो बरयात. (2X10 = 20)

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(अभ्यासक्रमांतल्या घटक 1 अतंगत कार्यालयीन पत्रवेव्हाराचेर आदारून प्रस्न.)

प्र. 2. सकयल विचारिल्ल्या खंयच्याय दोन प्रस्नाच्यो जापो बरयात. (2X10 = 20)

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(अभ्यासक्रमांतल्या घटक 2 अतंगत अर्ज लिखाणाचेर आदारून प्रस्न.)

प्र. 3. सकयल विचारिल्ल्या खंयच्याय दोन प्रस्नाच्यो जापो बरयात. (2X10 = 20)

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(अभ्यासक्रमांतल्या घटक 3 अतंगत छापील प्रसारमाध्यमां खातीर बरपाचेर आदारून प्रस्न.)

प्र. 4. परिभाशीक उतरावळ बरयात.. (4X5 = 20)

अ. मंत्रीपदां (सात दिवन पांच बरोवंक लावचीं)

आ. कांय गिन्यानाचे फांटे (सात दिवन पांच बरोवंक लावचीं)

इ. संचालनालयां (सात दिवन पांच बरोवंक लावचीं)

ई. महामंडळां - आस्थापनां (सात दिवन पांच बरोवंक लावचीं)

## Bachelor of Arts Honours

Programme : B.A. Honours Konkani (DSE)

Semester : V

Course Code : KOD- 102

Title of the Course : भासविज्ञानाची वळख

Number of Credits : 04



Effective From AY : 2019- 2020

Prerequisites for the Course :	‘भास’ हे संकल्पनेची शास्त्रीय म्हायती आनी कोंकणी भाशेचें मुळावें गिन्यान आसचें.	
Objectives :	5 भास उत्पत्ती आनी विकास हाचें गिन्यान मेळचें. 6 भास विज्ञानाची मुळावी वळख जावची. 7 बोली, भास, प्रमाण भास, लिपी ह्या घटकांचीं खोलायेन म्हायती मेळची.	
		वरां
Content:	1. भास आनी भासविज्ञानाची वळख 2. भाशेचे वेंचीक प्रकार : अ. कृत्रिम भास, सैमीक भास, सांकेतिक भास आ. आवयभास, वेव्हारीक भास 3. बोली, भास आनी प्रमाण भास 4. लिपी आनी लिपयांच्यो तरा 5. भास अभ्यासाच्यो मुखेल रिती अ. वर्णनात्मक आ. तुळात्मक इ. इतिहासीक 6. नाद निर्मणी प्रक्रिया आनी नादांच्यो तरा (स्वर, व्यंजन, आनी अर्दस्वर) 7. भासविज्ञानाची मुखेल आंगां अ. स्वनिम विचार आ. पदविचार इ. वाक्यविचार 8. कोंकणींत अनुस्वाराचें महत्व	04 10 05 05 12 10 12 04
	वट्ट	60
Pedagogy	व्याख्यान, अभ्यासिका, स्वाध्याय, स्व-अध्ययन, गट चर्चा कार्यशाळा.	
References/Readings	1. सरदेसाय, माधवी. भासाभास. प्रियोळ गोंय:जाग प्रकाशन 1993 2. गांवकर, भालचंद्र. भाशाविज्ञान, फोंडें गोंय मित्र प्रकाशन, 1993	
Learning Outcomes	1. ‘भास विज्ञान’ हे संकल्पनेची मुळावी वळख जाता. 2. भाशेची उत्पत्ती आनी तिचो विकास हे संबंदांतलें गिन्यान मेळटा.	



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(अभ्यासक्रमांतल्या सगळ्या घटकांचेर आदारून टिपो.)

## Bachelor of Arts Honours

Programme : B.A. Honours Konkani (DSE)

Semester : V

Course Code : KOD-103

Title of the Course : बाकीबाब बोरकार हांच्या कोंकणी कवितांचो अभ्यास

Number of Credits : 04

Effective From AY : 2019- 2020

Prerequisites for the Course :	कोंकणी कविते विशीं आवड आनी बाकीबाब बोरकार हांची साहित्यीक वळख आसची.	
Objectives :	कोंकणी कवितेंत बाकीबाबांची सुवात समजुपाक मजत जावची. बाकीबाबांच्या कोंकणी कवितेचो चिकीत्सक अभ्यास जावचो.	
		वरां
Content:	1. बाकीबाब बोरकार: जीण आनी वळख	04 08



	2. बाकीबाबाचो साहित्यीक वावर 3. कोंकणी साहित्यांत बाकीबाबाची सुवात 4. बाकीबाबांच्या कोंकणी कवितांचो चिकित्सक अभ्यास अ. पांयजणां आ. सासाय	08 40
	वट्ट	60
Pedagogy	व्याख्यान, अभ्यासिका, स्वाध्याय, स्व-अध्ययन, कार्यशाळा.	
References/Readings	1. बोरकार, दिलीप. बाकी विशेश, आगशी गोंय: बिम्ब प्रकाशन बाकीबाब बोरकार जल्मशताब्दी वर्स 2. बोरकार, दिलीप संपा. बाकी- विशेश 1992 अंक 6 3. तडकोडकर, सु.म. कविवर्य बा. ब बोरकार जन्मशतसांवत्सरिक पुणे: प्रतिमा प्रकाशन, 2012 4. गानू, अरुणा आनी पांडुरंग, कामत. संपा कौतुक तू पाहे संचिताचे (बा. ब. बोरकार ह्यांचे आत्मचरित्र) 2010	
Learning Outcomes	1. कोंकणीकवितेंत बाकीबाबांची सुवात समजुपाक मजत जाता. 2. बाकीबाबांच्या कोंकणीकवितेचो चिकित्सक अभ्यास जाता.	

### QUESTION PAPER MODEL

**Paper: KOD – 103 बाकीबाब बोरकार हांच्या कोंकणी कवितांचो अभ्यास**

**Semester: V**

**Max. Marks: 80**

**सुचोवण्यो:**

1. सगळे प्रस्न सक्तीचे आसात.
2. प्रस्ना सामकार दरेकाचे गूण दिल्यात.
3. प्रस्न 1, 2 आनी 3 च्यो जापो दरेकी 250 उतरांनी बरोवच्यो.

प्र. 1. सकयल विचारिल्ल्या खंयच्याय दोन प्रस्नाच्यो जापो बरयात.

(2X10 = 20)

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(अभ्यासक्रमांतल्या घटक- 1, 2 आनी 3 चेर आदारून लांब जापेचे प्रस्न.)

प्र. 2. सकयल विचारिल्ल्या खंयच्याय दोन प्रस्नाच्यो जापो बरयात.

(2X10 = 20)

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## Bachelor of Arts - Honours

Programme : B.A. Konkani – Honours (DSC)

Semester : VI

Course Code : KOC- 108

Title of the Course : आधुनीक कोंकणी साहित्याचो इतिहास (20 वो शेंकडो ते 2015 मेरेन)

Number of Credits : 04

Effective From AY : 2019-20

Prerequisites for the Course :	कोंकणी साहित्याचें गिन्यान आसचें	
Objectives :	<ol style="list-style-type: none"><li>कोंकणी साहित्याच्या इतिहासाची वळख जावची.</li><li>कोंकणींतल्या मुखेल साहित्यिकांचे त्या त्या साहित्य प्रकारांतलें योगदान कळचें.</li><li>कोंकणी साहित्यांतले मुखेल प्रवाह कळचे.</li></ol>	
Content:	<ol style="list-style-type: none"><li>शणै गोंयबाबाचो साहित्यीक वावर: अ. संशोधनात्मक साहित्य आ. रुपांतरीत साहित्य इ. सर्जनशील साहित्य</li><li>वेंचीक साहित्य प्रकारांचो इतिहास: अ. नाटक</li></ol>	<div>वरां</div> <div>15</div> <div>15</div>



	<p>आ. तियात्र</p> <p>इ. बालसाहित्य (Pink)</p> <p>ई. कादंबरी</p> <p>2. वेंचीक साहित्य प्रकारांतले प्रवाह :</p> <p>अ. कथा (ग्रामीण कथा, नवतंत्र आनी आधुनीक जिणेच्यो कथा, बालविश्व चित्रीत कथा)</p> <p>आ. कविता (स्त्रीकेंद्री कविता, सैम कविता, विद्रोही कविता)</p> <p>इ. निबंद (विनोदी निबंद, व्यक्तिचित्रणात्मक निबंद, वैचारीक निबंद)</p> <p>3. ललितेतर साहित्य (संगीत, वैजकी, विज्ञान, शिक्षण, कला, पर्यावरण, खेळ, पाककला आदी विशयांचेर आदारीत म्हायतीपर साहित्याचो नियाळ.)</p>	15
	वट्ट	60
Pedagogy	व्याख्यान, अभ्यासिका, स्वाध्याय, स्व-अध्ययन, कार्यशाळा.	
References/Readings	<ol style="list-style-type: none"> <li>वेरेंकार, श्याम. संपाकोंकणी भास, साहित्य आनी संस्कृताय, मडगांव, गोंय, कोंकणी भाशा मंडळ, 2003.</li> <li>गोमिश, ऑलिव्हीन्यु. कोंकणी सरस्पतिचो इतिहास (एक सुपुल्लो नियाळ) चांदर, गोंय :कोंकणी सरस्पत प्रकाशन, 1989</li> <li>पवार, राजय. कोंकणी कवितेचो इतिहास (1960 ते 1990 मेरेनची कोंकणी कविता) बोरी फोंडें गोंय:सानिका प्रोडक्शन, 2014</li> <li>भावे, भूषण. साहित्य विमर्श, सत्तरी गोंय:शाल्मली क्रिएशन्स, 2016</li> <li>Sardesai, Manoharra. History of Konkani Literature, New Delhi:SahityaAkademi, 2000</li> <li>भरणे, शकुंतला. नादब्रह्म, पणजी, गोंय:गोवा कोंकणी अकादेमी, 2006</li> <li>भोसले, सर्वेश. दोब, पणजी गोंय: गोवा कोंकणी अकादेमी, 2011.</li> <li>लवंदे, वसंत. कोंकणी भाशेचें अध्यापन, पणजी, गोंय:गोवा कोंकणी अकादेमी, 1995</li> </ol>	



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(अभ्यासक्रमांत आशिल्ल्या चारुय घटकांचेर आदारून टिपो.)

## Bachelor of Arts- Honours

Programme : B.A. Honours Konkani (DSC)

Semester : VI

Course Code : KOC- 109

Title of the Course : समिक्षा: सिद्धांत आनी उपयोजन



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Prerequisites for the Course :	समिक्षे विशींचेंमुळावें गिन्यान आसचें.	
Objectives :	<ol style="list-style-type: none"> <li>1. 'समिक्षा' हे संकल्पने कडेन वळख जावची.</li> <li>2. समिक्षेच्या सिद्धांतांचें आकलन जावचें.</li> <li>3. समिक्षा सिद्धांताच्या आदारान उपयोजन करपाक कळचें.</li> </ol>	
Content:	<ol style="list-style-type: none"> <li>6. समिक्षेचें स्वरूप</li> <li>7. समिक्षेचीं प्रयोजनां</li> <li>8. समिक्षा पद्धती             <ol style="list-style-type: none"> <li>अ. समाजशास्त्रीय</li> <li>आ. मानसशास्त्रीय</li> <li>इ. चरित्रात्मक</li> <li>ई. तुळात्मक</li> <li>उ. इतिहासीक</li> <li>ऊ. आस्वादकीय</li> </ol> </li> <li>9. उपयोजीत समिक्षे खातीरचें साहित्य             <ol style="list-style-type: none"> <li>अ. प्रकृतीचो पास (कविता) :मॅल्विन रॉड्रिगस</li> <li>आ. निवलकाणयो (कथा) वसंत भगवंत सावंत</li> </ol> </li> </ol>	<p>वरां</p> <p>02</p> <p>03</p> <p>15</p> <p>40</p>
	वट्ट	60
Pedagogy	व्याख्यान, अभ्यासिका, स्वाध्याय, स्व-अध्ययन, कार्यशाळा.	
References/Readings	<ol style="list-style-type: none"> <li>1. नागवेंकार, हरिश्चंद्र . आस्वादन, मडगांव, गोंय : गोंयकार प्रकाशन, .1987</li> <li>2. गांवकार, भालचंद्र . साहित्य - एक भासाभास, फोंडें, गोंय : मित्र प्रकाशन, .1998</li> <li>3. बुडकुले, किरण . साहित्य नियाळ : अंतरंग आनी कायारुपा, गोंय : ओम श्री दत्त पद्मजा प्रकाशन, .1998</li> <li>4. बुडकुले, किरण . समिक्षेकडेन इश्टागतगोंय : राजहंस वितरण, .1998</li> <li>5. बुडकुले, किरण . अक्षर सरिता, गोंयधर्म-लक्ष्मी, सांत लॉरेन्स, आगशी, गोंय : बिम्ब प्रकाशन, .2009</li> <li>6. बुडकुले, किरण . शतकान्तिका, धर्म-लक्ष्मी, सांत लॉरेन्स, आगशी, गोंय : बिम्ब प्रकाशन, .2009</li> <li>7. तेंडुलकार, एस .डी . वालोर . पणजी, गोंय : राजहंस वितरण, .1998</li> </ol>	



## Bachelor of Arts - Honours

Programme : B.A. Honours - Konkani (DSC)

Semester : VI

Course Code : KOC- 110

Title of the Course : वेंचीक कोंकणी व्यक्तिचित्रणां

Number of Credits : 04

Effective From AY :2019- 2020

Prerequisites for the Course :	कोंकणी साहित्याची आवड आसची	
Objectives :	1. व्यक्तिचित्रणां ह्या साहित्य प्रकाराची वळख घडटली. 2. वेंचीक कोंकणी व्यक्तिचित्रणांचो अभ्यास जावचो आनी तातूंतल्यान विद्यार्थ्यांनी बोध घेवचो.	
		वरां
Content:	1. व्यक्तिचित्रण: स्वरूप आनी प्रकार 2. कोंकणी साहित्यांत चितारिल्लीं व्यक्तिचित्रणां एक उडटो नियाळ	05 10



	3. वेंचीक कोंकणी व्यक्तिचित्रणांचो अभ्यास :“चित्राक्षरां” (वेंचीकधा कोंकणी व्यक्तिचित्रणांचो झेलो)	45
	वट्ट	60
Pedagogy	व्याख्यान, अभ्यासिका, स्वाध्याय, स्व-अध्ययन, कार्यशाळा.	
References/Readings	1. नायक, जयंती. म्हजी माती म्हजी मनशां, केंपें गोंय: रजाई प्रकाशन, 2015 1. नायक, विष्णू. स्वाती, प्रियोळ म्हड्डोळ गोंय जाग प्रकाशन. 1992 2. शिला कोळंबकार भूंयचाफीं 3. वेरेंकार, संजीव, हाडामासाचीं देवळां, फोंडे गोंय नवश्री क्रिएशन्स 2014	
Learning Outcomes	1. व्यक्तिचित्रणां ह्या साहित्य प्रकाराची वळख जाता. 2. वेंचीक कोंकणी व्यक्तिचित्रणांचो अभ्यास जावन तातूंतल्यान विद्यार्थी बोध घेता.	

### QUATION PAPER MODEL

**Paper: KOC-110 वेंचीक कोंकणी व्यक्तिचित्रणां**

**Semester: VI**

**Max. Marks: 80**

**सुचोवण्यो:**

1. सगळे प्रस्न सक्तीचे आसात.
2. प्रस्ना सामकार दरेकाचेगूणदिल्यात.
3. प्रस्न 1, 2 आनी 3च्यो जापो दरेकी 250 उतरांनी बरोवच्यो.

प्र. 1. सकयल विचारिल्ल्या खंयच्याय दोन प्रस्नाच्यो जापो बरयात. (2X10 = 20)

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(अभ्यासक्रमांतल्या घटक 1 आनी घटक 2चेर आदारून लांब जापेचे प्रस्न.)

प्र. 2. सकयल विचारिल्ल्या खंयच्याय दोन प्रस्नाच्यो जापो बरयात. (2X10 = 20)

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## Bachelor of Arts - Honours

**Programme : B.A. Konkani – Honours (DSE)**

Semester : VI

**Course Code : KOD- 104**

Title of the Course : लोक वेव्हारांतली कोंकणी भास

Number of Credits : 04

Effective From AY : 2019- 2020

Prerequisites for the Course :	कोंकणीचें लोक वेव्हारीक गिन्यान आसचें	
Objectives :	<ol style="list-style-type: none"> <li>1. लोक वेव्हारांतले कोंकणी भाशे विशीं गिन्यान जावचें.</li> <li>2. जायरात आनी मुलाखती खातीर लागपी घटकांची म्हायती मेळची.</li> </ol>	
		वरां
Content:	<ol style="list-style-type: none"> <li>1. मुलाखत आनी जायरात <ol style="list-style-type: none"> <li>अ. मुलाखत (रेडियो खातीर, दुरदर्शन खातीर, दिसाळया खातीर)</li> <li>आ. जायरात <p>मसुद्याचे घटक (रेडियो खातीर, दुरदर्शना खातीर, दिसाळया खातीर)</p> </li> </ol> </li> <li>2. मुद्रीत शोधन <ol style="list-style-type: none"> <li>अ. कांय भाशीक कुरवो आनी खुणो</li> </ol> </li> <li>3. आमंत्रण पत्रांचे नमुने <ol style="list-style-type: none"> <li>अ. कार्यवळीचो उक्तावण आनी समारोप</li> </ol> </li> </ol>	<p>15</p> <p>15</p> <p>15</p>



	<p><b>सुवाळो</b></p> <p>आ. सत्कार सुवाळो</p> <p>इ. लग्न आनी काजाराची व्होंवळीक</p> <p>ई. संमेलन सुवाळो</p> <p>उ. प्रकाशन सुवाळो</p> <p>4. अणकार</p> <p>अ. इंग्लीशींतल्यान कोंकणीत</p> <p>आ. कोंकणींतल्यान इंग्लीशींत</p>	15
Pedagogy	वट्ट	60
References/Readings	<p>व्याख्यान, अभ्यासिका, स्वाध्याय, स्व-अध्ययन, कार्यशाळा.</p> <p>1. भावे, भूषण आनी हेर, कावारी कोंकणी राजहंस वितरण 2012</p> <p>2. भावे भूषण संपा कोंकणी शुद्धलेखनाचे नेम पणजी गोंय गोवा कोंकणी अकादेमी. 2015</p> <p>3. हिमोहन समाचार फिचर लेखन एवम संपादन कला नई दिल्ली: तक्षशिला प्रकाशन 2008</p>	
Learning Outcomes	<p>1. जायरात आनी मुलाखती खातीर लागपी संहिता लेखनाची कळाशी आत्मसात जाता.</p> <p>2. लोक वेव्हारांतले कोंकणी भाशे विशींचेंगिन्यान वाडटा.</p>	

### QUATION PAPER MODEL

aper: KOD - 104 : लोक वेव्हारांतली कोंकणी भास

emester: V

Max. Marks: 80

mester: VI

Number of Credits : 04

वेवण्यो:

1. सगळे प्रस्न सक्तीचे आसात.
2. प्रस्ना सामकार दरेकाचे गूण दिल्यात.

1. सकयल विचारिल्ल्या खंयच्याय दोन प्रस्नाच्यो जापो बरयात.

(2X10 = 20)



# Bachelor of Arts - Honours

Programme : B.A. Honours Konkani (DSE)

Semester : VI

Course Code : KOD- 105

Title of the Course : कोंकणी भाशेचो व्याकरणीक अभ्यास

Number of Credits : 04

Effective From AY : 2019- 2020

Prerequisites for the Course :	कोंकणी भाशेचें गिन्यान आसचें	
Objectives :	<ol style="list-style-type: none"><li>कोंकणी भाशेच्या व्याकरणाची शास्त्रीय वळख जावची.</li><li>कोंकणी भाशेची व्याकरणीक नदरेंतल्यान तरेकवार आंगां स्पश्ट जावचीं.</li></ol>	
		वरां
Content:	<ol style="list-style-type: none"><li>व्याकरणाचो अर्थ आनी स्वरूप : भाशेच्या वेव्हारांत व्याकरणाचें म्हत्व आनी गरज</li><li>शब्द विचार : विकारी, अविकारी</li><li>वाक्यविचार : अ. सादें वाक्य, जोड वाक्य, मिश्र वाक्य आ. वाक्याचीं आंगां (कर्त्याचें आंग, क्रियापदाचें आंग) इ. वाक्याच्यो जाती : विधानार्थी, प्रस्नार्थी, आज्ञार्थी, उमाळी.</li><li>लिंग, वचन</li><li>काळ, धातू</li><li>विभक्ती</li><li>संधी</li><li>समास</li></ol>	<div>10</div> <div>14</div> <div>12</div> <div>03</div> <div>03</div> <div>06</div> <div>06</div> <div>06</div>
	वट्ट	60
Pedagogy	व्याख्यान, अभ्यासिका, स्वाध्याय, स्व-अध्ययन,	



# **NATIONAL CADET CORPS**



## **SPECIALISED SUBJECTS SD/SW**

## **ALL WINGS**

Directorate General of NCC

Ministry of Defence

RK Puram, New Delhi, 110066

May 2013

By Order

Director General NCC



**ARMED FORCES -1**  
**BASIC ORGANISATION OF ARMED FORCES**

Code	-	AF-1
Period	-	One
Type	-	Lecture
Term	-	I

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**Training Aids**

1. OHP, Computer slides, pointer, screen, black board and chalk.

**Time Plan**

- |    |     |                                         |   |         |
|----|-----|-----------------------------------------|---|---------|
| 2. | (a) | Introduction.                           | - | 05 mins |
|    | (b) | Command and control                     | - | 10 mins |
|    | (c) | Headquarters and formation headquarters | - | 10 mins |
|    | (d) | Navy and Air Force                      | - | 10 mins |
|    | (e) | Conclusion                              | - | 05 mins |

**INTRODUCTION**

1. As a Cadet of the NCC, it is very important to understand the basic organisation of the Indian Army at a macro level. A look at the command and control structure shows how finely it has been tuned to meet India's threat perception based on the major wars that it has fought and the present day geo-political scenario.

**AIM**

2. To acquaint the cadets about basic organization of Armed Forces.

**PREVIEW**

3. The lecture will be conducted in the following parts:-
  - (a) Part I - Command and Control.
  - (b) Part II - Headquarters and Formation Headquarters.
  - (c) Part III - Navy and Air force



## **PART I-COMMAND AND CONTROL**

4. **Command.** The President of India is the Supreme Commander of all the Armed Forces of the Country. The Chief of Army Staff is the head of the Indian Army and is responsible for the command, training, operations and administration. He carries out these functions through Army Headquarters. (Army HQ) of the 1.1 million strong force. A number of Staff Officers assist him, such as Principle Staff Officers(PSOs),Head of Arms and Services, etc. A Vice Chief and two Deputy Chiefs of Army Staff handle coordination.

## **PART II : HEADQUARTERS AND FORMATION HEADQUARTERS**

5. **Command Headquarters.**The whole country is divided into seven Commands. These are Northern, Western, Central, Southern, South Western, Eastern and Training Command. The Command HQ exercises operational responsibility. It is commanded by an officer of the rank of Lt General who is called Army Commander.

6. **Field Formation.**Combat formations are grouped asCorps, Divisions and Brigades. These are commanded by an officer of the rank of Lt General, Maj General and Brig respectively. These are field forces. The Corps are further divided as" Holding' and "Strike" Corps depending on their role. A defence oriented Corps is the "Holding" Corps whereas the "Strike" Corps is for offensive operations.

The Corps Head Quarters handles 03 to 05 Divisions. The Army has in its Order of Battle, Mountain Divisions, Infantry Divisions, Armoured Divisions and Mechanised Divisions. Independent Brigade Groups and Brigades which may be Armoured, Mechanised, Parachute, Engineer, Air defence, Field Artillery or Infantry/Mountain Brigades.

7. **Static Formations** (Area and Sub Area Headquarters) . These are commanded by an officer of the rank of Lt General and Maj General respectively. These span the length and breadth of the Country. These look after infrastructural assets, lines of communications, civil-military liaison etc.

## **PART III : NAVY AND AIR FORCE**

8. Enveloping the country from almost three sides and stretching over 6000 Kms of our coast line, the sea has always exerted decisive influence of India's freedom, trade, commerce, and culture.

### **Constituents of the Navy.**

9. The Indian Navy is equipped with several ships of different types and naval aircrafts. Shore facilities have been provided at various places in the country to train personnel for the Navy, repair ships and aircrafts, and provide the fleets with logistic support.

### **Organisation and Administration.**

10. The Naval Headquarters at New Delhi exercises administrative and operational control over the Navy through various "Administrative Authorities". For this purpose the Navy is divided into three commands. These are : -



- (a) Western Naval Command with HQ at Mumbai.
- (b) Eastern Naval Command with HQ at Vishakhapatnam.
- (c) Southern Naval Command with HQ at Cochin.

11. The Navy has at present two fleets, viz the Western Fleet and the Eastern Fleet, each commanded by Flag Officer of the rank of a Rear Admiral. The Southern Naval Command is basically a Training Command governing the Training Establishments in the Indian Navy. It has under its command an afloat Training Squadron. It is also allotted operational ships or aircraft from time to time as the situation warrants.

12. Indian Air Force is the youngest of the three Services. It was in 1932 that an Act was passed in Indian Legislature for establishing the Indian Air Force on the recommendations of Skeen Committee.

### **Organisation.**

#### **13. Air Headquarters.**

- (a) Air Headquarters comprises the Chief of the Air Staff and his principal staff officers.
- (b) The staff of Air Headquarters consists of three branches, viz the Air Staff, Administrative and Maintenance branches, each being organized into Directorates.

### **Commands.**

14. The Air Force is organized into seven commands which are functionally and administratively control by Air HQ. Each Command is placed under the command of an Air Officer Commanding-in-Chief. The Commands are : -

- (a) Western Air Command.
- (b) Central Air Command.
- (c) Eastern Air Command.
- (d) South Western Air Command.
- (e) Southern Air Command.
- (f) Training Command.
- (g) Maintenance Command.

15. These commands have a number of formations under them.



**CONCLUSION**

16. Thus, the Organisation of the Army is structured in a manner to facilitate ease of coordination of the functioning of the Army with the nucleus being the Army Head quarters and the various Formations down the Chain of Command.



**ARMED FORCES 2:**  
**BASIC ORGANISATION OF ARMY**

Code	-	AF-2
Period	-	Two
Type	-	Lecture
Term	-	I

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**Training Aids**

1. OHP, Computer slides, pointer, screen, black board and chalk.

**Time Plan**

2.	(a)	Introduction	-	05 mins
	(b)	Part I-Command and control	-	10 mins
	(c)	Part II-Fighting Arms	-	20 mins
	(d)	Part III-Supporting Arms	-	15 mins
	(e)	Part IV-Supporting Services	-	20 mins
	(e)	Conclusion	-	10 mins

**INTRODUCTION**

1. The present day Indian Army owes its origin to British days. It was then used as an instrument for the expansion and preservation of the British Empire. At the time of independence in 1947, due to partition of the sub-continent, the old Indian Army was also divided. Since then the Army has continued to be re-organised and modernised. The Army since independence has taken part in the following major operations in defence of our borders.-

- (a) Kashmir Operations against Pakistan 1947-48.
- (b) Sino-Indian Operations in NEFA (Arunachal) and Ladakh 1962.
- (c) Indo-Pak war 1965.
- (d) Indo-Pak war 1971.



- (e) Kargil conflict 1999.

### **AIM**

2. To acquaint cadets about the basic organization of the Army.

### **PREVIEW**

3. The lecture will be conducted in the following parts: -

- (a) Part I - Command and control
- (b) Part II - Fighting Arms
- (c) Part III - Supporting Arms
- (d) Part IV - Supporting Services

### **PART I: COMMAND AND CONTROL**

#### **Command and Control**

4. In addition, Army has taken part in peace keeping missions under United Nations in various parts of the world. Services of the Army have been extensively utilised in aid of civil authorities during natural calamities like floods, cyclones and earthquakes.

5. The Army today is self-reliant in respect of its requirements of conventional weapons and is fully geared to meet any external aggression on our borders.

6. **Command.** The President of India is the Supreme Commander of all the Armed Forces of the Country. The Chief of Army Staff is the head of the Indian Army and is responsible for its command training, operations and administration. He carries out these functions through Army Headquarters. (Army HQ). To the entire army, now some 1.1 million strong, he is the Chief. A number of Staff Officers assist him, such as Principle Staff Officers(PSOs), Head of Arms and Services, etc. A Vice Chief and two Deputy Chiefs of Army Staff handle coordination.

7. **Command Headquarters.** The whole country is divided into seven Commands. These are Northern, Western, Central, Southern, South Western, Eastern and Training Command. The Command HQ exercises operational responsibility. It is commanded by an Officer of the rank of Lt General called Army Commander.

8. **Field Formation.** The Combat Commands are grouped as Corps, Divisions and Brigades. These are commanded by an officer of the rank of Lt General, Maj General and Brig respectively. These are field forces. The Corps are further divided as 'Holding' and 'Strike' Corps depending on their role. A defence oriented Corps is the 'Holding' Corps whereas a Reserve is the 'Strike' Corps. The Corp Head Quarters handle 03 to 05 Divisions. The Army has in its Order of Battle, Mountain Divisions, Infantry Divisions, Armoured Divisions and



Mechanised Divisions. Independent Brigade groups may be Armoured, Mechanised, Parachute, Engineer, Air defence, Field Artillery or Infantry/Mountain Brigades.

9. **Static Formations.** Area and Sub Area Headquarters . These are commanded by an Officer of the rank of Lt General , Maj General and Brig respectively. These span the length and breadth of the country. These look after infrastructural assets, Lines of Communications, Civil-military Liaison etc.

## **PART II: FIGHTING ARMS**

10. **Armour.** Armour by virtue of its mobility, fire power protection and shock action is most aptly suited for present day battle field environment. The basic role of armour is to destroy the enemy by relentless, mobile offensive action, both in offensive and defensive operation. An Armcd Regt has 45 tanks. In India we have TK T-72,TK T-90 & MBT Arjun tanks.

11. **Infantry.** Infantry is essentially an arm of close combat. Its role in attack is to close in with the enemy and destroy or capture him and hold ground. In Defence it is to hold ground against all forms of attack. It is also employed in counter insurgency and counter terrorism operations.

12. **Mechanized Infantry.** It is infantry with enhanced mobility and fire power. Mechanized Infantry moves in armoured personnel carrier (APC) which has adequate protection against small arms fire . Their mobility in conjunction with Armour enables own troops to obtain most favorable decision in battle. The emphasis is on mobility fire power and maneuver rather than manpower. The eqpt used are BMP- I & II.

## **PART III: SUPPORTING ARMS**

13. **Artillery.** Artillery provides heavy volume of fire at long ranges to damage and destroy enemy position before it can be physically captured and occupied by own ground forces.

14. **Engineers.** The Corps of Engineers consists of three major constituents namely Combat Engineers, MES and Border Roads. The Corps also provides Officers to the military survey and DRDO. In wars they provide mobility to own forces by constructing bridges, tracks and helipads. They also deny the same to the enemy by creating obstacles such as laying of mine fields and demolition of bridges.

15. **Army Air Defence.** Army Air Defence is equipped with air defence guns and Short and Medium range surface to air missile systems. Alongwith air force it provides air defence to mobile forces, Vulnerable Areas and Vulnerable Points.

16. **Army aviation Corps.** The role of Army Aviation corps is reconnaissance and observation by controlling artillery and infantry mortar fire from air and also to provide commanders and staff, rapid means for liaison visits and recce. It is ideally suited for evacuation of battle casualties. They use the Chetak helicopters for logistic tasks and the Cheetahs for aggressive tasks.

17. **Signals.** The role of Signals is to provide radio, Radio Relay and line communication and establish Signal centres during war and peace. It also monitors enemies



communication systems. It is also responsible for cyber security. Its vision in the 21<sup>st</sup> century is to achieve electronic and information superiority for effective functioning of the Army.

### **PART III: SUPPORTING SERVICES**

18. These elements provide administrative cover to the fighting and supporting arms thus enabling them to carry out their task. The services and their functions are .-

(a) **Army Service Corps.** It constitutes that part of the Army which is concerned with the planning and execution of logistic support for the fighting formations. It is primarily responsible for provisioning, procurement and distribution of Supplies, Fuels, Oils & lubricants, hygiene Chemicals and miscellaneous items to Army, Air Force and where required to Navy also. The operation of mechanical transport, (except 1<sup>st</sup> line) and the provision and operation of Animal transport is also a responsibility of the Army Supply Corps.

(b) **Army Medical Corps.** It provides medical cover during operations as well as in peace stations to troops and their families.

(c) **Army Ordnance Corps.** It is responsible to provide logistic support to the Army during war & peace . The logistic function involves the provisioning & procuring of all stores required for operations and maintenance.

(d) **Corps of Electronics and Mechanical Engineers.** The major role of EME is repair ,recovery and maintenance of all vehicles ,arms, electrical, electronics and mechanical equipment .

(e) **Remount and Veterinary Corps.** The role is breeding, procurement, caring and training of Animals. It is also involved in disease diagnosis and treatment of animals. It trains Army Dog trainers and also carries out inspection of foods of animal origin.

(f) **Army Education Corps.** It is involved in human resource development through imparting higher education to the troops.

(g) **The Intelligence Corps.** Its role is to gather intelligence of the enemy and prevent leakage of own information to the enemy.

(h) **The Corps of Military Police.** Its role is to preserve good order and discipline and to prevent breaches of the same by persons in or attached to regular Army. It also assists in movement of men, material and vehicles during peace /war.

(j) **Judge Advocate General Branch.** It deals with legal matters relating to Armed Forces.

(k) **Army Physical Training Corps.** Its role is to impart physical education and develop sports in Armed Forces.



(l) **The Pioneer Corps.** Its role is to provide disciplined and well trained manpower where civilian labour is either not available or its employment is not desirable for security reasons. They are mostly committed in operational areas.

(m) **Defence Security Corps.** Its role is to protect Defence /installations under specific instructions of the Govt of India against minor sabotage and pilferage. The DSC provides armed security staff, static guards, searchers, escorts and mobile patrols by day & night.



**ARMED FORCES-3:**  
**BADGES AND RANKS**

Code	-	AF-3
Period	-	One
Type	-	Lecture
Term	-	I

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**Training Aids**

1. OHP, Computer slides, pointer, screen, black board and chalk.

**Time Plan**

2.	(a)	Introduction.	-	05 mins
	(b)	Badges of rank-Army	-	10 mins
	(c)	Badges of rank –Navy	-	10 mins
	(d)	Badges of rank-Air force	-	10 mins
	(e)	Conclusion	-	05 mins

**INTRODUCTION**

3. **Commissioned Officers.** Officers of the Army are leaders who lead everything from a company all the way to a corps and higher. Field Marshal is a honorary rank given to a General for his invaluable service and will continue to serve the rest of his term with the honorary rank. S.H.F. Manekshaw was Army Chief when India went to war in 1971 against Pakistan. In recognition of his services, he was elevated to the rank of Field Marshal. The first in post-independent India, on 01 January 1973. Field Marshal Manekshaw completed his term of office, as Army Chief, just a fortnight later on 15 January 1973. Field Marshal K.M. Crappa was also elevated to this honorary rank in 1986, after he had retired in 1953. The badges of ranks worn by commissioned officers is as given under :-





2. **Junior Commissioned Officer (JCO).** The second set of Officers in the Army are Junior Commissioned Officers. The soldiers who become JCOs join the Army as sepoy and come up through the NCO ranks. The ranks of Sub Maj , Sub and Nb/Sub are used in the Infantry while the ranks of Risaldar Major, Risaldar and Nb Risaldar are used in the Armd Corps. The badges of rank worn by the JCOs are :-





Subedar Major / Risaldar Major

**Subedar / Risaldar**

Naib Subedar / Naib Risaldar

3. **NON COMMISSIONED OFFICER (NCO).** The Third set of Officers are the Non Commissioned Officers (NCOs). These ranks are given to Jawans according to their merit and seniority. The rank badges for NCOs are :-



Regimental Havildar Major / Regimental Daffadar Major



Regimental Quarter Master Havildar / Regimental Quarter Master Daffadar



Company Havildar Major / Squadron Daffadar Major



Company Quarter Master Havildar / Squadron Quarter Master Daffadar



Havildar / Daffadar



Naik / Lance Daffadar





Lance Naik / Acting Lance Daffadar

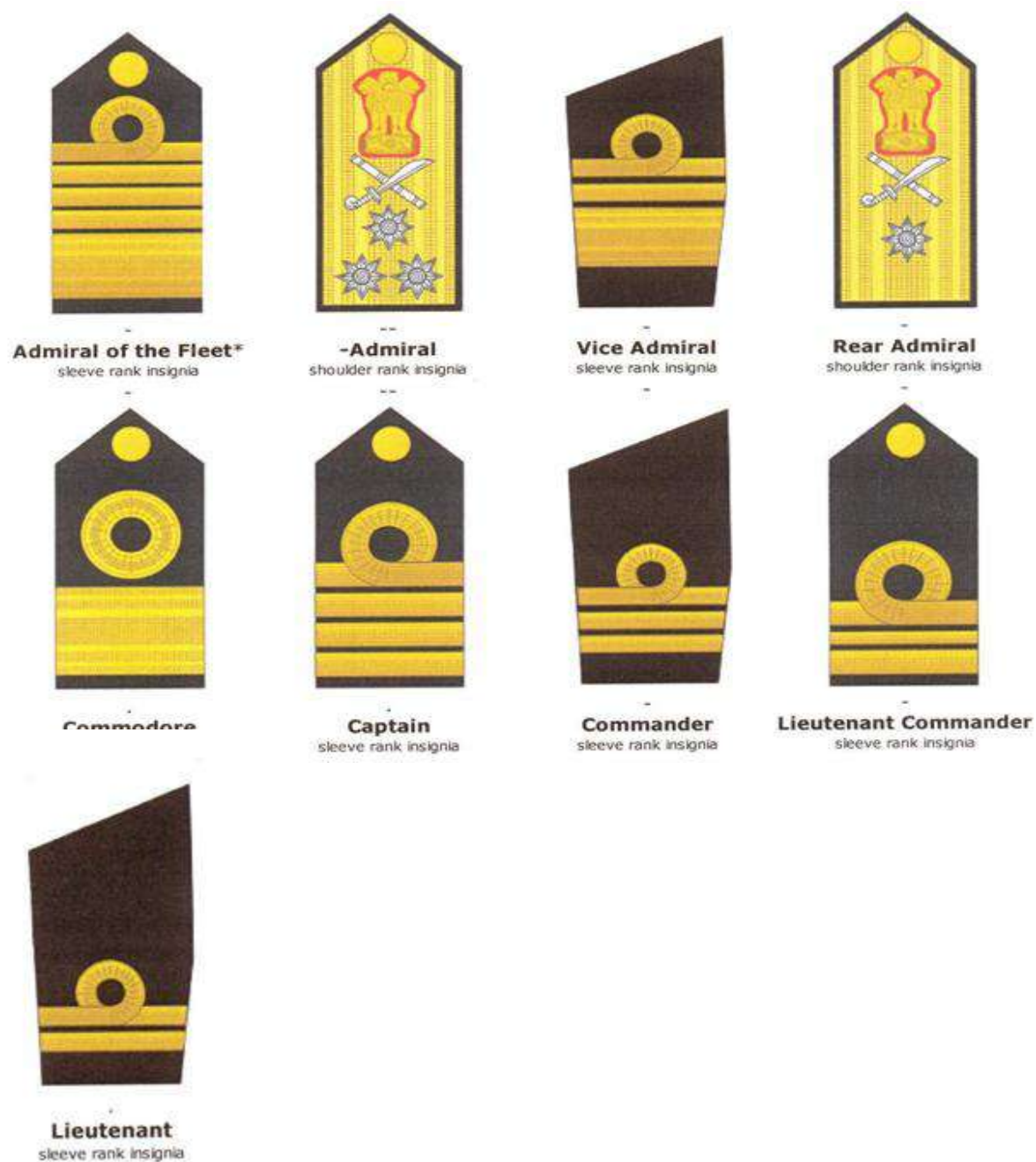


Sepoy / Sowar

## NAVY

4. **Commissioned Officers.** Admiral of the Fleet is a honorary rank given to an admiral for his invaluable service and will continue to serve the rest of his term with the honorary rank. The rank has not been used in the Indian Navy. The badges of rank worn by Naval Officers are:





5. **Junior Commissioned Officers.** The badges of rank worn by these Officers are :-





6. **Non Commissioned Officers.**



**AIR FORCE**

7. **Commissioned Officers.** Marshall of the Air Force is the honorary rank given to an Air Chief Marshal for his invaluable service. In recognition of his services the Government of India conferred the rank of Marshall of the Air Force to Arjan Singh in January 2002 making him the first and the only 'Five Star' rank officer with the Indian Air Force. The badges of rank worn by officers are :-





**Marshal of the Air Force**



**Air Chief Marshal**



**Air Marshal**



**Air Vice Marshal**



**Air Commodore**



**Group Captain**



**Wing Commander**



**Squadron Leader**



**Flight Lieutenant**



**Flying Officer**

8. **Junior Commissioned Officers.** The badges of rank worn by these officers are:-



**Master Warrant Officer**



**Warrant Officer**



**Junior Warrant Officer**



9. Non Commissioned Officers.

Sergeant



Corporal



Leading Aircraftsman

NO  
INSIGNIA

Airman



**ARMED FORCES 4:**  
**TASK AND ROLE OF FIGHTING ARM**

Code - AF-4

Period - Two

Type - Lecture/video

Term - II

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**Training Aids**

1. OHP, Computer slides, pointer, screen, black board and chalk.

**Time Plan**

- |    |     |                              |   |         |
|----|-----|------------------------------|---|---------|
| 2. | (a) | Introduction.                | - | 05 mins |
|    | (b) | Part I- Infantry             | - | 25 mins |
|    | (c) | Part II-Armour               | - | 25 mins |
|    | (d) | Part III-Mechanised Infantry | - | 20 mins |
|    | (d) | Conclusion                   | - | 05 mins |

**PART I- INFANTRY**

**INTRODUCTION:**

3. In the ultimate analysis, defeat of the enemy implies the destruction or disarmament of his fighting forces and physical occupation of his territory and coordinated effort of the land, sea and air forces but ultimately it is infantry that captures and occupies ground and destroys the enemy in his fortifications.

**ROLE OF INFANTRY:**

4. Infantry is essential an arm of close combat. Its role in attack is to close with enemy and destroy or capture him; in defence it is to hold against all forms of attacks by the enemy.

**CHARACTERISTICS:**

5. **Self Reliance:** This is the basic and most important characteristic of the infantry. Although maximum support by other arms will normally be available, there will be numerous

occasions when infantry will have to close with the enemy with no support other than the provided from within the battalions.

6. **Ability to Hold Ground:** Infantry is the arm best suited for this task. The more support it can be given, the more efficient and economically it can carry out this task.

7. **Adaptability:** Infantry is highly adaptable and can operate over any type of ground, by day or by night and under almost any climatic conditions. The infantry soldier and his equipment are readily transported by land, sea or air to the battlefield.

8. **Mobility:** Infantry mobility should not be measured in terms of marching speeds over easy country. The characteristics of the infantry in this respect is that, unlike other arms, it has a degree of mobility over almost any kind of country and given appropriate transport, it can travel as other arms.

9. **Vulnerability:** Infantry is responsible for its own protection at all times. It is vulnerable to the following: -

(a) **Ground Action:** To tank and small arms fire especially machine guns. Protection against artillery and small arms fire is obtained by careful siting, concealment, dispersion, digging, skilful use of ground, by utilising periods of poor visibility and darkness and by maximum neutralising fire including smoke. When dug in, infantry is capable of defending itself against tanks with its integral antitank weapons. When on the move and during initial reorganization, it normally require the support of armour against a tank threat.

(b) **Air Attack:** Infantry in the open is vulnerable to air attack. Casualties can, however, be reduced by dispersion, concealment and digging. If adequate measures are taken, infantry is less vulnerable than other arms, for example, armour and artillery.

(c) **Anti Personnel Mines:** A minefield with a density of three blast type of anti-personnel mines will cause about 10 percent casualties and a minefield of similar density consisting of blast and fragmentation types of mines laid in the ratio of 3:1 will cause approx 25% Casualties. Though Infantry will normally be provided engineer resources, when anti-personnel mines are encountered in large numbers, it should be trained to negotiate a minefield either by rushing through it or after creating a lane by its own effort.

### **Employment And Tactics:**

10. **Employment:** Infantry may be employed in any operation of war but whatever the nature of the operation, with the possible exception of withdrawal, the basic role of infantry remains the same, that is, to close with the enemy to destroy or capture him and to hold ground.

11. **Tactics:** Fire and movement is the basis of all infantry tactics. Infantry organisations from section upwards are based on this principal. To cover its movement, the infantry requires supporting fire from within its own resources and from other arms. Infantry units and sub units must, however, be trained to continue their movement in the face of enemy opposition without entirely depending on support from other arms, by skilful use of ground entirely depending on



support from other arms, by skilful use of ground or by movement under cover of darkness, smoke or fog.

### **Infantry Weapons**

12. The basic infantry weapons are the rifle and bayonet, the light machine gun and grenades. In addition certain personnel are armed with the carbine or pistol. Support weapons are the 2 inch and 81 mm mortars, machine guns and infantry anti-tank weapons.

### **Training**

13. The basic training of the infantryman must be more flexible than that of any other arm. The training of infantry must cultivate skill at arms, endurance, courage, initiative, adaptability and skilful use of ground.

## **PART II-ARMOUR**

### **Role of Armour**

14. The role of armour is to destroy the enemy by relentless, mobile, offensive action, both in offensive and defensive operations.

### **Principles of Employment**

15.. **General.** The basic principles of war equally apply to the employment of armour. Certain principles, however, assume greater emphasis in view of the characteristics of armour which must be fully exploited to achieve success in battle.

16. **Offensive Action.** Armour is primarily an offensive weapon and it must be used as such. This offensive characteristic is achieved by a combination of mobility, flexibility, fire power and armour protection of tanks. Even in those operations of war which are basically defensive. The tasks given to armour should be offensive in nature and concept. Armour must be employed as aggressively as possible, accepting calculated risks where necessary.

17.. **Concentration.** Armour used concentrated, produces decisive results. For maximum shock effect it should be used in mass in depth. The shock action produced by armour increases greatly as the number of tanks employed is increased. At the same time own tank casualties are reduced in view of the heavier volume of fire available to deal with hostile tanks and antitank weapons and by making target acquisition difficult for the enemy. In the words of FM Slim, "the more you use, the less you lose". However, concentration does not imply that tanks must be concentrated in space at all times. Initial dispositions of a force may require armoured units and formations to be dispersed. But they must be concentrated at the decisive time. Thus concentration is required in time and not so much in space.

18. **Economy of Force.** The principle is a corollary to the principle of concentration. If tanks are frittered away on nonessential tasks, concentration at the decisive point suffers. The temptation to employ tanks everywhere is great and must be guarded against. Equally, indiscriminate and continued use of armoured units causes deterioration in their equipment resulting in such units not being at the peak of their battle worthiness when required for a really worthwhile task. The tendency to assign a multitude of tasks, to an armoured unit or subunit

particularly during a defensive battle should be curbed and it should be borne in mind that once committed in an action, the same units may not be available for subsequent tasks in terms of time or battle worthiness. Armour should, therefore, be used when its employment will have a decisive effect on the battle.

19. **Surprise.** Armour achieves surprise mainly by weight, violence and direction of its attack combined with the speed with which the operation is executed. This is achieved by skilful use of ground and overcoming of obstacles, both nature and artificial. Due to engine noise, clatter of tracks and dust which tanks create, it is not always easy to conceal their presence. Concealment of large armoured forces is difficult because of the improved surveillance devices, based both on the ground and air, available these days. Nevertheless surprise can be achieved by holding armour back until the last moment, by moving it at night or during bad weather and by the employment of deceptive measures such as the creation of tank noises in areas where it is not intended to employ them. With night fighting aids becoming increasingly more effective, imaginative use of armour at night will assist in gaining surprise. It must be remembered that mere achievement of surprise is not enough; it is the exploitation of the opportunity created by achievement of surprise that will pay rich dividends.

20. **Flexibility.** Sound organization, good physical mobility and excellent means of command and control allow a high degree of flexibility. This enables pre-arranged plans to be altered to meet changing tactical situations and unexpected developments. By virtue of this flexibility and the speed with which armour can come into action, armour is extremely responsive to command which makes it an ideal weapon for seizing fleeting opportunities in battle. The armour commander must therefore be allowed the maximum possible initiative and freedom of action in execution of plans.

21. **Cooperation.** The full potential of armour can only be developed when it is organised into closely knit battle groups which should include tanks, mechanised infantry, self propelled artillery, assault engineers, attack helicopters and is provided with close air support. The composition of these combined arms teams should be need based and will depend on the troops. Common doctrine and joint training should ensure that such groups operate smoothly with complete mutual confidence and understanding.

22. **Speed.** In mobile warfare speed is of the utmost importance. It implies the following : -

- (a) Speed in decision.
- (b) Speed in issue of orders.
- (c) Speed in execution.

23. **Speed in Decision.** This will invariably decide the final outcome of a battle. Commanders must therefore, operate well forward so that they can assess a situation and take decision on the spot. Reconnaissance and intelligence reports must reach a commander by the fastest possible means. The fundamental tactics of mobile warfare are speed in judgement and action and to create situations for the enemy faster than he can react to them.



24. **Speed in Issue of Orders.** In mobile operations there is no place or time to issue bulky and detailed written orders. The best method is for a commander to issue verbal instructions to his subordinates. The next best method is to issue orders on the radio. Sometimes very brief written orders may be sent through liaison officers. Such orders should cover the tasks and terms of reference, if any. Detailed execution should be left to the subordinate commanders.

25. **Speed in Execution.** Quick response to command, complete coordination and speed of maneuver are vital to success. The main criterion for a commander is to ensure that the allotted mission is completed within the duration stipulated for it. Speed in execution is also achieved by sound and well rehearsed battle drills. The battle drills should cater for mixed battle groups. These should be so devised that there is no rigidity in the mode of fighting and that the troops deploy for battle automatically from the line of march.

26. **Initiative.** The side that has the initiative, automatically gains an advantage over the opposing force. In simple terms, he who acts has the initiative, than the one who reacts. Retention of initiative implies retention of the power of maneuver thereby enabling a commander to create situations rather than reacting to the ones created by the enemy. It is therefore, imperative that the initiative must be seized and retained from the outset.

### **PART III: THE MECHANISED INFANTRY**

#### **Introduction**

27. The concept of mechanized infantry is based on the need to provide protection, added mobility, radio communications and firepower to enable the infantry to operate effectively in mobile operations. The Infantry Combat Vehicle provides the infantry with these basic needs of protection, mobility and firepower so as to enable it to operate effectively in close coordination with armour.

#### **Role of the Mechanized Infantry**

28. **Primary Role.** The primary role of the mechanised infantry is to close with the enemy in coordination with armour and destroy or capture the enemy.

29. **Secondary Role.**

- (a) Mop up ground over-run by armour.
- (b) Hold ground temporarily.
- (c) Reconnaissance.
- (d) Establish a bridgehead across an anti-tank obstacle for rapid exploitation by armour.
- (e) Could be used for spoiling attack or a deliberate counter attack.
- (f) For counter infiltration and against para and heliborne landings.

30. **General.** Mechanised infantry should not be considered something distinct or different from other infantry. Mechanized infantry, while retaining all the characteristics and capabilities of infantry has been endowed with certain additional characteristics, which make it more versatile and particularly suitable for mobile operations with armour. The special characteristics possessed by mechanized infantry are discussed in the succeeding paragraphs.

31. **Mobility.** Mechanised infantry units have been provided sufficient armoured personnel carriers to lift the 'F' echelon. The Armoured personnel carriers give them the capability to move cross country and because of the amphibious capability of the armoured personnel carriers, infantry can cross canals or rivers without dismounting-which makes the mechanized infantry particularly suitable for opportunity or encounter crossings. Availability of suitable approaches and exits from the water obstacle may, however, restrict the use of armoured personnel carriers. In such an eventuality, which should be rare, if planning and reconnaissance have been thorough, mechanized infantry must be prepared to establish the bridgehead by dismounted action.

32. **Protection.** The light armour of the armoured personnel carrier provides protection against small arms fire and shell splinters, which enables the infantry to close with the enemy. The armoured personnel carriers, however, are vulnerable to enemy anti-tank weapons and direct hits from artillery.

33. **Fire Power.** Mechanized infantry is able to muster considerable firepower due to the machine guns mounted on the armoured personnel carriers. Though mechanized infantry will normally operate with armour, they have been provided with their own organic anti-tank weapons to make them self-reliant and to give them the capability to hold ground or establish a bridgehead across obstacles.

34. **Communications.** Radio is the primary means of communication in a mechanized infantry unit. To meet the requirement of receiving and passing orders quickly while on the move and for close and intimate cooperation with armour, mechanized infantry units have been provided with additional radio communication facilities for both mounted and dismounted action and for communication with tank units/sub units.

35. **Flexibility.** Increased mobility and better signal communications have given mechanized infantry greater flexibility. Mechanized infantry units and sub units can quickly form composite groups with armour for a variety of missions and can be rapidly switched over from one mission to another. They can remain self-contained on a cross-country axis for limited periods and when conditions of ground prevent the use of the armoured personnel carrier, they can fulfill their mission by dismounted action.

36. **Shock Action.** Mechanised infantry by rapidly closing with the enemy, mounted in armoured personnel carriers and bearing upon the enemy its concentrated fire power, produce a shock effect much greater than an equivalent or even a larger quantum of infantry attacking on foot. The shock effect is maximum when the mounted mechanized infantry along with armour over-runs the objective.



**ARMED FORCES-5:****TASK AND ROLE OF SUPPORTING ARMS AND SERVICES**

Code	-	AF-5
Period	-	One
Type	-	Lecture/video
Term	-	III

**Training Aids**

1. OHP, Computer slides, pointer, screen, black board and chalk.

**Time Plan**

2.	(a)	Introduction.	-	05 mins
	(b)	Part I-Supporting Arms	-	15 mins
	(c)	Part II-Supporting Services	-	15 min
	(d)	Conclusion	-	05 mins

**INTRODUCTION**

3. Army is basically organised into two main categories, namely the Arms and the Services. The Arms consist of the Armoured Corps, the Infantry, the Artillery, the Engineers, the Signals and more recently, the Air Defence Corps and the Aviation Corps, both of which originate from the Artillery. The Armoured Corps and Infantry are called Fighting Arms. The Artillery, Engineers, Signals, Air Defence Corps, and Aviation Corps are called Supporting Arms, as they support the Fighting Arms in the field. Those troops that provide the logistical support to the Arms are called Services. These are the Army Service Corps (ASC), Army Ordnance Corps (AOC), Corps of Electrical and Mechanical Engineers (EME) and Army Medical Corps (AMC).

**PART I : SUPPORTING ARMS**

4. Supporting Arms, are those Arms designed to provide the requisite support to enable combat forces of the fighting arms to accomplish the assigned tasks effectively. Armour, Infantry and Mechanised Infantry are known as "Fighting Arms". The following Arms which assist the Fighting Arms comprise supporting Arms :-

- (a) Arty
- (b) Engineers
- (c) Army Air Defence
- (d) Army Aviation Corps
- (e) Signals
- (f) Int Corps

### **Role and Tasks of Supporting Arms.**

#### **Arty.**

5. **Role.** The role of Arty is to est such fire supremacy in the battle area that enemy neither interferes with our operations, nor develops his own effectively.

#### 6. **Tasks.**

- (i) To provide heavy volume of fire at long ranges to damage and destroy enemy positions before it can be physically captured and occupied by own forces.
- (ii) To provide fire support to advancing Infantry in offensive operations and defensive support to keep enemy head down with shocking Firepower.
- (iii) To carry out surveillance and target acquisition to conduct counter bombardment and counter mortar.
- (iv) To provide fire support to fighting arms



### **Engineers.**

7. **Role.** The role of Engineers in War is to provide support for offensive and defensive operations in mine warfare, bridging, demolitions, constructions of field fortifications and operational roads/tracks.

8. **Tasks.**

(a) To provide mobility to own forces by constructing bridges, tracks and helipads; on the other hand the Corps denies the same to the enemy by creating obstacles such as laying mine-fields and demolition of bridges.

(b) To lay mine fields during War and also demining and maintenance of records thereof.

(c) To create water resources during operations.

(d) To assist in transportation of explosives and undertake bomb disposal activities during peace and war.

### **Army Air Defence (AAD).**

9. **Role.** Army Air Defence is equipped with air defence guns and short and medium range surface to air missile systems. Along with Air Force it provides Air Defence to Mobile Forces, Vulnerable Areas and Vulnerable points.

10. **Tasks.**

(a) To safeguard against hostile aircrafts, helicopters and drones attacking high values targets including Fighting Arms.

(b) To ensure early detection and destruction of enemy aircrafts before they release ammunition.

### **Army Aviation Corps (AAC).**

11. **Role.** The role of Army Aviation Corps is reconnaissance and observation by controlling Artillery and Infantry mortar fire from air and provide Commanders & Staff rapid means for reconnaissance of operational areas. It is ideally suited for evacuation of battle casualties.

### **Signals.**

12. **Role.** The role of Signals is to provide radio, radio relay and line communication and establish signal centre during war and peace. It also monitors enemy's communication system.

13. **Intelligence Corps.** The main task of Intelligence Corps is to gather intelligence of the enemy and prevent the leakage of own information to the enemy.

## **PART II:SUPPORTING SERVICES**

14. The services and the functions of some of them in brief are: -

- (a) **Army Service Corps (ASC).** ASC is responsible for : -
- (i) For the supply and provision of ration to the Army during peace and war.
  - (ii) To provide fuel oil and lubricants to the entire Army.
  - (iii) To provide transport for conveyance of troops during movement.
  - (iv) Transportation of heavy equipment and machineries including ammunition during war.
- (b) **Army Medical Corps (AMC).** AMC is responsible for providing the medical cover to the entire Army units located in peace and field both. In peace time Military Hospital located along cantonments are providing medical cover to peace time units including Ex-Servicemen.
- (c) **Army Ordnance Corps (AOC)** Army Ordnance Corps is responsible for the supply of entire range of stores and equipment to the Army which are not the responsibility of ASC, AMC and that of ENGINEERS. It covers the following types of stores which are stocked in central ordnance depots (CODs) located at different places.
- (d) **Corps of Electrical & Mechanical Engineers (EME).** Corps of Electrical and Mechanical Engineers (EME) is responsible for the repair, recovery and maintenance of all vehicles armaments, electronics and communication equipment held by the Army.
- (e) **Remount and Veterinary Corps (RVC).** RVC is responsible to maintain and train animals utilized by the army like mules for carrying loads, dogs for tracking and sniffing, horses for equestrian activities.
- (f) **Army Education Corps (AEC).** AEC is responsible for imparting Military & Civil education to troops which helps them in passing promotion exams reqd in their career and profession.
- (g) **The Corps of Military Police (CMP).** CMP helps in maintaining discipline related to Army personnel and also helps Army during mobilization interacting with the civil traffic police in route.
- (i) **Judge Advocate General (JAG).** Deals with legal matters relating to all branches of the Armed Forces.



(j) **Army Physical Training Corps (APTC).** Deals with physical education and Corps supports the Armed Forces by providing trained manpower to all the regimental recruitment centres and the Officer Training Academies.

(k) **The Pioneer Corps.** Deals with provision and looking after manpower for load carriage in the Armed Forces.

(l) **Defence Security Corps.** Provide security to Vital Areas, Vulnerable Points and other important installations like Air fields, Airports, Shipping Yards. Bulk manpower in DSC comes from Ex-Defence Personnel and TA units.

**ARMED FORCES -6:**  
**MODES OF ENTRY TO ARMY**

Code	-	AF-6
Period	-	One
Type	-	Lecture
Term	-	II

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**Training Aids**

1. OHP, Computer slides, pointer, screen, black board and chalk.

**Time Plan**

2.
  - (a) Introduction. - 05 mins
  - (b) Part I-Types of Commission - 05 mins
  - (c) Part II-Entry Scheme Officers (Men/Women) - 10 mins
  - (c) Part III-JCOs and Other Ranks - 05 mins
  - (d) Part IV-Recruitment procedure - 10 mins
  - (e) Conclusion - 05 mins

**INTRODUCTION**

**General : What The Army Offers.**

3. All of you have aspirations and dreams, of what your education will finally yield. If you are looking for a fat pay packet, a corporate job is the answer. But above and beyond this should be the question of what the job offers in totality. Let us see what attributes go into making an excellent career. The attributes that one expects from a satisfying profession are:-

- (a) Professional Advancement
- (b) Job Satisfaction



- (c) Job Security
- (d) Economic Stability
- (e) Social Status
- (f) Quality of Life
- (g) Variety and Adventure

4. If these are what you are looking forward to, then Army is the profession for you.

5. All of us are aware that, professions are competitive, in so far as promotions are concerned. Army is no different. However, as said earlier the competition in the Army is clean and devoid of any other factor but competence.

6. The Indian Army is the land based branch and the largest component of the Indian Armed Forces. The president of India is the Commander –in – Chief of the Army. The Chief of Army Staff (COAS), a General, is a four star commander who commands the army.

7. Its primary mission is to ensure the national security and defence of the Republic of India from external aggression and threats, and maintaining peace and security within its borders. It also conducts humanitarian rescue operations during Natural calamities and other disturbances. As a major component of national power alongside the Indian Navy and the Indian Air Forces, the roles of the Indian Army are as follows; Primary- preserves national interests and safeguard sovereignty, territorial integrity and unity of India against any external threats by deterrence or waging war. Secondary -assist Government agencies to cope with 'proxy war' and other internal threats and provide aid to civil authority when requisitioned for the purpose.

### **AIM**

8. Aim of the lecture is to introduce with the type of entries, procedures and other Qualitative Requirement of the entry into Indian Army.

### **PREVIEW**

9. The lecture shall be covered in following Parts:-

- (a) Part-I - Types of Commission
- (b) Part-II - Entry scheme (men and women)
- (c) Part-III - JCO and Other Rank
- (d) Part-IV - Recruitment Procedure

## **PART I: TYPES OF COMMISSION**

10. There are a number of ways in which one could get a commission in the Army. You can join right after school or after graduation. The selection procedures are impartial, objective and are uniformly applied to one and all and have only one aim – to “select the best”.

### **Types of Commission.**

11. The Army offers both **Permanent** and **Short Service Commission**. Permanent commission (PC) is granted through the Indian Military Academy (IMA) Dehradun and Short Service Commission (SSC) is granted through Officers Training Academy (OTA) Chennai. When you opt for ‘PC’, you are basically looking at a permanent career in the Army, a career till you retire. SSC is a wonderful option for all those of you who aspire to serve it for a few years. It gives you the option of joining the Army, and serving it as a commissioned officer for ten years. Once your tenure is over, you are allowed to opt for PC. Alternatively, you can also ask for a four years extension and can choose to resign from your post any time during this period.

(a) **Permanent.**

- (i) NDA - AFTER 10+2(Through UPSC)
- (ii) DIRECT ENTRY (Through UPSC)
- (iii) ENGINEERING GRADUATES - TGC
- (iv) UNIVERSITY ENTRY SCHEME 10 +2 TES

(b) **Short Service.**

- (i) NON-TECH (Both men & women)
- (ii) TECH (Both men & women)
- (iii) NCC SPECIAL ENTRY (Both men & women)
- (vi) LAW GRADUATES(Both men & women)

**Note.** Details of eligibility criteria duration and venue of training and other information is freely available through news papers or may be obtained from [www.joinindianarmy.nic.in](http://www.joinindianarmy.nic.in). The following telephone numbers may also be contacted. (011) 26173215, 26175473, 26172861.



### **Permanent Commission.**

12. A permanent commission means a career in the army till you retire. For a permanent commission you have to join the National Defence academy Khadakwasla or the Indian Military Academy Dehradun.

### **The National Defence Academy Pune.**

13. You can take the NDA entrance exam right after class XI. Clear the UPSC exam and a 5-day Service Selection Board interview, pass your medicals, and you're in NDA Three years in NDA and you will be a much improved person apart from providing graduation degree, NDA has the finest infrastructure for professional training. You'll find phenomenal opportunities to develop your personality and cultivate new interests there are 31 extra – curricular activities to choose from. You have aero –modelling, golf, gliding, sailing, wind surfing, astronomy, photography and many more. For more details about NDA KHADAKWASLA visit website [www.nda.nic.in](http://www.nda.nic.in)

### **Indian Military Academy Dehradun**

14. Indian Military Academy is another cradle of leadership. The IMA trains you to lead from the front. You are trained in all aspects of combat and tactics using computers and other modern tools and technologies. The IMA has excellent facilities for all-round development. You can go for adventure sports like river rafting, para jumping, rock climbing, trekking and mountaineering. From the IMA, you're commissioned as a "Lieutenant" and mountaineering. From the IMA, you're commissioned as "Lieutenant" in the India Army to go out into the world and live to the IMA motto- "Valour & Wisdom". There are four main entries to get into IMA :-

- (a) **Combined Defence Service Examination ( CDSE )** In final year of Graduation, you need to pass the Combined Defence Service Exams being conducted by UPSC, clear the SSB interview, be medically fit and join IMA as a Direct Entry provided you come in merit. For details of exam dates/notification visit UPSC website [upsc.nic.in](http://upsc.nic.in) The other entries are Non UPSC entries ( There is no written exam. You are directly called for SSB interview )'-
- (b) **10+2 Tech Entry.** You can apply after your 12th Exams. Minimum aggregate of 70% is mandatory in physics, Chemistry and Mathematics. You will be detailed for SSB interview based on the cut off as decided by Recruiting Directorate. Look out for the advertisement published in leading newspapers/employment news in May/Dec every year. Total training is five years. ( one year at OTA Gaya and four years at Cadets Training Wings )
- (c) **University Entry Scheme ( Pre Final Year Students Only ).** This entry is for those of you who wish to apply for army in Pre-Final year of engineering. Look out for the advertisement published in leading newspapers/employment news in May every year.

(d) **Technical Graduate Course.** Those who are studying in final year/ have completed BE/B Tech in notified streams can also join IMA through Technical Graduate Course. The duration of training is 1 year through Technical Graduate Course. The duration of training is 1 year. Look out for the advertisement published in leading newspapers/employment news in May/June & Nov/Dec every year.

### **Short Service Commission.**

15. You also have the option of joining the Army and service as a Commissioned Officer for 10 years and is extendable up to 14 years. At the end of this period you have two options. Either elect for a permanent Commission or opt out.

16. Those not selected for Permanent Commission have the option of a 4 year extension. They can resign at any time during analytical thinking, planning skills administrative and organization that you join after the Army and there are opportunities to side step to an alternate career for which Army will also help you.

### **Officers Training Academy, Chennai**

17. Once selected for Short Service Commission, you go to the Officers Training Academy at Chennai. The selection process is written exam followed by the SSB interview and medicals. For Technical (Engineering) graduates and law graduates it is direct SSB interview and medicals. If you have done NCC Senior Division (Army) and obtained 'C' certificate with minimum 'B' grade, you can apply through your NCC Branch HQ/Zonal HQ to Recruiting Directorate for direct SSB interview. SSB qualified candidates undergo a medical examination. The duration of training is 49 weeks. OTA training provides you with opportunities to broaden your perspective and widen your horizon. Whether it's skeet –shooting, golf, riding or angling...at OTA you can do it all.

### **Short Service Commission For Women ( Officers )**

18. In 1992, an important landmark in the history of Indian Army was the induction of women into the officer cadre, and the onerous task of training them was undertaken by the Officers Training Academy.

### **Revised Term and Conditions of Service of SSCOs( Women both ) Technical and Non-Technical )**

19. Prominent features of the revised policy are :-

#### **(a) Extension of Tenure.**

(i) Tenure of Short Service Commission, Short Service Commission (SSC) in the Regular Army will be granted for 14 years i.e. for an initial period of 10 years, extendable by 4 years.

(ii) Duration of Training. 49 weeks.



- (b) **Substantive Promotion.** SSCOs will be eligible for substantive promotion.
- (i) **To the rank of Capt.** on completion of 2 years reckonable Commissioned service.
- (ii) **To the rank of Maj.** on completion of 6 years reckonable commissioned service.
- (iii) **To the rank of Lt Col.** on completion of 13 years reckonable commissioned service.

## **PART – II : ENTRY SCHEMES(MEN AND WOMEN)**

20. *The Indian Army is looking for a few “GOOD MEN”. For the best and brightest amongst them Men with intellect idealism and courage. Men who could lead and inspire others. There are following Entry Schemes for MEN.*

- (a) **Intermediate Level**
- (i) NDA
- (ii) 10 + 2 TES
- (b) **Graduate UPSC**
- (I) IMA (CDS)
- (II) OTA SSC (Non Tech)
- (c) **Graduate Non UPSC**
- Law Graduate
- (d) **Engineers**
- (i) UES
- (ii) TES
- (iii) SS ( Tech )
- (f) **Post Graduate**

### **10+2 Technical Entry Scheme (10+2 TES )**

Tentative Vacancies per course  
notify in Employment News and leading  
Daily News Papers

85  
Notified by ADG Rtg AG's Branch IHQ of MOD  
(army) in Apr & Sept

### **Eligibility Criteria**

Age between

16<sup>1/2</sup> to 19 & 1/2 yrs as of first day of the month in  
which course is due to commence

Qualification

12<sup>th</sup> Class of 10+2 System of Education  
/Equivalent with a minimum aggregate of 70% in  
Physical, chemistry & Maths (PCM)

Marital Status

Un Married

Application to be Addressed to

Additional Directorate General of Rtg TES Section  
AG Branch IHQ of MOD (army)

West Block III

RK Puram

New Delhi-110066

Training Academy  
During of Tanning

IMA Dehradun

01 Year pre-commision Trg at IMA Dehradun & 03  
Years at CME Pune/MCTE Mhow /MCME  
Secunderabad

01 Yers Post Commision trg at CME Pune/MCTE  
Mhow/MCME Secunderabad

### **National Defence Academy (NDA)**

Tentative Vacancies per course per  
notify in Employment News and leading  
Daily News Paper

300 (Twice a years) or As notified from time to time  
Army-195 Air force-66 Navy-39  
Jun and Dec as notified by UPSC

### **Eligibility Criteria**

Age between

16<sup>1/2</sup> to 19 & 1/2 yrs as of first day of the month in which  
course is due to commence

Qualification

12<sup>th</sup> Class of 10+2 System of Education /Equivalent for  
Army and with Physics and Maths for AF/Navy

Marital Status

Un Married



Application to be Received by  
Likely SSB date  
Date Commencement of training  
Training Academy  
Duration  
of Training

As per UPSC notification  
Sep to Oct and Jan to Apr  
Jan and Jul  
NDA, khadakwasla, pune  
3 Yrs at NDA and 1 Yrs at IMA (For Army cadets)  
  
3 Yrs at NDA and 1 Yrs at Naval Academy (For Naval cadets)  
  
3 Yrs at NDA and 1 & ½ Yrs at AFA Hyderabad (For AF cadets)

### **NCC (SPL) Entry Men**

Tentative

50 (Twice a years)

Vacancies per course  
notify in Employment News and leading

Notified by Additional Directorate General  
Recruiting / AG Branch in Jun & Dec

Daily News Paper  
**Eligibility Criteria**  
Age between

19 and 25 Yrs as 01 Jul of the Yr in which course  
is due to commence for Oct Course 01 Jul of the  
Yr in which course is due to commence for Apr  
Course

Qualification

Final Years appearing/Graduate with 50%  
Aggregate marks, 2 Yrs service in NCC Senior Div  
army with minimum 'B' Grade in 'C' Certificate  
Exam.

Marital Status  
Application to be Received by  
Likely SSB Date  
Date Commencement of Trg

Un Married /Married  
Oct/Nov and Apr/ May through NCC Dte  
Dec/Jan and Jul/ Jun  
Apr and Oct

Training Academy  
Duration of Trg

OTA, Chennai  
49 Weeks

### **Indian Military Academy Direct Entry (Non Technical Men)**

Vacancies per course notify in Employment News and leading	250 (Twice a year) Notified by UPSC under the aegis of CDSE in May/ Jun and Nov/Dec
Daily News Paper <b>Eligibility Criteria</b>	
Age between	19 and 24 yrs as of first day of month in which course is due to commence
Qualification	Graduation from Recognised University
Marital Status	Un Married
Likely SSB Date	Jul to Aug and Mar/Apr
Date of Commencement of Trg	Jan and Jul
Training Academy	IMA Dehradun
During of Tanning	18 Months

### **Officer Training Academy (Non Technical Men)**

Vacancies per course Notify in Employment News and leading	175 (Twice a year) Notified by UPSC under the aegis of CDSE in May/ Jun and Nov/Dec
Daily News Paper <b>Eligibility Criteria</b>	
Age	19 and 24 yrs as of first day of month in which course is due to commence
Qualification	Graduation from Recognised University
Marital Status	Un Married /Merried
Likely SSB Date	Nov/Dec and May/Jun
Date of Commencement of Trg	Apr and Oct
Training Academy	OTA, Chennai
During of Tanning	49 Weeks

### **TGC (Engineers)**

Vacancies per course notify in Employment News and leading	As Notified ( Twice a Year ) Notified by Additional Directorate General Recruiting / AG Branch in Apr and Oct
Daily News Paper <b>Eligibility Criteria</b>	
Age	20 to 27 years
Bron Between	2 <sup>nd</sup> Jan to 1 <sup>st</sup> Jan for Jan Course.  2 <sup>nd</sup> Jul to 1 <sup>st</sup> Jul for Jul Course.



Qualification	BE/ B Tech in notified streams of Engineers
Marital Status	Un Married /Merried
Application to be Received by	Apr/ May and Oct/ Nov
Likely SSB Date	Mar/Apr and Sep/Oct
Date of Commencement of Trg	Jan and Jul
Training Academy	IMA
During of Tanning	One Year

### **University Entry Scheme**

Vacancies per course	60
Notify in Employment News and leading	Notified by Additional Directorate General Recruiting / AG Branch in May. Application to be forwarded to respective Command Headquarters as per the areas indicated in the notification
Daily News Paper	
<b>Eligibility Criteria</b>	
Age	19 to 25 yrs for Final Year, 18 to 24 Yrs for per Final Year
Born Between	2 <sup>nd</sup> Jul to 1 <sup>st</sup> Jul for Jul Course.
Qualification	Final and pre Final year student of Engineering Degree Course
Marital Status	Un Married
Application to be Received by	31 Jul or as specified in the notification.
Likely SSB Date	Jan to Mar for final year Aug to Oct for pre final year
Date of Commencement of Trg	Jul at IMA Dehradun

### **Short Service Commission (Technical) (Men)**

Vacancies per course	As Notified ( Twice a Year )
Notify in Employment News and leading	Notified by Additional Directorate General Recruiting / AG Branch in Dec/Jan and Jun/Jul
Daily News Paper	
<b>Eligibility Criteria</b>	
Age Between	20 to 27 yrs as on first day of the month in which course is due to commence
Qualification	Engineering Degree in notified discipline
Marital Status	Un Married /Married
Application to be Received by	To Apply online & application to be fwd as given in advertisement
Likely SSB Date	Nov to Jan for Apr Course and May to July for Oct Course

Date of Commencement of Trg Training Academy During of Tanning	Oct and Apr OTA Chennai 49 Weeks
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**JAG (Men)**

Vacancies Per Course	As Notified
Notify in Employment News and leading Daily news Paper	
<b>Eligibility Criteria</b>	
Age between	21 and 27 yrs as on 01 Jul of the yr in which course is due to commence for Oct course and 01 Jan of the yr in which course is due to commence for Apr course
Qualification	Graduate with LLB / LLM with 55% marks. Registered with Bar Council of India / State
Marital Status	Un Married / Married
Application to be Received by	Oct / Nov and Apr / May
Likely SSB Date	Dec - Jan and Jul - Aug
Date Commencement of Trg Training Academy	Apr and Oct OTA CHENNAI
Duration of Trg	49 Weeks

**TGC Education (AEC)**

Vacancies per course	As Notified ( Twice a Year )
notify in Employment News and leading	Notified by Additional Directorate General Recruiting / AG Branch in May/Jun and Nov/Dec
Daily News Paper	
<b>Eligibility Criteria</b>	
Age	23 to years
Bron Between	2 <sup>nd</sup> Jan to 1 <sup>st</sup> Jan for Jan Course.
Qualification	2 <sup>nd</sup> Jul to 1 <sup>st</sup> Jul for Jul Course. MS/MSC in 1 <sup>st</sup> or 2 <sup>nd</sup> division in notified subject from
Marital Status	Recognized university Un Married
Application to be Received by	Jun/Jul and Dec/Jan
Likely SSB Date	Sept/Oct and Apr/May



Training Academy  
During of Tanning

IMA  
One Year

21. In 1992, an important landmark in the history of Army was the induction of women into the officer cadre, and the onerous task of training them was undertaken by officers Training Academy. So far, more than 1200 Lady cadets have already been commissioned into, into the various Arms Service of the Indian Army. You should be a graduate to apply.

**Revised Terms and Conditions of Service of SSCOs ( Men and Women ) both (Technical and Non –Technical)**

22. Prominent features of the revised policy are :-

(a) **Extension of Tenure.**

(i) Tenure of Short Service Commission. Short Service Commission ( SSC ), in the Regular Army will be granted for 14 years i.e for an initial period of Ten years, extendable by Four years.

(ii) Duration of Training 49 weeks

(b) **Substantive Promotion.**

SSCOs will be eligible for substantive promotion.

(I) **To the rank of Capt**  
commissioned service.

on completion of years reckonable

(ii) **To the rank of Maj**  
commissioned service.

on completion of 6 years reckonable

(iii) **To the rank of Lt Col**  
commissioned service.

on completion of 13 years reckonable

**NCC (SPL) Entry Women**

Vacancies Per Course	As notified
Notify in Employment News and leading Daily news Paper	Notified by Additional Directorate General Recruiting / AG Branch in Jun / Dec
<b>Eligibility Criteria</b>	
Age between	19 and 25 yrs as on 01 Jan of the yr in which course is due to commence for Apr course and 01 Jul of the yr in which course is due to commence for Oct course
Qualification	Final Year appearing/Graduate in any discipline with 50% Aggregate marks, 2 Yrs service in NCC Senior Div Army with minimum 'B' Grade in 'C' Certificate Exam.
Marital Status	Un Married
Application to be Received by	Oct / Nov and Apr / May through NCC Gp HQ/NCC Dte
Likely SSB Date	Nov to Jan for Apr Course and May to July for Oct

	Course
Date Commencement of Trg	Apr and Oct
Training Academy	OTA, Chennai

### **Short Service Commission Non Technical Women**

#### **Eligibility Criteria**

Age between	19 and 25 yrs as on 01 Jan of the yr in which course is due to commence for Apr course and 01 Jul of the yr in which course is due to commence for Oct course
Qualification	Graduation / Post Graduation from Recognized University.
Marital Status	Un Married
Application to be Received by	applications to be forwarded to UPSC as per notification published in Apr/ Sep every year
Likely SSB Date	May/Jun and Nov/Dec
Date Commencement of Trg	Apr and Oct
Training Academy	OTA Chennai
Duration of Trg	49 Weeks

### **Short Service Commission Technical Women**

Vacancies Per Course	As Notified (Twice a year)
Notify in Employment News and leading Daily news Paper	Notified by Additional Directorate General Recruiting / AG Branch in Dec/Jan and Jun / Jul
<b>Eligibility Criteria</b>	
Age between	20 and 27 yrs as on first day of the month in which course is due to commence
Qualification	Engineering Degree in notified discipline
Marital Status	Un Married
Application to be Received by	Feb / Mar and Jul / Aug
Likely SSB Date	Nov to Jan for Apr Course and May to July for Oct Course
Date Commencement of Trg	Oct and Apr
Training Academy	OTA Chennai
Duration of Trg	49 Weeks



**JAG Women**

<b>JAG Women</b>	
Vacancies Per Course	As Notified
Notify in Employment News and leading Daily news Paper	Notified by Additional Directorate General Recruiting / AG Branch
<b>Eligibility Criteria</b>	
Age between	21 and 27 yrs as on 01 Jan of the yr in which course is due to commence for Apr course and 01 Jul of the yr in which course is due to commence for Oct course
Qualification	Graduate with LLB / LLM with 55% marks. Registered with Bar Council of India / State
Marital Status	Un Married
Application to be Received by	Oct / Nov and Apr / May
Likely SSB Date	Dec - Jan and Jul - Aug
Date Commencement of Trg	Apr and Oct
Training Academy	OTA CHENNAI
Duration of Trg	49 Weeks

23. Incase of UPSC Entries ( NDA, IMA ( DE ) and OTA ( SSC ( Non Tech, men and women ),wait for the UPSC ,advertisement in Employment News/Rozgar Samachar/UPSC website Thereafter, apply to UPSC online to UPSC, as per instructions given by UPSC in the advertisement.

24. In case of other entries details are as under :-

(a) **NCC Entry ( Men and Women )** After advertisement is issued in Dec or Jun, download common application form from this website and submit from duty filled with requisite documents to respective NCC unit/Group HQ. War Widows and Wards of battle Casualties : After downloading common application form from this website ,post the form duty filled with attested photocopies of documents to Rtg Dte ( Rtg-6), as per the address given in the advertisement.

(b) **10=2 TES,TGC,SSC (Tech,men and women )** Apply online through this website, after the advertisement is issued, within the period stipulated in the advertisement and mail the printed online application to ADG Rtg ( Rtg-6) ,West Block 3, R K Puram New Delhi- 110066,within the time period stipule in the advertisement.

(c) **University Entry Scheme ( Pre Final Year Students Only )**. Advertisement will be published in the month of Jun/Jul every year. Apply to concerned Command Headquarters as per the advertisement published Download the common application form for UES from DOWNLOAD Menu on the main page of this website and apply as per advertisement.

**Points To Note for Non –UPSC Entries.**

25. 10<sup>th</sup> Class Certificate 12<sup>th</sup> Class Certificate and latest College Education documents ( final mark sheet or previous semester marksheets or degree cert or provisional degree cert ) are required to be attached as attested photocopies with most application as given in the advertisement. The documents are be attested by gazette Officer,

**PART III - JCO & OTHER RANKS**

Eligibility Criteria For Recruitment of JCOs and Other Ranks are given in the table below:-

**Minimum Educational Qualification and Age Criteria**

S No	Category	Education	Age
1	Solder ( General Duty ) ( All Arms )`	SSLC/Metrics with 455 marks in aggregate and 32% in each subject No percentage considered in case candidate has passed higher qualification ie 10+2 and above	17 ½21 yer
2	Solder (Technical Technical Arms Artillery, Army Air Defence )	10+2/ intermediate Exam pass in Science with Physics, Chemistry, math's and English with 505% marks in aggregate and 40% in each subject ( simple pass in 10+2 with requisite subject is acceptable up to 31 mar 2013.	17 ½23 Yrs
3	Soldiers Clerk/Store Keeper Technical ( All Arms	10+2 Intermediate Exam pass any stream ( Arts, commerce, Science ) with 50% marks in aggregate and minimum 40 % in each subject. Should have studied and passed English and Maths/Accts/Book Keeping in CI X or CI XII with 40% marks in each subject. In case of graduate with marks and English as subject in Bsc the stipulation of 40% in CI or CI XII is waived off. In case of gradute withot English and Marks/Accts/Book Keeping he should have score more than 40% in English and Marths/Accts/Book Keeping at least once in CI X or CI XII	17 ½23 Yrs
4	Soldier Nursing Assistant ( Army Medical Corpa )	10+2/Intermediate exam pass in Science with Physics, Chemistry Biology and English with Min 50% marks in aggregate and min 40% in each subject  OR  In case the candidate has a BSc Degree with ( Botany/Zoology/Bio-Science ) and English ,the  Stipulation of percentage I CI-XII is waived off However, the candidate should have studied all the four specified subjects in CI XII also	17 ½23 Yrs
5	Soldier Tradesmen ( All Arms )	10 <sup>th</sup> ( except Syce Mess Keeper and House Keeper Who may be 8 <sup>th</sup> pass )	17 ½23 Yrs
6	Soldier	10 <sup>th</sup> Simple pass	17 ½23 Yrs



	General Duty ( Matric Simple Pass ) ( All Arms		
7	Surveyor Auto Carto ( Engineers )	BA/BSc with Maths Must have also passed 12 <sup>th</sup> class ( 10+2 ) or equivalent with Marks and Science as main subject.	20-25 Yrs
8	Junior Commissioned officer Religious Teacher ( All Arms )	Graduate in any discipline In addition requisite qualification in his own religious denomination	27-34Yrs
9	Junior Commissioned officer Catering ( Army Service Corps )	10+2 of equivalent exam and Diploma /Certificate  Course of a duration of one year or more in cookery/Hotel Management and Catering Tech from a recognized University/Food Craft Institute .AICTE recognition is not mandatory.	
10	Havildar Education (Army Education Corps)	Group X MA/Msv/MCA or BA/BSC/BCA/Bsc ( IT ) with B Ed. )	20-25 Yrs

### **Conclusion**

**26. Here if would be apt to reiterate- That all professions serve our motherland- but none of them is the same league as the Indian Army- for this is the only profession which affords you opportunity to live up to these stirring lines.**

***“ To every man upon this earth,***

***death comes sooner or later***

***And how can a man die better***

***Facing fearful odds***

***For the ashes of his father***

***And the temple of his Gods” -Macaulay***

**ARMED FORCES-7:**  
**HONOURS AND AWARDS**

Code - AF-7

Period - One

Type - Lecture

Term - II

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**Training Aids**

1. OHP, Computer slides, pointer, screen, black board and chalk.

**Time Plan**

- |    |     |                                                             |   |         |
|----|-----|-------------------------------------------------------------|---|---------|
| 2. | (a) | Introduction.                                               | - | 05 mins |
|    | (b) | Gallantry Awards                                            | - | 10 mins |
|    | (c) | Non gallantry awards including NCC awards                   | - | 10 mins |
|    | (d) | Order of precedence for wearing of medals<br>and decoration | - | 10 mins |
|    | (e) | Conclusion                                                  | - | 05 mins |

**INTRODUCTION**

- 3.. Introduction. For the purpose of classification, Indian Armed Forces Honours and Awards can be divided into two categories :

- (a) Gallantry Awards
- (b) Non- Gallantry Awards

**AIM**

2. The aim of this lecture is to introduce the SD/SW and JD/JW NCC Cadets to the various Gallantry Awards in the Army.



### **PREVIEW**

3. The lecture will be conducted in the following parts: -
- (a) Part I - Gallantry Awards
  - (b) Part II - Non Gallantry Awards including NCC Awards
  - (c) Part III - Order of precedence for wearing of medals  
and decoration

### **PART I: GALLANTRY AWARDS**

4. **Gallantry Awards** Gallantry awards are again divided into two categories: -

(a) Gallantry in the face of enemy

- (i) Param Vir Chakra
- (ii) Maha Vir Chakra
- (iii) Vir Chakra
- (iv) Sena, Nao Sena and Vayu Sena Medal
- (v) Mention in Despatches
- (vi) Chiefs of Staff Commendation card

(b) Gallantry other than in the face of enemy

- (i) Ashoka Chakra
- (ii) Kirti Chakra
- (iii) Shaurya Chakra

5. **Non –Gallantry Awards** are as follows

- (a) Bharat Ratna
- (b) Padma Vibhushan
- (c) Padma Bhushan
- (d) Sarvottam Yudh Seva Medal
- (e) Param Vishisht Seva Medal

- (f) Padam Shri
- (g) Sarvottam Jeevan Rakasha Padak
- (h) Uttam Yudh Seva Medal
- (j) Ati Vishisht Sena Medal
- (k) President's Police and Fire Service Medal for Gallantry
- (l) President's Police Medal For Gallantry
- (m) President's Fire Service Medal For Gallantry
- (n) President's Home Guards and Civil Defence Medal For Gallantry
- (o) President's Correctional Service Medal For Gallantry
- (q) Yuddh Seva Medal
- (r) Vishisht Seva Medal.

### **Conditions of Eligibility and Eligible categories**

6. Conditions of Eligibility and Eligible Categories for some of the awards are given in succeeding paras.

### **7. Param Vir Chakra**

- (a) **Conditions of Eligibility** : Awarded for most conspicuous bravery or some daring or pre- eminent act of valour or self sacrifice, in the presence of the enemy, whether on land, at sea , or in the air. The decoration maybe awarded posthumously.
- (b) **Eligible Categories** : Officers, men and women of all rank of the Army, the Navy and Air Force, of any of the Reserve Forces, of the Territorial Army, Militia and of any other lawfully constituted Armed Forces Matrons, Sister, Nurses and staff of the Nursing Service and other Services pertaining to Hospital and Nursing and Civilians of either sex serving regularly or temporarily under the order, directions or supervision of any of the above mentioned Forces.
- (c) Monetary Allowances : Rs 3000/-pm and each bar to the decoration another Rs 3000/--pm to all recipients.



## 8. **Ashok Chakra**

(a) **Conditions of Eligibility** : Awarded for most conspicuous bravery, or some act of daring or pre-eminent act of valour or self-sacrifice other than in the face of the enemy. The decoration may be awarded posthumously.

(b) **Eligible Categories** : Officers, men and women of all ranks of the Army, the Navy and the Air Force, of any Reserve Forces, Territorial Army, Militia and of any other lawfully constituted Forces Members of the Nursing service of the Armed Force Civilian citizens of either sex in all walks of life, other than members of police Force and of recognized Fire services.

(c) **Monetary Allowances** : Rs 2800/- pm and each bar to the decoration Rs 2800/-

## 9. **Vir Chakra**

(a) **Conditions of Eligibility** : For the acts of gallantry in the presence of enemy, whether on land or at sea or in the air. The decoration may be awarded posthumously.

(b) **Eligible Categories** : Officer,s men and women of all ranks of the Army, the Navy and the Air Force , of any of the Reserve Force, of the Territorial Army, Militia and of any other lawfully constituted Armed Forces Matrons Sister, Nurses and staff of the Nursing Services and other Service pertaining to Hospital and Nursing and Civilians of either sex service regularly or temporarily under the order, directions or supervision of any of the above mentioned Forces.

(c) **Monetary Allowance** : 1700/--pm and each bar to the decoration Rs 1700/--pm to all recipients.

## **PART II: NON GALANTRY AWARDS INCLUDING NCC AWARDS**

## 10. **Param Vishisht Seva Medal**

(a) **Conditions of Eligibility** : For distinguished service of the most exceptional order

(b) **Eligible Categories** : All ranks of the Armed Force including Territorial Army units, Auxiliary and Reserve Force (When embodied ) and the Nursing Service in the Armed forces.

## 11. **Yuddh Seva Medal**

(a) **Conditions of Eligibility** : Awarded for distinguished service of a high order during war/conflict/hostilities.

(b) **Eligible Categories** : All ranks of the Army, the Navy and the Air Force, including those of Territorial Army units, Auxiliary and Reserve Force and other lawfully constituted Armed Forces when embodied. Nursing officers and other members of the Nursing Service in the Armed Forces.

12. **Sena Medal**

- (a) **Condition of Eligibility** Awarded for such individual acts of exceptional devotion to duty or courage as have special significance for the Army Navy and Air Force. The award may be made posthumously.
- (b) **Eligible Categories** : All ranks of Army , Navy and Air Force
- (c) **Monetary Allowance** : Rs 500 /- pm and each bar to the medal Rs 500/- pm to all Sena Medal ( Gallantry ) awardees.

**NCC Awards**

13. These awards are given to NCC personnel since 1984 It includes NCC, Whole Time Lady Officers ( WTLO's) Associate NCC Officers ( ANO's ) Girls Cadets Instructors ( GCI'S ) and NCC cadets.

14. **Raksha Mantri's Padak** : Raksha Mantri's Padak is awarded to NCC personnel and cadets since 1989 for performance of any exceptional act involving courage devotion to duty and contribution of lasting value to the NCC. Every year only one Raksha Mantri's Padak is awarded.

15. **Raksha Mantri's Prashansa Patra** Raksha Mantri's Commendation is awarded to NCC personnel and cadets since 1989 for any outstanding act involving leadership, courage or devotion to duty, which enhances the image of the NCC every year maximum three Raksha Mantri's Commendation Cards are awarded.

16. **Raksha Sachiv's Prashansa Patra** The Commendation card is awarded since 1984 for outstanding act deed in the field of adventure sports, training or for outstanding contribution in social or cultural activities. Every year maximum ten Raksha Sachiv Commendation Cards are awarded.

17. **Maha Nideshk's Prashansa Patra** : This Commendation Card is awarded since 1984 for outstanding act deed in the field of adventure sport, training or for outstanding contribution in social or cultural activities. There is no limit to the number for award of Maha Nideshak's Prashansa Patra.

18. **Maha Nideshak's Prashansa Patra To Civilion Personnel.** It is awarded to Central Government civilian officers/staff posted at various level in the NCC for displaying outstanding and distinguished service, dedication and devotion to work and outstanding contribution for efficient management of various NCC activities including camp.



**PART III: ORDER OF PRECEDENCE FOR WEARING OF MEDALS AND DECORATION****Order of precedence for wearing of medals and decoration**

1. Bharat Ratna
2. Param Vir Chakra
3. Ashoka Chakra
4. Padma Vibhushan
5. Padma Bhushan
6. Sarvottam Yudh Seva Medal
7. Param Vishisht Seva Medal
8. Maha Vir Chakra
9. Kirti Chakra
10. Padma Shri
11. Sarvottam Jeevan Raksha Padak
12. Uttam Yudh Seva Medal
13. Ati Vishisht Seva Medal
14. Vir Chakra
15. Shaurya Chakra
16. President's Police and Fire Service Medal for Gallantry
17. President's Police Medal for Gallantry
18. President's Fire Service for Gallantry
19. President's Correctional Service Medal for Gallantry
20. President's Home Guards and Civil Defence Medal for Gallantry
21. Yuddh Seva Medal
22. Sena, Nao Sena and Vayu Sena Medal
23. Vishisht Seva Medal

- 24 Police Medal for Gallantry
- 25 Fire Service Medal for Gallantry
- 26 Correctional Service Medal for Gallantry
- 27 Home Guard and Civil Defence Medal for Gallantry
- 28 Uttam Jeevan Rakha Padak
- 29 Parakram Padak
- 30 General Service Medal -1947
- 31 Samanya Seva Medal -1965
- 32 Special Service Medal
- 33 Samar seva star- 1965
- 34 Poorvi Star
- 35 Paschmi Star
- 36. Op Vijay Star
- 37 Siachin Glacier Medal
- 38 Raksha Medal- 1965
- 39 Sangram Medal
- 40 Op Vijay Medal
- 41 Op Parakram Medal
- 42 Sainya Seva Medal
- 43 High Attitude Medal
- 44 Police ( Special Duty ) Medal – 1962
- 45 Videsh Seva Medal
- 46 President's Police and Fire Service Medal for Distinguished Service
- 47 President's Police Medal for Distinguished Service
- 48 President 's Correctional Service Medal for Distinguished Service



- 49 President's Fire Service Medal for Distinguished Service
- 50 President's Home guards and Civil Defence Medal Distinguished Service
- 51. Long Service and Good Conduct Medal
- 52 Meritorious Service Medal
- 53 Police Medal for Meritorious Service
- 54 Fire Service Medal for Meritorious Service
- 55 Correctional Service Medal for Meritorious Service
- 56 Home Guard and Civil Defence Medal for Meritorious Service
- 57 Jeevan Raksha Padak
- 58 Territorial Army Decoration
- 59 Territorial Army Medal
- 60 Indian Independence Medal – 1947
- 61 Independence Medal – 1950
- 62 50<sup>th</sup> Anniversary of Independence Medal
- 63 25<sup>th</sup> Independence Anniversary Medal
- 64 30 Year Long Service Medal
- 65 20 Year Long Service Medal
- 66 9 Years Long Service Medal
- 67 Commonwealth Awards
- 68 Other Awards

### **CONCLUSION**

19. Honours and Awards are ultimate recognition by the nation for unmatched act of bravery and selfless service, dedication and supreme sacrifice by soldiers/civ/or any other professionals. All of us should try for them in our professional life but by fair means.

**ARMED FORCES-8:**  
**CONCEPT OF INTEGRATED DEFENCE STAFF**

Code	-	AF-8
Period	-	One
Type	-	Lecture
Term	-	III

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**Training Aids**

1. OHP, Computer slides, pointer, screen, black board and chalk.

**Time Plan**

- |    |     |                                   |   |         |
|----|-----|-----------------------------------|---|---------|
| 2. | (a) | Introduction.                     | - | 05 mins |
|    | (b) | Part I-Background                 | - | 05 mins |
|    | (c) | Part II-Role                      | - | 05 mins |
|    | (d) | Part III-Organisational Structure | - | 20 mins |
|    | (e) | Conclusion                        | - | 05 mins |

**INTRODUCTION**

3. The Headquarters of the Integrated Defence Staff is located in New Delhi. The CISC, his secretariat, and certain other components are located in South Block. The major portion of the Headquarters is located in Kashmir House. The Headquarters is staffed by officers and personnel from the three Services, the Ministry of External Affairs/Indian Foreign Service, Defence Finance/Defence Accounts Department, Department of Defence (Ministry of Defence) and the Department of Defence Research and Development (Ministry of Defence).

**PART I: BACKGROUND**

4. In 1947, very few Indians had first-hand knowledge or experience of higher defence organization and administration. Pakistan inspired invasion of Kashmir forced the pace of evolution of such an organization. A number of committees came into existence to advise the



Government and the Defence Minister on defence problems, the main one being the Defence Committee of the Cabinet, which was supported by other committees like the Defence Minister's Committee (DMC), the Chiefs of Staff Committee (COSC), the Joint Planning Committee (JPC) and the Joint Intelligence Committee (JIC).

5. In subsequent years, following the ceasefire in Kashmir and India's adherence to a policy of peace and non-alignment, most of the committees became defunct, their functions being combined.

6. After the Chinese aggression in 1962, the Defence Committee of the Cabinet was replaced by the Emergency Committee of the Cabinet – the latter excluded the attendance of Service Chiefs and the Defence Secretary unlike the former. The DMC was revamped to include scrutiny of operational developments and overseeing of defence preparedness. A number of other committees came into being to expedite the defence build-up. However, as the imminence of Chinese threat receded, most of these committees again became defunct.

7. After the Kargil Conflict, the Government constituted the Kargil Review Committee to carry out an in-depth review and analysis of Security Management System in the country. The recommendations of the Kargil Review Committee were considered by the Group of Ministers which made specific proposals for implementation based on the analysis carried out by four task forces.

8. Based on the recommendations of the Group of Ministers, **the Integrated Defence Staff was set up vide Government of India, Ministry of Defence letter number MoD/IC/1027/32/IDS/5843/2001 dated 23 November 2001.**

## **PART II: ROLE**

### **Role**

7. The Chief of Integrated Defence Staff to the Chiefs of Staff Committee (CISC) will support the Chairman and the Chiefs of Staff Committee (COSC) in the optimal performance of their role and functions.

## **PART III: ORGANISATIONAL STRUCTURE**

### **Organisational Structure**

8. The Integrated Defence Staff comprises of Service Officers, Civilian Officers and Scientists and they are allocated duties, roles and functions based on responsibilities of Integrated Defence Staff. It is organized into the following major branches:-

- (a) CISC Secretariat including Scientific Advisor to CISC and Financial Advisor to CISC.
- (b) Policy, Plans and Force Development.
- (c) Operations.
- (d) Doctrine, Organisation and Training.

- (e) Defence Intelligence Agency.
- (f) International Affairs and Net Assessment.

9. The Andaman and Nicobar Command (ANC) is the first integrated theatre command in India with headquarters at Port Blair. It operates directly under the COSC, through to IDS. Of late, the Strategic Forum Command (SFC) which basically comprise Strategic long range weapon systems of all three services, has also been raised and functions under the IDS.

### **CONCLUSION**

10. The vision of IDS is **“Act as point organization for joint manship in MoD which integrates policy, doctrine, war fighting and procurement by employing best management practices”**



**LESSON PLAN : MR 1**  
**INTRODUCTION TO TYPES OF MAP AND CONVENTIONAL SIGNS**

Period	-	Two
Type	-	Lecture
Code	-	MR 1
Term	-	I

---

**Training Aids**

1. Map Sheets, Computer Slides, Pointer, Charts, Black board & Chalk.

**Time Plan**

2.	(a)	Introduction and Aim	-	05 Min
	(b)	Definition and type of Map	-	35 Min
	(c)	Conventional Signs	-	35 Min
	(d)	Conclusion	-	05 Min

**AIM**

3. The aim of this lecture is to introduce the JD/JW NCC Cadets to the basics of Map reading and conventional signs.

**PREVIEW**

- |             |   |                             |
|-------------|---|-----------------------------|
| (a) Part I  | - | Definition and Types of Map |
| (b) Part II | - | Conventional Signs          |

**PART I: DEFINITION AND TYPES OF MAP**

**Definition of Map**

5. A map is representation of selected natural and man made features of the whole or part of the earth's surface on a flat sheet of paper on a definite scale and in their correct relative geographical positions and elevations. Symbols, colour differentiations and contours help to show the physical features- mountains , valleys and plains- in their true relationship to the land and man made features. A map, however, has the following limitations:-

- (a) It is seldom, if ever, upto date.

- (b) It cannot show every thing that exists on the ground.

### **Types of Maps**

6. There are different types of maps depending on their scale and their use. Important types of maps are as under:-

- (a) **Atlas Maps.** These are small scale maps showing whole country's continents, oceans or even world on one sheet.
- (b) **Topographical Maps.** These are maps with which we are concerned in map reading. Survey of India maps are all topographical maps.
- (c) **Relief Maps.** These are solid maps built as an actual model of the ground.
- (d) **Outline Maps.** These indicate general plan of the country e.g. main towns and rivers. Siometimes the normal topographical details are also shown.
- (e) **Rail / Road Maps.** These are intended only for use in connection with rail / road movements.
- (f) **Photo Maps.** These are produced by making a mosaic of strips of vertical air photographs, so as to cover completely the area required to be shown.
- (g) **Other Maps.**
  - (i) Geographical Maps showing the structure of the rock formation below the top soil.
  - (ii) Statistical maps showing information of such things as population, industries, mineral ores, crops etc.
  - (iii) Charts – showing depth of water round the coast and in river estuaries.
  - (iv) Meteorological maps showing information regarding winds, atmospheric pressures and so on.

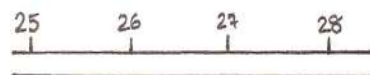
## **PART II : CONVENTIONAL SIGNS**

### **Conventional Signs**

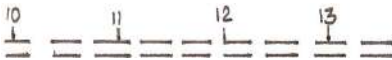








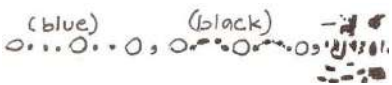




7 Conventional signs are symbols used to represent certain artificial or natural features/objects on the map. They are seldom drawn to scale. Some common types of conventional signs are listed at Fig-1.








- (a) Roads-metalled with Km-stone.

-





- (b) Roads-unmetalled with Km-stone. - 
- (c) Cart track, camel track, mule path. - 
- (d) Foot path, road in bed of stream, Level crossing. 
- (e) Bridges with piers and without, Causeway, Ford 
- (f) Stream-Approx water course, canal - 
- (g) River banks, shelving, steep 10 to 20 feet, over 20 feet - 
- (h) River beds-dry, with stream, with island and rocks - 
- (j) Tidal river-shoal-sub merged rocks - 
- (k) Wells-lined and unlined, spring, tanks-perennial and dry - 
- (l) Kaeaz-in, flow and dry, swamp, Reeds. - 
- (m) Embankments, road or rail, tank cutting tunnel. - 
- (n) Broken ground, camping ground, vine on trellis. - 
- (o) Railways, broad guage, double, single (Station), under construction. - 
- (p) Railways other Guages, double, 

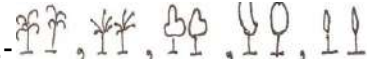
- Single (milestone) and under Construction.- 
- (q) Light railway or tram way, Telegraph line. - 
- (r) Circuit house, Dak, Travellers Bungalow, Rest House. - CH, DB, TB, RH
- (s) Inspection bungalow, Police station, Buddhist Kyaung - IB (Cenal), PS, kg
- (t) Post office, telegraph office, combined office. - PO, TO, PTO
- (u) Forest-reserved, state and protected. - RP, SR, PF.
- (v) Spaced names, Administrative, Locality, tribal. - KIKRI, DUAR, HAGIA
- (w) Villages : open, walled, ruined, deserted antiquities.- 
- (x) Huts, permanent and temporary, Fort, Tower chhatvi. - 
- (y) Church, Mosque, Temple, pagoda, Idgah, tomb.-   

- (z) Dams, masonry and earth work-wair (anicut in madras). X (Red)(black)
- (aa) Lighthouse-Lightship-Buoys Bamboo-plantation.- 



(ab) Grass high and low cane, Bamboo-plantation. -



(ac) Palms, Areca, palmyra, other conifer, other trees, scrub. -



ad) Contours, Formlines, Rocky slopes. -



(ae) Cliffs-sand features. -



(af) Moraine, Glacier, Scree -



(ag) Boundary demarcated; international. -



(ah) Boundary demarcated; province or state. -



(aj) Boundary undermarked; International, province or state. -



(ak) Boundary; district or Tribal. -



(al) Boundary; Sub Divisional, tahsil taluk or township forest. -



(am) Boundary pillars, surveyed, not found. -



(an) Graves oil wells, Mine-Battle field with year. -



(ao) Heights traingulated, Bench Mark.

$\Delta$  - 200, BM200

-



**LESSON PLAN : MR 2**  
**SCALES AND GRID SYSTEMS**

Period	-	Two
Type	-	Lecture
Code	-	MR 2
Term	-	I

---

**Training Aids**

1. Map Sheets, Computer Slides, Pointer, Charts, Black board & Chalk.

**Time Plan**

- |    |     |                                           |   |        |
|----|-----|-------------------------------------------|---|--------|
| 2. | (a) | Introduction and Aim                      | - | 05 Min |
|    | (b) | Definition, Methods of expressing a scale | - | 35 Min |
|    | (c) | Definition and methods of Grids Reference | - | 35 Min |
|    | (d) | Conclusion                                | - | 05 Min |

**AIM**

3. The aim of this lecture is to introduce the JD/JW NCC Cadets to the method of learning scales and method of finding Grid Reference.

**PREVIEW**

4. The lecture will be conducted in the following parts:-
 

(a)	Part I	-	Definition and methods of expressing a scale
(b)	Part II	-	Definition and Methods of finding Grid Reference

**PART I**

**Definition of Scale**

6. Scale is the proportion which the distance between the two points on the map bears to the distance between two points on the ground. Everything on the map must be reduced and the extent to which the size is reduced constitutes the scale of the map. The essence of a map is

that it is a drawing to scale and it bears a definite ratio to the size of the actual country which it portrays.

### **Methods of Expressing a Scale**

7. There are two methods of expressing a scale:-

(a) **In Words.** 1 inch to 1 mile, it means that 1 inch on the map represents 1 mile on the ground.

(b) **As a Representative Fraction (RF).** This is the scale expressed in the form of a fraction, if the scale of a map is given as  $1/100000$  this means that one unit of the map represents 100000 of the same unit on the ground. It could mean that one centimeter on the map represents 100000cm on the ground.

### **Scale Line**

8. Underneath the scale is the scale line which is drawn in two ways and by means of this, distance on the map can be measured. On the 2 cm to 1 km map one shows 1 km along its length, and is similarly divided into metres, with sub divisions in the left hand section.

9. The large divisions on these scale lines are called primaries and the small divisions on the left secondaries. An example of the scale line for a scale "2 cm to 1 km" is at Fig-2 below.

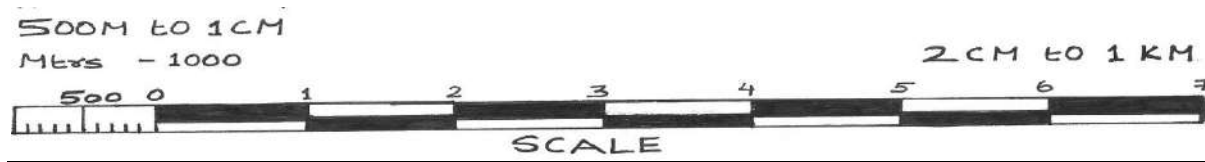


Fig-2

## **PART II**

### **Definition of Grid**

10. A map is covered with a network of purple lines, some running North and South and others West and East. These form a series of small squares all over the map. These lines are known as Grid Lines.

### **Purpose**

11. The purpose of Grid Lines is to make possible giving and reading Grid References and to facilitate measurement of bearings.

### **Method of Grid Reference**

12. In giving a Grid Reference there are four rules to remember:-



- (a) A reference must always contain an even number of figures. Normally it contains six figures.
- (b) Always count along the EASTING lines first from the WEST to EAST and then from SOUTH to NORTH along NORTHINGS.
- (c) For six figure Grid Reference the third and the sixth figure represent the divisions of 1000 meters square to the nearest 10th part, so they have to be estimated and for these figures a slight latitude is allowed.
- (d) If a general Grid Reference is to be given or there is only one such object in one square e.g. bridge, temple, road junction then its identity and four figure grid reference would suffice.

**LESSON PLAN : MR 3**  
**TOPOGRAPHICAL FORMS AND TECHNICAL TERMS**

Period	-	Two
Type	-	Lecture
Code	-	MR 3
Term	-	I& II

---

**Training Aids**

1. Computer Slides, Pointer, Charts, Black board & Chalk.

**Time Plan**

2. (a) Introduction	-	05 Min
(b) Topographical terms	-	35 Min
(c) Technical terms	-	35 Min
(d) Conclusion	-	05 Min

**INTRODUCTION**

3. The following list of technical terms and topographical forms is by no means exhaustive and is meant to include only those which are more commonly used. Topographical forms is a name used to describe geographical features which occur on the ground.

**AIM**

4. The aim of this lecture is to introduce the JD/JW NCC Cadets to the various topographical forms and understanding technical terms in map reading.

**PREVIEW**

5. The lecture will be conducted in the following parts:-
  - (a) Part I - Topographical terms
  - (b) Part II - Technical terms



**PART I****6. Topographical Forms.**

- (a) Basin - An area of fairly level ground surrounded by hills or the area drained by a river and its distributaries.
- (b) Col or Saddle - A narrow ridge of high land joining up to higher hills.
- (c) Crest - The highest part of a hill or mountain range. It is that line on a range of hills or mountains from which the ground slopes down in opposite directions.
- (d) Dead Ground - Ground which by reason of undulations or hills is not visible to the observer.
- (e) Defile - Any feature whether natural or artificial which could cause a body of troops to contract its front. An example of a natural defile is mountain pass while a bridge is an example of an artificial defile.
- (f) Escarpment - The steep hill side formed by a sudden drop in the general ground level usually from a plateau.
- (g) Knoll - A small isolated hill.
- (h) Plateau - A table land, an elevated region of considerable extent generally fairly level.
- (j) Ravine - A long deep valley closed at one end separating two spurs.
- (k) Ridge - The line along a hill or range of hills or mountains from which water flows in opposite directions.
- (l) Spur - A piece of high ground jutting out from a range of hills into lower ground.
- (m) Watershed - The line separating the water flowing into two different river

systems, the edge of a river basin.

## **PART II**

### **7. Technical Terms.**

- (a) Bearing - The angle formed by a line joining two points and the North and South line. Bearings are always measured clockwise.
- (b) Bench Mark - A permanent mark usually cut into a wall recording exact height for future reference, marked BM with the height on Ordnance Survey Maps.
- (c) Contours - A line drawn on the map joining up all points of equal height above sea level.
- (d) Detail - All the Topographical information on a map.
- (e) Gradient - The slope of a hill expressed as a fraction.
- (f) Grid Lines - Lines running parallel to and at right angles to a North and South line through approximately the centre of the area covered by the grid system.
- (g) Grid North - Except through the origin, grid lines do not lie true North and South or East and West, Grid North is the direction of the North South grid lines on a map.
- (h) Horizontal Equivalent (HE) - The distance measured on the map between adjacent contour lines. It varies according to the nature of the relief.
- (i) Magnetic Variation - The difference between True North & Magnetic North.
- (k) Setting - Placing a map so that North on the map points toward the North so that the objects on the map are placed in relationship to the same objects on the ground.
- (1) Spot Height - A point on a map whose height has been determined by Survey methods. This height is printed alongside the point.



- (m) Trig Point - A point fixed during the triangulation at the beginning of a survey, marked on Ordnance Survey Maps by a small triangle with the height.
- (n) True North - The direction of the North Pole from the point.
- (o) Vertical Interval (VI) - Successive contour lines. The VI is generally the same for any given scale.

**LESSON PLAN : MR 4**  
**RELIEF, CONTOURS AND GRADIENTS**

Period	-	Two/One
Type	-	Lecture/Practice
Code	-	MR 4
Term	-	I&II

---

**Training Aids**

1. Map Sheets, Computer Slides, Pointer, Charts, Black board & Chalk.

**Time Plan**

2.	(a)	Introduction	-	05 Min
	(b)	Relief, slopes	-	15 Min
	(c)	Countours and Gradients	-	15 Min
	(d)	Conclusion	-	05 Min
	(e)	Practice	-	40Min

**AIM**

3. The aim of this lecture is to introduce the Cadets to Relief ,slopes Countours and gradients in map reading.

**PREVIEW**

4. The lecture will be conducted in the following parts:-
  - (a) Part I - Relief and Slopes
  - (b) Part II - Countours and Gradients

**PART I : RELIEF AND SLOPES**

**Relief**

5. Relief is a general term applied to the shape of the ground in a vertical plane. Representation of a relief on a map means showing of heights and shape of the ground above



or below or datum which is normally sea level. Thus it shows the broad features and relative heights of highlands and low lands which are portrayed on the map.

6. Relief is shown with means of hachures, shading, form lines, layer tints, contours, spot heights, trig heights, bench marks and relative heights.

### **Slopes**

7. The closer together the contour lines are, the steeper is the slope of the hill which they show, where they are far apart, the slope down is gradual. Remembering this, it is possible to see at a glance where the steeper hills are.

### **Type of Slopes**

8. There are two type of slopes, convex and concave. A convex slope is the one which bulges outwards and concave slope is the one which curves inwards.

## **PART II :COUNTOURS AND GRADIENTS**

### **Contours**

9. A contour is an imaginary line following surface of the ground at a certain level. If you walk around a hill at a certain level, going neither uphill nor down, you will be following the contour for that level.

10. **Characteristics of Contours.** These are as under:-

- (a) Contours accurately show the height, the shape and slope of the ground.
- (b) Contours are shown generally in brown and rarely in black.
- (c) Height is marked on every fifth contour on 1:50000 scale map.
- (d) Contour lines vary in appearance.
- (e) These line never touch or cross each other except at hanging cliff where they appear dotted.

### **Vertical Interval (VI)**

11. The rise between successive contour lines is known as the vertical interval. On map scale 1 inch to 1 mile, the VI of each contour line is 50 feet while on the 1/4 inch to a mile it is 250 feet.

### **Horizontal Equivalent (HE)**

12. The distance measured flat on the map between adjacent contour lines is horizontal equivalent (HE).

### **Gradient**

13. The slope of the ground may be expressed as the angle the ground makes with the horizontal but more commonly it is expressed as a gradient – 1 in 15 or 1 in 20, which may be written as  $1/15$  or  $1/20$ . A gradient of 1 in 15 means that in a horizontal distance of 15 m the ground rises or falls 1 metre so the gradient of the slope is the relation that its rise or fall bears to its length measured on the ground or in other words it is the ratio of the vertical interval to horizontal equivalent. It is independent of any unit of measurement. Simple Formula is  $VI/HE = \text{Gradient}$ .

14. The horizontal equivalent is obtained by measuring on the map and vertical interval by subtracting the contour heights.

15. You may often need to know just how steep a piece of ground is, whether a road is too steep for a certain type of vehicle to negotiate. The gradient can be worked out quickly from a contoured map.

16. **Measuring Gradient.** The rise or fall of a slope can be expressed in following two ways:-

- (a) In a Angle or Degree of Slope.
- (b) The tangent of the Angle or Gradient.



**LESSON PLAN : MR 5**  
**CARDINAL POINTS AND TYPES OF NORTH**

Period	-	One
Type	-	Lecture/Practice
Code	-	MR-5
Term	-	I

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**Training Aids**

1. Computer Slides, Pointer, Charts, Black board & Chalk.

**Time Plan**

- |    |     |                                         |   |        |
|----|-----|-----------------------------------------|---|--------|
| 2. | (a) | Introduction                            | - | 05 Min |
|    | (b) | Cardinal Points and Types of North      | - | 15 Min |
|    | (c) | Magnetic variation and Grid convergence | - | 15 Min |
|    | (d) | Conclusion                              | - | 05 Min |

**AIM**

3. The aim of this lecture is to introduce the Cadets to the basics of Map reading and conventional signs.

**PREVIEW**

4. The lecture will be conducted in the following parts:-
 

(a)	Part I	-	Cardinal Points and Types of North
(b)	Part II	-	Magnetic variation and Grid convergence

**PART I: CARDINAL POINTS AND TYPES OF NORTH**

**Cardinal Points**

6. North, South, East and West are known as the cardinal points.
7. If the North point is taken as zero degrees the angle which East forms with it is 90 degrees, or a right angle. The angle formed by the South point, being twice as large, is 180

degrees, and the West point forms an angle of 270 degrees. If the angle is measured all the way round the circle back again to North, it will be found to be 360 degrees.

8. In addition to four Cardinal Points and four intermediate four major directions, there are eight minor directions. The names and degrees are as under:-

- |     |                  |   |                 |
|-----|------------------|---|-----------------|
| (a) | North North East | - | 22 & ½ Degrees  |
| (b) | East North East  | - | 67 & ½ Degrees  |
| (c) | East South East  | - | 112 & ½ Degrees |
| (d) | South South East | - | 157 & ½ Degrees |
| (e) | South South West | - | 202 & ½ Degrees |
| (f) | West South West  | - | 247 & ½ Degrees |
| (g) | West North West  | - | 292 & ½ Degrees |
| (h) | North North West | - | 337 & ½ Degrees |

### **Types of North**

9. There are three types of North :-

- (a) **True North.** The direction of North pole from the observer.
- (b) **Magnetic North.** It is the point to which a magnetic needle points, when freely suspended.
- (c) **Grid North.** It is the direction to which the North South grid lines on a map point.

### **Angles Between North Points**

Angle between three Norths are as under:-

- (a) **Magnetic Declination.** Angle between Magnetic North & True North, also known as Magnetic Variation.
- (b) **Grid Convergence.** Angle between Grid North & True North.
- (c) **Grid Magnetic Angle.** Angle between Grid North & Magnetic North.

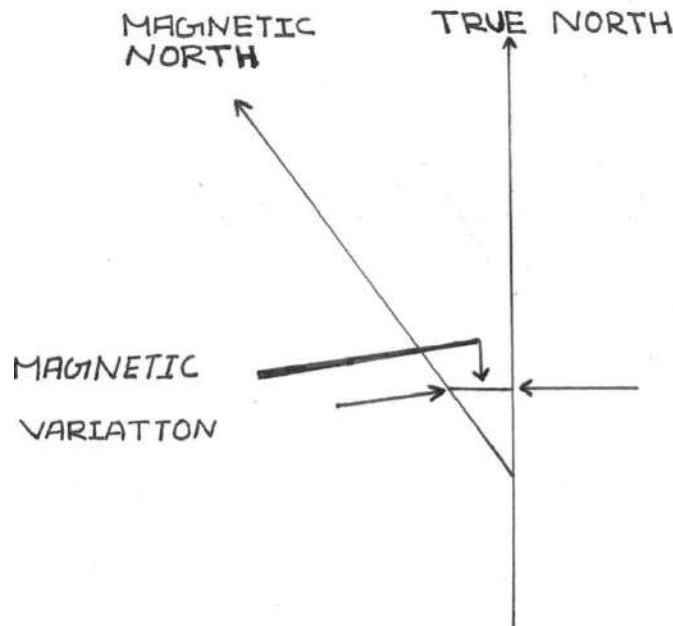
## **PART II : MAGNETIC VARIATION AND GRID CONVERGENCE**

### **Magnetic Variation**

10. **True North is Constant.** Magnetic North is the point to which the compass needle points. The needle does not point directly to True North, but a little West or East of True North.



The point towards which the needle swings is known as Magnetic North and the difference between True North and Magnetic North is called Magnetic Variation. The amount of the Magnetic Variation depends upon two factors, time and place as at Fig-3 below.



### **Magnetic Variation**

11. **Time.** The Variation is not constant but is, gradually changing and even the change each year is not constant but the difference being negligible it is taken to be constant. On the top margin of a map will be found a statement giving the Magnetic Variation. To bring this up-to-date, the year of issue of the map must be noted and for every year that has passed since then the applicable change annually subtracted or added from the figure given as applicable.

12. **Place.** The amount of the Magnetic Variation also changes in different parts of the world and indeed in different parts of the country.

### **Grid Convergeance**

13. The angular difference between Grid and True NORTH is called the Angle of Convergence or the Grid Convergence.

**LESSON PLAN : MR 6**  
**TYPES OF BEARING AND USE OF SERVICE PROTRACTOR**

Period	-	Two/ Three
Type	-	Lecture/Practice
Code	-	MR 6
Term	-	I & II

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**Training Aids**

1. Service Protractor, Compass, Computer Slides, Pointer, Charts, Black board & Chalk.

**Time Plan**

2.	(a)	Introduction and Aim	-	05 Min
	(b)	Bearing, conversion of bearing	-	35 Min
	(c)	Service Protractor and its uses	-	35 Min
	(d)	Conclusion	-	05 Min
	(e)	Practice	-	40Min

**AIM**

3. The aim of this lecture is to introduce the JD/JW NCC Cadets to the process of understanding how to take bearing ,methods of conversion of bearing and service protractor and its uses.

**PREVIEW**

4. The lecture will be conducted in the following parts:-
  - (a) Part I - Bearing and its conversion methods
  - (b) Part II - Service protractor and its uses



## **PART I: BEARING AND ITS CONVERSION METHODS**

### **Bearing**

5. The clock wise angle formed by a straight line joining two points and direction of NORTH, is called the bearing between the two points. A bearing is always measured clockwise. They are three types as given below:-

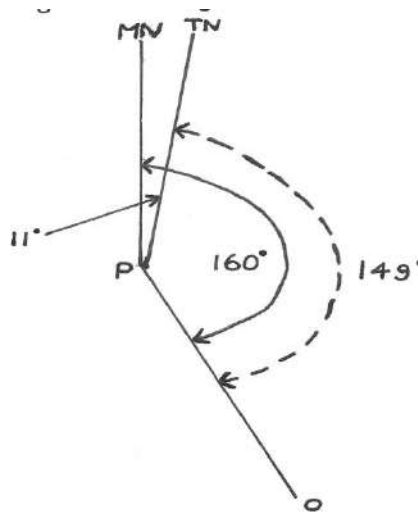
(a)	Grid Bearing.	-	Measured on the map from the Grid North by the help of a protractor.
(b)	Magnetic Bearing	-	Measured from Magnetic North by the compass.
(c)	True Bearing	-	Calculated by finding out the relation of True NORTH and Grid NORTH or Magnetic NORTH.

### **Conversion of Bearings**

6. The methods are explained in the succeeding paras.

#### **To Convert a Magnetic Bearing to a True Bearing**

7. Suppose the bearing of a certain point P is measured with a compass and is found to be  $160^{\circ}$  Degrees. To convert this Magnetic Bearing to a True Bearing, draw a diagram as given below:-



**Fig-4**

8. First draw a vertical line to represent Magnetic North (because it is a Magnetic Bearing which is being considered). Next draw a line PO at P an angle of 160 degrees. It is only a rough diagram, and the angle can be judged by eye. Thirdly, draw in the true North line approximately 11 degrees East of Magnetic North, with this diagram it becomes clear that True Bearing

(marked with a dotted line) is smaller by 11 degrees. Therefore, the True Bearing of O is 149 degrees.

### **To Convert Grid Bearing to Magnetic Bearing**

9. Measuring with a protractor on the map, the bearing of a Wind Mill at Y from a Church at X is found to be 120 degrees. To convert this Grid Bearing to a Magnetic Bearing, draw a diagram as before this time starting with the Grid North line. The magnetic bearing is larger than the grid bearing by 11 degrees and is therefore, 131 degrees.

10. In converting bearing it is always wise to draw a diagram in order to see whether the magnetic variation should be added or subtracted and this is an easier way than remembering sets of rules.

### **Back Bearing**

11. It is the bearing taken from the observation point back on to the original position. In practice it is not necessary to move to the observation point as it can be calculated. The rule is that if the bearing is large enough to have 180 degrees subtracted from it this should be done. If it is smaller this figure should be added.

## **PART II: SERVICE PROTRACTOR**

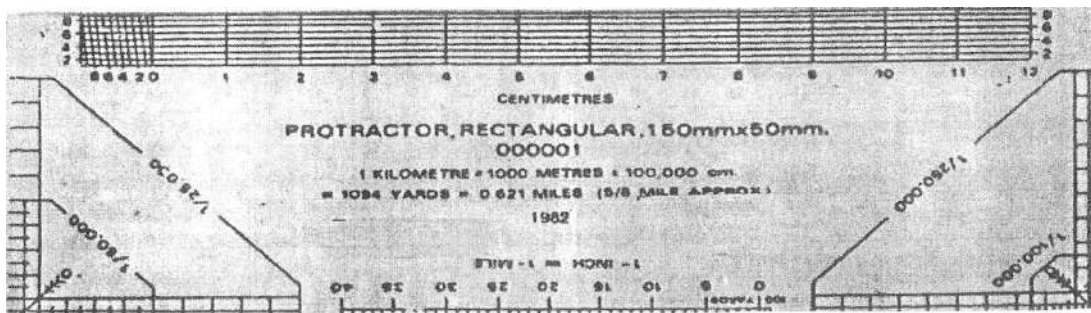
### **General**

12. The service protractor "A" Mark IV is an instrument used for plotting and measuring bearing on the map. It is the essential link between the compass and the map, for it is by means of the protractor that magnetic bearings have been converted to grid bearing and transferred to the map.

### **Description**

13. The protractor is made of cardboard or ivory (flexible material) and it measures 6 inches long and 2 inches wide.

14. The front face of the protractor has 360° of a circle marked around the edges of the three sides. The degrees are marked in a clockwise direction starting from the left hand bottom corner in two tiers, outer set of figures shows graduation from zero degrees to 180° and the inner set from 180° to 360°. The zero is denoted by a small arrow at the centre of the fourth side of the protractor.





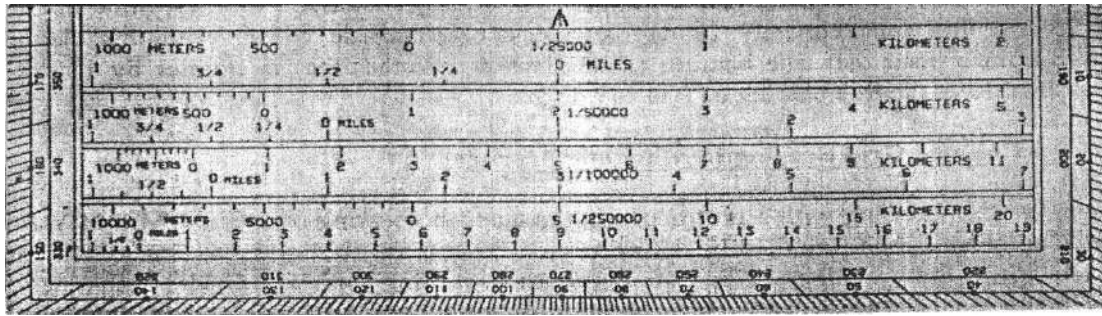


Fig-5

### **Scale of Protractors**

15. The main purpose of the protractor is to measure angles and bearings as described in the preceding paragraphs.

16. The protractor also shows on both its faces a number of the more common map scales. The respective scale lines are drawn out and divided into primary and secondary divisions in exactly the same way as at the bottom of the map. Six different scales are shown on the faces each with a variety of sub-divisions so that there is unlikely to be a map on which distance cannot be measured by means of the service protractor.

### **Measuring a Bearing**

17. The angle can be measured by drawing a line from the graduation to the point zero on the protractor. The required angle will be the gap between this line and the line joining the zero (Fig - 6).

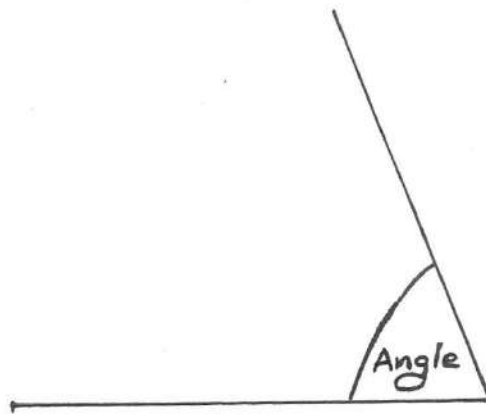


Fig-6

### **Uses of Protractor**

18. The service protractor is an essential item of Map Reading. With its help one can:-

- (a) Plot and measure bearing on paper or on a map. For bearing between 0 and 180 degrees their Zero edge must be on the LEFT and for 180 degrees -360 degrees it must be on the RIGHT.
- (b) Measure distance in inches / cm correct upto 1/100th.
- (c) Measure distance in yards, metres or miles on a map by using the appropriate scale.
- (d) For using the diagonal scale one must use an intermediate agent. Mark off the distance to be measured on the straight edge of a paper or by means of a divider and then put the paper or divider on the diagonal scale and measure.



**LESSON PLAN : MR 7**  
**PRISMATIC COMPASS AND ITS USE AND GPS**

Period	-	Two
Type	-	Lecture/Practice
Code	-	MR-7
Term	-	I&II

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**Training Aids**

1. Compass Prismatic, GPS, Computer Slides, Pointer, Charts, Black board & Chalk.

**Time Plan**

- |    |     |                                         |   |        |
|----|-----|-----------------------------------------|---|--------|
| 2. | (a) | Introduction                            | - | 05 Min |
|    | (b) | Types of compass, How to take a bearing | - | 35 Min |
|    | (c) | Compass errors and GPS                  | - | 35 Min |
|    | (d) | Conclusion                              | - | 05 Min |
|    | (e) | Practice                                | - | 40Min  |

**INTRODUCTION**

3. The magnetic compass has been and is being used extensively in ships, aircraft and the various branches of the army to find and maintain direction. The prismatic compass is an accurate and reliable instrument of great value except during a "magnetic storm" or when subject to strong local magnetic field e.g. in polar regions. With the prismatic compass one can measure magnetic bearing on the ground

**AIM**

4. The aim of this lecture is to introduce the cadets to the basics of Compass Bearing, understanding compass errors and use of GPS.

**PREVIEW**

5. The lecture will be conducted in the following parts:-
 

(a)	Part I	-	Type of Compasses and acquiring a bearing
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**PART I : TYPES OF COMPASS AND TAKING BEARING****Types**

6 There are two types of prismatic compass, the dry and liquid filled. Liquid type is easier to use though it is less sensitive.

**Description**

7. The names of various parts are shown below:-

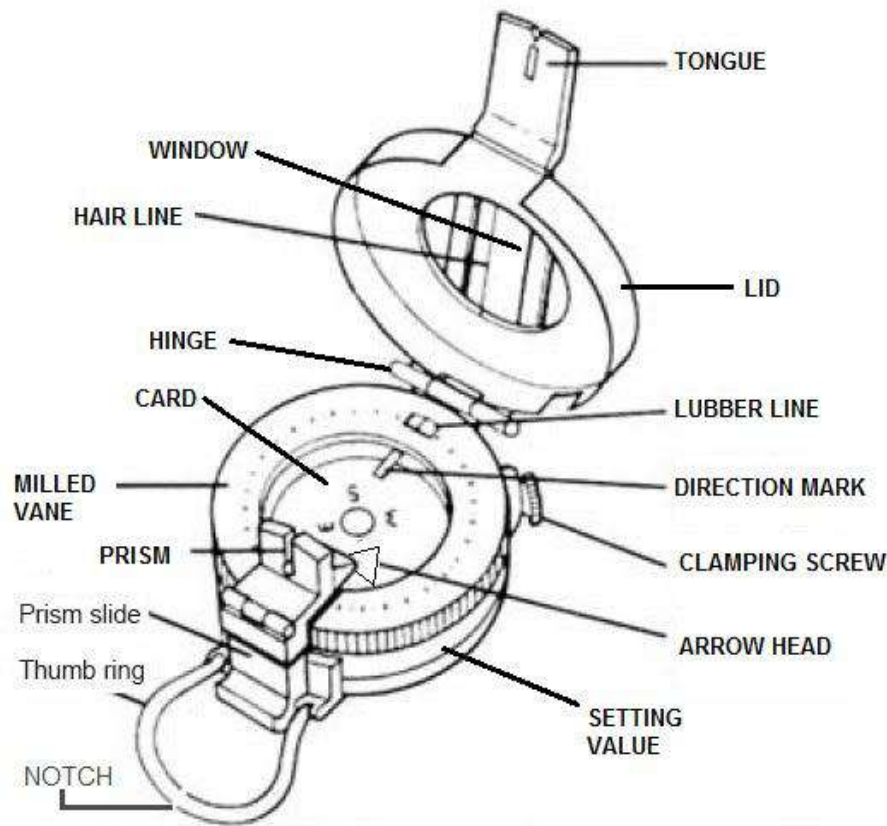


Fig-7

**How to Take a Bearing**

8. Open the lid so that it is roughly at right angle to the body of the compass.
9. Turn the prism casing over so that it lies flat on the face of the compass. Put your thumb through the ring and your forefinger underneath the compass and hold it so that it attains horizontal level.



10. Bring the prism upto the eye and you will see two things:-

- (a) Above the prism, through the slot on the case, the hair line on the window.
- (b) Through the prism itself, a set of figures.

11. The compass must be held so that the hair line is vertical and cuts the object on to which the bearing is being taken. The reading is determined by noting where the bottom of the hair line cuts the set of figures beneath it.

## **PART II :COMPASS ERRORS AND GPS**

### **Compass Error**

12. Sometimes due to the presence of imprurities in the material of which a compass is made or other reasons, the magnetic needle may not point toward the magnetic NORTH but a little to the EAST or WEST of it. This deviation of the magnetic needle in the compass from the magnetic NORTH is termed compass error.

- (a) The compass error is said to be 2 degrees EAST if the compass needle points 2 degrees EAST of magnetic NORTH. The compass error is 5 degrees WEST if the compass needle points 5 degrees WEST of magnetic NORTH.
- (b) Always draw a rough diagram showing the magnetic NORTH and the compass NORTH with the error, you will then see whether you have to subtract or add when converting compass bearing into magnetic bearing and vice versa.

### **Global Positioning System**

13. Global Positioning System (GPS) refers to a system of satellites and receivers that allows people and devices to pin point their precise location on the earth. The normal GPS operational constellation consists of 24 satellites that orbit the earth in 12 hours. The satellite orbits repeat almost the same ground track each day. The orbit altitude is such that the satellites repeat the same track and configuration over any point. There are six orbital planes with four space vehicles in each, equally spaced 60 degree apart and inclined about 55 degree with respect to equatorial plane. The constellation provides the user with 5-8 space vehicles visible from any point on the earth. Devices that are equipped with GPS equipment receive transmission from at least a few of the satellites and are able to discern very precise positioning data.

14. The first GPS satellite was launched in 1974 and the 24th was launched in 1994. The new satellites are periodically launched to replace the ageing ones. GPS is funded by and controlled by the United States, Department of Defence.

15. The application of GPS is very broad and number of users is increasing dramatically. With improved technology, small portable GPS receivers have become very handy and accuracy is remarkable. These devices are used by fishermen and hikers to navigate. Today, many vehicles are equipped with GPS to help the drivers to navigate. In the Armed Forces, GPS has made navigation very easy. All aircraft, ships and specialist vehicles are equipped with GPS. In the Army, GPS is commonly used in battle fields and insurgency affected areas. It

assists troops to navigate through jungles, mountains and deserts. GPS is also used to guide missiles to pre specified targets.



**LESSON PLAN : MR 8**  
**SETTING OF A MAP, METHODS OF FINDING NORTH AND FINDING OWN POSITION**

Period	-	Four
Type	-	Lecture/Practice
Code	-	MR 8
Term	-	II

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**Training Aids**

1. Map sheets, Compass, Service Protractor, Pointer, Charts, Black board & Chalk.

**Time Plan**

2.	(a)	Introduction and Aim	-	05 Min
	(b)	Setting of Map and methods	-	35 Min
	(c)	Finding North and finding own position on map	-	35 Min
	(d)	Conclusion	-	05 Min
	(e)	Practice	-	1h 20 Min

**AIM**

3. The aim of this lecture is to introduce the JD/JW NCC Cadets to the method of setting of maps, and finding own position on map.

**PREVIEW.**

4. The lecture will be conducted in the following parts:-

(a)	Part II	-	Map setting by various methods
(b)	Part III	-	Finding North and own position on map

**PART I: METHODS OF SETTING A MAP**

**Setting of Map**

5. A map is said to be set or oriented when it is placed such that it corresponds directly with the ground i.e. when true NORTH on the map points to true NORTH on the ground. Obviously it

is easier to read a map when the objects on it are pointing in the same direction as the objects on the ground.

### **Methods of Setting a Map**

6. There are two methods of setting a map - by compass and by objects on the ground.

7. **Setting by Compass** Draw a line showing magnetic NORTH from a point on a grid line. Open the compass and lay it flat on the map over the above drawn diagram, which will show the magnetic variation so that the hair line on the window lies along the magnetic NORTH line on the diagram. Then turn both the map and the compass till the needle points along the hair line. The map is now set, since the magnetic NORTH line on the map is pointing in the direction of magnetic NORTH as indicated by the compass needle.

8. (a) **Without a Compass when Own Position is Known.**

(i) Using a straight edge, for instance railway line.

(ii) Recognise one object on the ground and on the map and join own position to that object. Hold the map so that when looking along the line you see the object on the ground in the same straight line.

(b) **Without a Compass when Own Position is not Known.**

(i) **Parallel Method.** Select two landmarks such as road, railway line and so on which are easily recognizable on the map. If continuous landmarks are not visible, choose two objects and imagine a line joining them. With each landmark, make the corresponding landmark on the map parallel and the map will roughly be set.

(ii) **On/Near Line Joining Two Points.** Identify two nearby objects on the map and the ground. Stand on an imaginary line joining them and set the map.

## **PART II: FINDING NORTH AND OWN POSITION**

### **Finding North**

9. **Without Compass.** The position of NORTH can be discovered by one of the following methods:-

(a) **Watch Method.** Point the hour hand of your watch toward the sun. A line bisecting the angle between the hour hand and the direction of the 12 O'clock will then point due SOUTH. It must be ensured the the angle bisected must always be that which is less than 180 degrees. It is a rough method and applies only in the northern hemisphere.

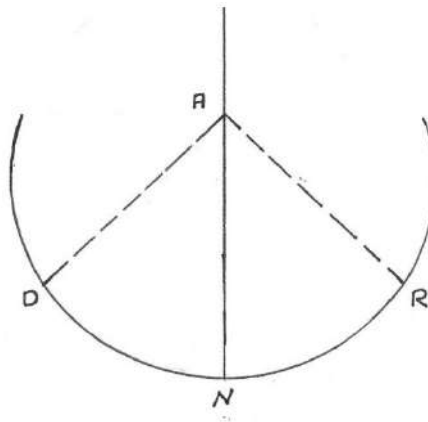


(b) **Equal Altitude Method**

(i) Take a fairly large piece of paper or card board and spread it flat on the ground. In the centre fix a pencil or piece of wood perpendicular to the ground. It can be done with the help of a coin fixed at the base of pencil or wood with sealing wax or by directly pushing it in the ground.

(ii) The pencil will throw on the paper a shadow as shown by the dotted line AB of Fig below. Where the shadow ends make a mark B, and then from the base of the pencil draw a circle of radius AB,

(ii) Wait till after mid day until the sun has moved around sufficiently to throw another shadow as indicated by the dotted line AD i.e. of the same length as the original shadow AB.



**Fig-8**

(iv) When this is so, draw a line AN bisecting the angle formed by the two shadow lines. This will point to TRUE NORTH.

(v) This is extremely accurate way of finding north but it is of no use on cloudy or dull day. It is also a very time consuming process as the work should start earlier than mid day.

(c) **By Stars.** In the Northern hemisphere, the Pole star indicates the position of True North to within 2 degree. It is a bright star and it can be found by protruding a line from Great Bear. The pole star will be found slightly off this line on the side remote from the remaining stars of the Great Bear.

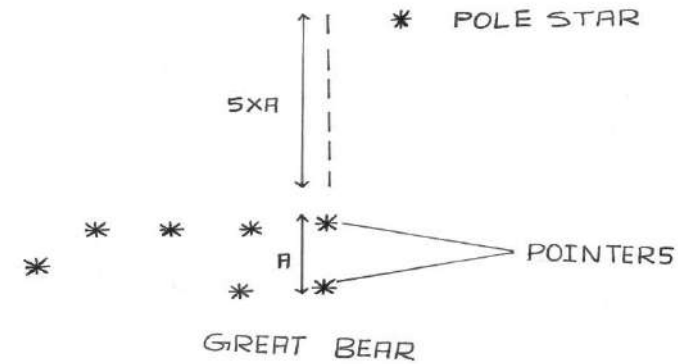


Fig-9

### **Finding own position on Map**

#### 10. **Methods of finding own position on Map**

- (a) By resection method or Compass method
- (b) By resection method without Compass
- (c) By Inspection method.

#### 11. **Resection with Compass method.**

- (a) Recognise three prominent features (A, B, C) on map and on the ground as well. These three prominent features must not be more than 180 or less than 30 apart. They should be as far as possible and clearly visible.
- (b) The bearing of these points be taken and converted into Grid bearings.
- (c) Then, on the map the back bearings from these points must be plotted, and the point of intersection will be the required position.
- (d) In order to do an accurate resection, three or more objects are necessary. But in that case if the three rays do not intersect at the same point, a triangle of error is obtained. The center of triangle is the point of your own position.



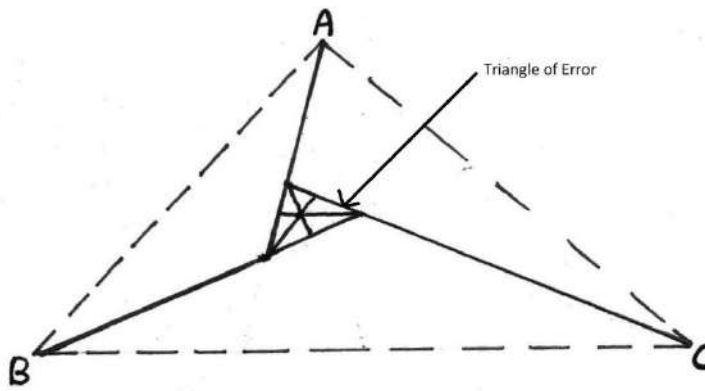


Fig-10

12. **Resection without Compass.** In case compass is not available, resections can still be carried out with the help of a piece of tracing paper. Identify three distant prominent objects on the ground and map. Take a piece of tracing paper and pin it on to a map board, make a point on it to represent position. Then draw a straight line along the straight edge of ruler through the point and in the direction of one of the three distant prominent objects. Now without moving or disturbing the board, repeat the process for the other two objects. Remove the tracing paper from the board and apply it to the map so that the three rays pass through the corresponding distant objects marked on the map. The point, where three rays intersect each other will be the required position.

13. **By Inspection Method.** By inspection is meant a careful and detailed study of the ground and features both on the map and the ground and features on the map and on the ground. The method consists of:-

- (a) Setting the map
- (b) Recognition of general area of own position on the map
- (c) A close study of the ground details

**LESSON PLAN : MR-9**  
**MAP TO GROUND AND GROUND TO MAP**

Period	-	Three
Type	-	Lecture/Practice
Code	-	MR-9
Term	-	I & II

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**Training Aids**

1. Map Sheets, Compass, Service protractor, Pointer, Charts, Black board & Chalk.

**Time Plan**

2.	(a)	Introduction	-	05 Min
	(b)	Map to Ground	-	35 Min
	(c)	Ground to Map	-	35 Min
	(d)	Conclusion	-	05 Min
	(e)	Practice	-	40 Min

**AIM**

3. The aim of this lecture is to introduce the Cadets to the basics of finding objects from Map to ground and ground to map.

**PREVIEW**

4. The lecture will be conducted in the following parts:-
  - (a) Part I - Map to ground
  - (b) Part II - Ground to map

**PART I: MAP TO GROUND**

**Introduction**

5. To find out the details of map on ground is known as map to ground. Following methods are used to identify objects from map to ground:-



(a) **Bearing and Distance Method.** With the help of bearing and distance, find out own position. Find out the distance of the object to be identified on ground with the help of a scale on the map. Using service protractor, find out the bearing of the object and convert it into magnetic bearing. Set the magnetic bearing on compass and look for the object in the given bearing. Estimating the distance on ground the object will be identified.

(b) **Direction and Distance Method.** Draw a line on the map between own position and object to be identified. Calculate its distance and using any of the following methods find the direction of the object:-

- (i) With the help of a sight rule find the ground direction of the object.
- (ii) With the help of two points on the map estimate the ground direction.
- (iii) Place a foot ruler /pencil at own position and align it with line of the map.
- (iv) Place a pin each at own position and at the object on the map. Align both pins and find general direction.

(c) **By Estimation Method.** In this method measuring bearing, distance and direction, object is identified with the help of other details in the proximity of the object.

## **PART II: GROUND TO MAP**

6. To find out an object indicated on ground on the map is called ground to map. Method used to identify objects from ground to map are discussed in succeeding paras.

### **7. Simple Method**

(a) **Using Bearing.** Find out the distance and the magnetic bearing of the object. Translate magnetic bearing to grid bearing. Set the map and find own position. From own position draw a line at the given grid bearing. Measure distance with service protractor and mark the given distance on the line. The object will be in the proximity of the given mark.

(b) **Intersection Method.** To find out the objects which are at a larger distance or in hilly terrain, intersection method is used. In this method help of minimum two prominent objects are taken which can be easily identified on the ground. Lines are drawn from the prominent objects to the object to be identified on map. This method is used when we cannot estimate exact distance. Intersection is done in two ways:-

(i) **By Compass Bearing .** Take the bearing of the object from two known prominent objects. Draw the lines on the map. The object will be in the proximity of the intersection of the two lines. Magnetic bearing is found by two methods:-

(aa) **By Compass.** Take the forward bearing from known object.

(ab) **By Back Bearing.** In war, in case we intercept the enemy's transmission, with the help of the fall of the shot we can find out the location by working out back bearing.

(c) **By Direction Method.** In this method set the map and mark own position. With the help of any of the following methods find the direction of object on the map. Draw a line from own position in that direction. Put a mark on the line at the estimated distance of the object. The object will be in the proximity of the marked point:

(i) Place a foot ruler /pencil at own position and align it in the direction of the object.

(ii) Place a pin at own position on the map. Place the second pin in the direction of the object.

(iii) With the help of details around the object, find direction and mark the object on the map.

(iv) With the help of sight rule find exact direction of the object.

(d) **By Estimation Method.** By knowing the bearing and distance of the object on ground it can be identified on map by estimation.



**LESSON PLAN : MR 10**  
**POINT TO POINT MARCH**

Period	-	Five
Type	-	Lecture/Practice
Code	-	MR-10
Term	-	II

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**Training Aids**

1. Compass, Binocular, Service protractor, Pointer, Charts, Black board & Chalk.

**Time Plan**

2.	(a)	Introduction	-	05 Min
	(b)	Navigation during day	-	35 Min
	(c)	Navigation during night and night march chart	-	35 Min
	(d)	Conclusion	-	05 Min
	(e)	Practice	-	5h30Min

**AIM**

3. The aim of this lecture is to introduce the Cadets to the basics of Navigation during day and night and preparation of night march chart

**PREVIEW**

4. The lecture/practice will be conducted in the following parts:-
  - (a) Part I - Navigation during day
  - (b) Part II- Night navigation and preparation of Night march chart

**PART I: NAVIGATION DURING DAY**

**Day Time**

5. **Methods Used During Day March.**

(a) **With Map Only.** In this method set the map and find your own position. Then, find out the position of the object. Note important landmarks in the vicinity of the object. Also find out the distance of the object. Finally find out the best route to reach the object. While marching, keep comparing the major landmarks enroute. Distance can be measured with the help of steps. 100 metre corresponds to 120 steps approximately. On reaching the object, confirm its correctness with help of other details in the proximity.

(b) **Marching without Map.** There are two methods of marching without map:-

(i) **With Compass.**

(aa) **First Method.** If you know the bearing and distance of the object, take a compass and select two important landmarks in one line where you can march easily. If there is difficulty in selecting landmarks at a large distance due to forest cover or undulating land, then closer landmarks can be selected. This could be repeated till you reach the object. If there is a major obstacle like river or nala which require deviation from the given bearing, one must come to the same line after crossing the obstacle and move on initial bearing.

(ab) **Second Method.** This method is used when bearing and distance of important landmarks enroute are given. Set the bearing of the first landmark from start point and repeat this after reaching every intermediate landmark till you reach the object. In this method one is more confident while marching.

(ii) **Without Compass.** In this method you are required to march based on your memory power. Points to be kept in mind are:-

(aa) Before marching, recognize the object carefully and take note of other landmarks in the proximity.

(ab) Choose best route to the object and convert distance into steps/paces.

(ac) Take note of all the intermediate landmarks and their distances.

(ad) Enroute, ensure you are marching correctly.

(ae) Be careful while measuring distance in steps.

(af) If you deviate while crossing an obstacle, choose a mark across the obstacle. After crossing the obstacle come in line of the mark and recommence marching.

(ag) If you reach a wrong place, come back to the start point.



## **PART II : NAVIGATION DURING NIGHT AND NIGHT MARCH CHART**

### **Night Time**

6. When a navigation party moves at night with the help of compass and night march chart, this is called night march.

(a) **During Moonlit Night.** If you have a compass, you can select two important land marks on the given bearing in a line and march on the same bearing and line. Repeat this till you reach the object.

(b) **Starlit Night.** Select a prominent star at 30 degree on the horizon on the given bearing. Select a landmark in line of the star. March in line of the star and the land mark for approximately 15 minutes. Then select another star in the same bearing and repeat till you reach the object.

(c) **Cloudy Night.** Make a person march on the given bearing to a distance where he can be seen. Then the person holding compass marches, measuring the distance. First person is made to march again in the given bearing and the process is repeated till he reaches the object.

### 7. **Items Required By Navigation Party**

- (a) Set compass as per bounds.
- (b) Luminous stick.
- (c) White cloth.
- (d) Marching chart.
- (e) White lime/ chalk.
- (f) Stone pebbles for measuring steps.
- (g) Frosted torch.

### 8. **Composition of Navigation Party**

- (a) **Guide.** He carries a luminous stick and a compass set to a given bearing.
- (b) **Assistant Guide.** He has a white piece of cloth at his back for Identification and a stick to measure depth of nala / pits.
- (c) **Recorder.** He carries additional compass already set on given bearing, night march chart and stone pebbles. He measures the distance.
- (d) **Scouts.** Number of scouts could be from 2 to 4 depending upon the route and tasks.

### 9. **Night March Party**

- (a) **Assistant Guide.** He moves in front between left and right scouts. He walks for 20 steps and stops. Guide moves up to him and then indicates him to march ahead. Following actions will be taken while crossing an obstacle.

(i) Assistant guide and scouts will negotiate the obstacle from left / right. Guide and balance party will keep waiting. After crossing the obstacle assistant guide and scouts will come in the line of march.

(ii) Then guide and balance party will cross the obstacle and move behind assistant guide.





(b) **Guide.** Guide marches behind assistant guide so that required instructions can be given to him. He also carries a compass with set bearing so that he can correct the line of march of assistant guide.

(c) **Recorder.** Recorder marches behind the guide and measures the distance by steps / measuring tape.

#### 10. Points to be kept in-Mind

- (a) While marching do not cough, talk or make any noise.
- (b) While marching keep inter person distance in mind.
- (c) Party must ensure safety and security.
- (d) Smoking / using any kind of light is strictly prohibited.
- (e) To read night march chart use frosted torch.

#### NIGHT MARCH CHART

(Object)	Distance	Degree
<b>Temple</b> 		
	<b>450 M</b>	
<b>Well</b> 		<b>50°</b>
	<b>200 M</b>	
<b>Bridge</b> 		<b>40°</b>
	<b>350 M</b>	
<b>Track Junction</b> 		<b>20°</b>




	<b>300 M</b>	
<b>Start point(Survey tree)</b>  		<b>70°</b>

Fig-11

**LESSON PLAN :FC & BC 1**  
**INTRODUCTION TO FIELD CRAFT AND BATTLE CRAFT**

Period	-	One
Type	-	Lecture
Code	-	FC & BC 1
Term	-	I

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**Training Aids**

1. Computer Slides, Pointer, Charts, Black board & Chalk.

**Time Plan**

- |    |     |                      |   |        |
|----|-----|----------------------|---|--------|
| 2. | (a) | Introduction and Aim | - | 05 Min |
|    | (b) | Field Craft          | - | 15 Min |
|    | (c) | Battle Craft         | - | 15 Min |

**INTRODUCTION**

3. Field Craft is an important aspect of military training as it relates to the conduct of a soldier in face of the enemy. Field craft is an art of using the ground and the weapon available to the best of one's own advantages.

**AIM**

4. To acquaint the cadets in the art of Field craft and Battle craft.

**PREVIEW**

5. The lecture shall be conducted in the following parts: -
 

(a)	Part- I	-	Field Craft
(b)	Part -II	-	Battle Craft



**PART I – FIELD CRAFT**

6. Field Craft includes the following subjects:-
- (a) Visual Training.
  - (b) Recognition and description of targets.
  - (c) Personal camouflage and concealment.
  - (d) Judging distance.
  - (e) Movement with and without arms.
  - (f) Fire discipline and control

**PART II – BATTLE CRAFT**

7. Battle drills are very useful in tackling minor tactical problems. They save time, ensure rapid action and avoid confusion. Knowledge of field signals and section and platoon formations, however, is essential in the execution of battle drill.

8. Battle Craft includes the following subjects:-
- (a) Field Signals.
  - (b) Section Formations.
  - (c) Fire control orders.
  - (d) Fire and movements.
  - (e) Section battle drills.
9. Each of the above stated subjects have been discussed at length in subsequent lessons.

**LESSON PLAN :FC & BC 2**  
**JUDGING DISTANCE**

Period	-	One
Type	-	Lecture/Practice
Code	-	FC & BC 2
Term	-	I & II

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**Training Aids**

1. Computer Slides, Pointer, Charts, Black board & Chalk.

**Time Plan**

- |    |     |                             |   |        |
|----|-----|-----------------------------|---|--------|
| 2. | (a) | Introduction and Aim        | - | 05 Min |
|    | (b) | Methods of Judging Distance | - | 15 Min |
|    | (c) | How to use the methods      | - | 15 Min |
|    | (d) | Conclusion                  | - | 05 Min |

**INTRODUCTION**

3. Accurate fire with any weapon depends on the correct judging of distance. Although a cadet is not normally required to open fire at range over 100 yards, he must be able to judge distance up to about 1000 yards, so that he:-

- (a) Knows when to open fire.
- (b) Can indicate targets to supporting arms or to men in a sub-unit.
- (c) Can pass back information accurately when acting as an observer.

4. An individual should be able to judge distance accurately with his eyes so that the individual: -

- (a) Knows when to open fire.
- (b) Knows which weapon to be used (51 mm mortar, rifle or carbine).
- (c) Can indicate targets to other men in his section/direct the fire of sp weapons.
- (d) Pass back accurate information when acting as an observer.



**AIM**

5. To teach the methods of Judging Distance.

**PREVIEW**

6. The lecture shall be conducted in the following parts: -
- (a) Part- I - Methods of Judging Distance.
  - (b) Part -II - How to use the methods.

**PART I - METHODS OF JUDGING DISTANCE**

7. The following are the six methods of Judging Distance.
- (a) Unit of measure.
  - (b) Appearance method.
  - (c) Section average.
  - (d) Key range.
  - (e) Halving.
  - (f) Bracketing.

**PART II - HOW TO USE THESE METHODS**

7. **Unit of Measure.** This method is also termed as the 100 yards method. The unit of measure chosen is normally 100 yards and therefore one should form a good idea of 100 yards distance on the ground. The length of a hockey field is the best yard stick for this purpose.
8. The distance of a given object will be a multiple of the imaginary unit of 100 yards, as placed between the observer and the object.
9. This method is not accurate above 100 yards and is of little use if there is dead ground between the observer and the object.
10. **Appearance Method .** The distance can be judged by noting the detailed appearance of man at various ranges. This is the best method under service conditions. The following is a guide to distance:-
- (a) At 200 yards, all parts of the body are distinct.
  - (b) At 250 yards, blade of the foresight covers a kneeling man.
  - (c) At 300 yards the face becomes blurred.

(d) At 400 yards the body remains same in shape but face is difficult to distinguish. Blade of the foresight covers a standing man.

(e) At 500 yards body appears to taper slightly from the shoulder but movement of limbs can still be seen.

(f) At 600 yards head appears as a dot. Details are not visible and body tapers from shoulders downwards noticeably.

11. **Section Average.** Each man in the section is asked to judge the distance of a given object. The average of the answers given by the whole section is then accepted as the distance. Here caution must be exercised in the estimation of a few who may foolishly over estimate the distance. This method may be resorted to under the following circumstances:-

(a) Ample time is available.

(b) Judging of distance is made difficult by mist or darkness.

(c) Judging of a long distance is involved e.g. beyond 400 yards.

12. **Key Range .** If the range of the certain object is known, distance to other objects can be found in relation to the known range. This method is called 'Key Range' method.

13. **Halving.** An object is selected half way between the observe and the target, the distance to the selected object is judged and doubled to get the distance to the target.

14. **Bracketing.** The observer works out the maximum and the minimum possible distance of the object and then accept the mean as the distance e.g. maximum possible distance 1000 yards, minimum possible distance 500 yards therefore estimated range is 750 yards. The greater the range wider the bracket. In no case the bracket should be less than 300 yards.

### **Practical Hints**

15. **During Night** Judging distance at night will depend upon the visibility. The only suitable method is the 'Key Range'. Therefore mark prominent objects and work out their distances while there is still day light.

16. **During Day.** Conditions which mislead the observer when judging distances are as follows:-

(a) Distance are over-estimated when:-

(i) Light is bad.

(ii) The sun is in the observer's eye.

(iii) The object is small in relation to its surroundings.

(iv) Looking through a valley of narrow lane e.g. street.



- (v) Lying down.
- (b) Distance are under- estimated when:-
  - (i) The light is bright or the sun is shining from behind the observer.
  - (ii) The object is large in relation to its surrounding.
  - (iii) There is some dead ground between observer and the object.
  - (iv) Looking up hill.

### **CONCLUSION**

17. In order to bring down effective fire judging distance is extremely essential. It is also necessary for indication of landmarks. Hence all cadets should be able to judging distance accurately.

**LESSON PLAN :FC & BC 3**  
**DESCRIPTION OF GROUND**

Period	-	One
Type	-	Lecture/Practice
Code	-	FC & BC 3
Term	-	I

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**Training Aids**

1. Computer Slides, Pointer, Charts, Black board & Chalk.

**Time Plan**

- |   |     |                                                 |   |        |
|---|-----|-------------------------------------------------|---|--------|
| 2 | (a) | Introduction and Aim                            | - | 03 Min |
|   | (b) | Types of ground                                 | - | 10 Min |
|   | (c) | Procedure of description                        | - | 10 Min |
|   | (d) | Indication of landmarks using GLD & boundaries– |   | 15 Min |
|   | (d) | Conclusion                                      | - | 02 Min |

**INTRODUCTION**

3. A quick, accurate & standard procedure is necessary to enable a commander to describe an area to his men and the men to understand it correctly.

**AIM**

4. The aim of this lecture is to enable students to study the ground understand various types of ground and understand the method of scanning & describing ground.

**SCOPE**

5. The lecture will be divided into the following parts :-
  - (a) Part I– Types of Ground.
  - (b) Part II– Procedure of description.
  - (c) Part III – Indication of landmarks using GLD & boundaries.



## **PART I : TYPES OF GROUND**

### 6. **Types of Ground :**

- (a) **Broken Ground.** It is uneven and is generally interspersed with nullahs, bumps and fields in the ground. It is suitable for move of infantry and hinders observation of activities.
- (b) **Flat and Open Ground.** It is even ground with little cover e.g. bushes, hedges and similar foliage. It is not suitable for move of Infantry by day.
- (c) **High Ground.** Ground far above the general level of the area e.g. hill. It facilitates domination of area around it by observation or fire or both.
- (d) **Dead Ground.** Ground that is hidden from an observer's view. It cannot be covered by flat trajectory weapons.

#### **Note :**

- (a) Though an open ground is easy to travel, it is dangerous to do so in the vicinity of the enemy. Whether moving or taking fire position in an open area one is vulnerable to enemy from view and fire.
- (b) Broken ground when correctly used affords protection from flat trajectory weapons. It does not afford cover from air or protection from high trajectory weapons.
- (c) Dead ground does not afford cover from high trajectory weapons.

## **PART II : PROCEDURE OF DESCRIPTION**

7. **Procedure of Description.** The normal method of scanning and describing ground is by dividing it as follows:-

- (a) Fore Ground                      Up to 300 yards
- (b) Middle Distance              From 300 yards to 500 yards
- (c) Distance                        Beyond 500 yards

## **PART III : INDICATION OF LANDMARKS USING GENERAL LINE OF DIRECTION AND BOUNDARIES**

8. For indication give the following:-

- (a) **General Line of Direction.** Start by giving the general line of direction by pointing out a centrally located, if possible, prominent land mark, e.g. No 1 section 500 RED HOUSE,

(b) **Boundaries**. After giving general line of direction give LEFT and RIGHT boundaries of your area. Divide the ground into foreground, middle and distance. Having done so start from LEFT to RIGHT systematically and describe. In attack describe the ground nearest to you first i.e. foreground, then middle and then distance. In defence reverse the procedure.

9. **Sequence of description**. While describing the ground bounded by particular arc after giving the boundaries start from LEFT to RIGHT. If the ground all around is to be described start after general line of direction to the right and finish at general line of direction by completing the indication all around.

### **CONCLUSION**

10. A cadet should have an eye for the ground. He should keep on observing and judging the ground even while advancing and section commander should keep on explaining continuously while on move.



**LESSON PLAN :FC & BC 4**  
**RECOGNITION, DESCRIPTION & INDICATION OF LANDMARKS AND TARGETS**

Period	-	One
Type	-	Lecture/Practice
Code	-	FC & BC 4
Term	-	I/II

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**Training Aids**

1. Computer Slides, Pointer, Charts, Black board & Chalk.

**Time Plan**

2.
 

(a)	Introduction and Aim	-	05 Min
(b)	Methods of indication of easy targets	-	35 Min
(c)	Methods of indication of difficult targets	-	35 Min
(d)	Conclusion	-	05 Min

**INTRODUCTION**

1. Landmarks and other objects on the ground on a battle field may be either indistinct due to climatic conditions or other reasons. There may be too many of the same type. Every effort should, therefore be made to indicate their location and extent carefully and accurately.
2. To ensure quick and accurate indication by commanders and recognition by individual soldiers a standard procedure has been laid down in the Army. Even the aids to be used for indicating difficult targets have been laid down.

**AIM**

3. To acquaint the cadets regarding recognition, description and indication of targets.

**SCOPE**

- |     |          |   |                                             |
|-----|----------|---|---------------------------------------------|
| (a) | Part I   | - | Definitions.                                |
| (b) | Part II  | - | Methods of indication of easy targets.      |
| (c) | Part III | - | Methods of indication of difficult targets. |

### **PART I : DEFINITIONS**

4. **Landmarks.** An object, which is prominent on the ground and which is used in verbal orders to explain the ground in front.
5. **Target.** It is an object having a tactical significance which is indicated with a view to bring down fire on it.
6. **Reference Point.** A prominent and unmistakable object, with the help of which you can indicate other land marks or targets. A reference point should be specific.

### **PART II : METHODS OF INDICATION OF EASY TARGETS**

7. **Easy Targets.** Can be indicated by the following methods:-
  - (a) **Indication by Description.** An obvious target can often be described directly. For example 'No. 1 Section BRIDGE' Here BRIDGE is so obvious that no body can make a mistake in recognizing it.
  - (b) **Indication by Direction or Range or Both.** In slightly less obvious cases other aids should be used e.g. direction or range or both. An example of each is given below:-
    - (i) **Indication by Direction.** No 1 Section BAEN BGHICHA.
    - (ii) **Indication by Range.** No 1 Section 600 BAGHICHA.
    - (iii) **Direction and Range.** When indicating a landmark indicate direction first and then range e.g. BAEN-600, BAGHICHA.

### **PART III : METHODS OF INDICATION OF DIFFICULT TARGETS**

8. The target which can not be indicated by the methods given above are termed difficult targets. The methods to indicate these are explained in succeeding paragraphs.

#### **The Direction Method**

9. This is used to indicate the following:-
  - (a) The general line of direction, or
  - (b) A known reference point, or
  - (c) Another landmark.
10. Unless otherwise stated all direction are taken to be with reference to the general line of direction. The following direction will be used:-

<b><u>Direction</u></b>	<b><u>Measuring</u></b>
Slight Left/Right	Approximately 10 degrees
Quarter Left/Right	Approximately 22 ½ degrees
Half Left/Right	Approximately 45 degrees
Three Quarter Left/Right	Approximately 67 ½ degrees
Full Left/Right	Approximately 90 degrees

### **CONCLUSION**

11. To achieve success in war it is of utmost importance that the target is understood and recognized by the troops. It is of no use reaching/capturing a target not intended to as this may jeopardize the plans.



**LESSON PLAN :FC & BC 5**  
**OBSERVATION, CAMOUFLAGE AND CONCEALMENT**

Period	-	Two
Type	-	Lecture/Practice
Code	-	FC & BC 5
Term	-	I/II

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**Training Aids**

1. Computer Slides, Pointer, Charts, Black board & Chalk.

**Time Plan**

2.	(a)	Introduction and Aim	-	03 Min
	(b)	Why things are seen	-	05 Min
	(c)	Demo of personal camouflage	-	35 Min
	(d)	Types of cover and correct use of cover	-	35 Min
	(e)	Conclusion	-	02 Min

**INTRODUCTION**

3. To observe is to penetrate the concealment of the enemy's observation. Visual training is training in observation and concealment which are two aspects of the same subject. The term camouflage comes from French word 'Camoufler' meaning 'to blind or veil'. Camouflage, also called protective concealment, means to disguise an object in plain sight in order to conceal it from something or someone. In the late nineteenth century an American artist named Abbot Thayer made an important observation about animals in nature that became a useful tool in developing modern camouflage. After studying wildlife, Thayer noticed that colouring of many animals graduated from dark, on their backs to almost white on their bellies. This is an important property that is very useful in modern camouflage. This graduation from dark to light breaks up the surface of an object and makes it harder to notice. The object loses its three dimensional qualities and appears flat. Camouflage, as we know it today, was born in 1915 when the French Army created a new unit called the Camouflage Division. Artists were among the first people the French Army called to development camouflage for use during WW I. Thereafter a lot of emphasis has been laid on camouflage. Camouflage is defined as action of misleading en by concealing or misrepresenting the identity of own troops, equipment, installations and activities. Good camouflage is possible only if you have a fair idea of skillful use of cover and you remember the principles as to why things are seen.

**AIM**

4. The aim of this lecture is :-
- (a) To teach the principles as to why things are seen.
  - (b) To teach the cadets importance of ground observation.
  - (c) To teach personal camouflage.
  - (d) To teach the cadets the types of cover and to make correct use of cover.

**PREVIEW**

5. The demo shall be conducted in four parts as follows :-
- (a) Part I - Why things are seen.
  - (b) Part II - Demo of personal camouflage.
  - (c) Part III - Types of cover and correct use of cover.

**PART - I : WHY THINGS ARE SEEN?**

6. Before we study these factors I shall indicate the landmarks which shall be used during the course of this lecture.

7. Various factors responsible for things to be seen are as follows :-

(a) **Shape.** Many objects are instantly recognised by reason of their distinctive shape, particularly if they are in contrast with their surroundings. The round outline of helmet, square shape of haversack and the well defined and familiar outline of rifle can be spotted instantaneously because of their contrast with the surroundings. Therefore to camouflage an object, its shape and outline has to be broken. (Camouflage and uncamouflaged helmets and haversacks to be placed at a distance of 50 to 100m and the cadets asked to spot them).

(b) **Shine.** Any object which reflects light gives away its position. The objects on a soldier which can cause shine can be metal on his equipment and belt, rifle barrel and body, magazine, map case, spectacles, watch, ring, binocular lenses etc. Infact all metal parts on personal weapon are susceptible to shine. Thus it is imperative to cover all shining surfaces like watches and map cases. Metal on the equipment should be blackened with paint or tape. All shining surfaces of rifle should be covered with coal or garnish. While using binocular, care should be taken to shade them in case there is any chance of their reflecting sunlight and when not in use they should be kept in cover.

(c) **Shadow.** Shadow cast by an object in bright sun or moonlit night will reveal its position. A soldier may otherwise be well camouflaged but his dark shadow will attract attention. So whenever possible a soldier must remain in shade. This not only affords him cover but also avoids casting a shadow which is distinctive and conspicuous.

(d) **Silhouette.** Objects silhouetted against a contrasting background are easily seen. Any smooth and flat background such as water, sky is a dangerous background.

(e) **Surface.** If colour and texture of surface of an object or human contrast with its surroundings, that object will be conspicuous. Therefore surface resemblance to environment is one of the most important facets of camouflage. Hence troops op above snowline are dressed in white but disruptive in semi deserts, plains and jungle terrain. A fair skinned person should blacken all areas of exposed skin to avoid contrast between his skin and his dress.

(f) **Spacing.** Objects spaced regularly tend to draw attn even if they are well camouflaged. Eg, you would have noticed wire fencing covered by vegetation all along. Hence, the pillars of the fence which are regularly spaced are camouflaged by dense vegetation else en would be able to make out the loc of the pillars and therefore the fence.

(g) **Smoke.** Smoke has a quality of pillaring up in fair weather and hence gets noticed from a long dist. Due to this reason smoke is used to indicate targets to ac. Pillaring can be avoided by disintegrating smoke pillar at the very place where it is produced.

(h) **Sound.** Even if a man is otherwise not visible, noise will draw attn to the right spot facilitating his detection.

(j) **Movement.** Nothing catches the eye quicker than a sudden or violent movement. A man however well he may be camouflaged gives away his position by movement.

8. Cadets, you have seen as to why things are visible during day or in clear moonlit night. Now let us see why things are visible at night. In modern warfare night ops and movement have gained a lot of important. There are two factors which need to be looked into:-

(a) **Sound.** Sound travels great dist at night especially on a still night. Disturbing foliage in a jungle terrain, crackling of twigs under your feet can give away your position.

(b) **Light.** Light can be seen from a great dist. A match stick or a cigarette which has been lit is visible from a great dist.

## **PART II - PERSONAL CAMOUFLAGE**

9. You have been taught the factors responsible for things to be seen in Part I. Keeping these factors in mind let us see how personal camouflage is done which include camouflage of equipment worn or carried by a soldier.

(a) **Use of Disruptive Pattern Clothing and Local Vegetation.** Disruptive pattern clothing is worn to remove contrast with the surroundings and to break outline of a body. Local vegetation is used to break the outline of the body and merge with the surroundings. Vegetation used should be changed regularly before it wilts and changes appearance. No outlandish vegetation should be used. Different types of clothing should be used for different kinds of terrain.



(b) **Camouflage of Face.** Surface and texture of disruptive clothing is different from the uncovered parts of body. To remove this contrast, blanko is applied over the naked parts of body eg forearms, face and neck. Mud can also be used in case blanko is unavailable.

(c) **Camouflage of Equipment.** Camouflaging a body will be of no use unless equipment worn on the body or carried by a person is also camouflaged. Equipment is camouflaged as follows :-

(i) **Helmet.** Helmet is made of metal or fibre glass and is painted with OG colour. The difference between surface and texture of helmet with surroundings is removed as follows :-

(aa) **Use of Hessian Cloth.** Helmets with smooth surface are covered with hessian cloth. The cloth eliminates shine from the helmet.

(ab) **Use of Camouflage Net.** Camouflage net is put on helmet. Branches of local vegetation are stuck in the net. Pieces of garnish may be tied to the net. This helps to break the outline, reduce shine and contrast with surroundings. Camouflage can also be used on Cap FS in a similar manner.

(ii) **Camouflage of Packs.** Packs have square outline. This outline is broken by tying thin ropes on the packs and branches of local vegetation are stuck in the ropes. It must be ensured that you are able to open or close the packs w/o disturbing the vegetation. (instructor to show camouflaged packs).

(iii) **Camouflage of Rifle.** Metal parts of rifles are phosphated and hence shine is reduced. Garnish of suitable colour should be wrapped over wooden parts/ plastic parts to contrast with surroundings. It must be ensured that moving parts are not hindered by the garnish and the user should be able to take aim and use his weapon freely w/o any obstruction.

(iv) **Camouflage of LMG.** The most important weapon in a sec is LMG. Wooden/plastic parts of the LMG should be covered by garnish. However it should be ensured that the moving parts are not hindered and that the barrel can be changed smoothly. In def, an LMG trench is camouflage by use of a net. We shall show you a camouflaged LMG trench at the end of this cl. You shall also learn how to camouflage other weapons subsequently during the course of your training here.

(v) **Camouflage of Equipment.** Equipment like binocular, map case, Radio Set should also be camouflaged by breaking its outline and preventing shine or reflection due to sun or artificial light. Vehicles are also camouflaged similarly.

10. Cadets, you have three examples of camouflaged cadets standing in front of you. Keeping in mind what you have just learnt in Part I and Part II, we will discuss the efficacy of these three examples of camouflage.

(a) **Shape.** Cadet Pandey and Cadet Trivedi have not successfully broken the shape of their helmets and equipment, whereas Cadet Kumar has done so. He has also done the same for his rifle which is important.

(b) **Shine.** Cadet Pandey and Cadet Trivedi have equipment, rifle, watches which are all susceptible to causing reflection while Cadet Kumar has blackened all metal parts, covered his watch, binocular and has also ensured that his map case is carried the correct way.

(c) **Surface.** Colour and texture of Cadet Pandey makes him stand out straight away. In case of Cadet Trivedi, his skin is still contrasting with his comb dress. Cadet Kumar has darkened all exposed areas of his skin with OG Blanko.

### **PART III - TYPES OF COVER AND CORRECT USE OF COVER**

11. There are two types of cover. They are :-

- (a) Cover from view.
- (b) Cover from fire.

12. **Cover from View.** In this type of cover, a person is concealed only from view or from being seen and not from fire. If you look to your front you can see a soldier taking position behind a bush. The bush hides him from view but will not protect him from fire. He is therefore covered only from view.

13. **Cover from Fire.** This implies that the concealed person is protected both from view and fire of weapon. Take your attn to the White Stone towards your front. The construction in front protects the occupants both from view as well as from fire. Therefore the soldiers are covered from fire.

14. A soldier may be perfect in his personal camouflage but he cannot fully deceive the en unless he knows the correct use of cover/ground. Now we shall study the guidelines for correct use of cover.

15. **Look Through or Around Cover.** Whenever possible look through or around the cover but not over it. It is like somebody observing through a slit with his eye close to the slit. Such an observer can observe everything without being observe. If it is not possible to look through the cover then look around the cover.

16. **Avoid Breaking a Straight Line.** Any permanent fixture if disturbed will attract attention.

17. Skyline/light coloured background is the worst background as the object against it will be found out because of contrasting background and shape. You must always avoid skyline for observation and movement.

18. When firing from inside a bldg, keep well back making use of shadow. The darkness provided by the shadow will blend you with the shadow.

19. A rough, dark and irregular background which matches your clothing provides considerable cover. For movement use clothes which blends with terrain and the surroundings as this would provide natural camouflage.

20. Isolated cover is dangerous. Eye catches isolated cover easily especially if there is any movement near it.

21. Cross gaps as a body of troops at irregular intervals and on the double. This will ensure that the movement is not easily detected. The en will not be able to detect the movement of next group.

22. By now you would have realised the important of camouflage and correct use of cover. Cover is the gift which the ground gives you and you must use it to the best of your advantage.

### **CONCLUSION**

23. To conclude, the importance of camouflage can be realized from the following:-

(a) In earlier days it was said "If it can be seen, it can be hit, if it can be hit it can be killed".

(b) But now in the modern warfare "If it can be seen it will be killed".

24. Therefore, Cadets, camouflage needs greater emphasis and the art of camouflage and concealment reduces the different varieties of soldiers into two main categories viz, "The good and the dead." Concealment is an aid to tactical deception and misinforms the enemy as to our intentions and strength.



**LESSON PLAN :FC & BC 6**  
**FIELD SIGNALS**

Period	-	Two
Type	-	Lecture/Practice
Code	-	FC & BC 6
Term	-	II

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**Training Aids**

1. Computer Slides, Pointer, Charts, Black board & Chalk.

**Time Plan**

2.
  - (a) Introduction and Aim - 05 Min
  - (b) Demo and Practice - 70 Min
    - (i) Signals with hand & weapons.
    - (ii) Field Signals as means of giving orders.
    - (iii) Methods to attract attn of troops.
    - (iv) Other methods of inter communication.
    - (v) Field signals by day.
    - (vi) Field signals by night.
  - (c) Conclusion - 05 Min

**INTRODUCTION**

3. Whenever an individual wants to draw attention or has to pass a message to someone who is away from him, he does so by raising his voice and calling out his name. In olden days, smoke and sound of drum beats were extensively used to pass messages from one village to another. Emperor Akbar had devised a way to know the information of his newly born child. He asked one of his ministers to construct high towers at a distance of one mile from each other. The drum beaters were made to stand on top of the towers and beat the drum in a systematic way. Once when he was at Allahabad, news of his new born son was conveyed to him within half an hour, at a dist of 500 miles. In the army too we use different methods to convey messages which may be used during movement or when static. Today, you will learn one of these methods ie Field Signals.

**AIM**

4. To acquaint the cadets with the Field Signals used in the Army.

**PREVIEW**

5. The lecture will be conducted in the following parts.

(a) **Part I**

- (i) Signals with hand & weapons.
- (ii) Field Signals as means of giving orders.
- (iii) Methods to attract attn of troops.
- (iv) Other methods of inter communication.
- (v) Field signals by day.
- (vi) Field signals by night.

**PART I-SIGNALS WITH HAND**

- |    |                          |                                                                                             |
|----|--------------------------|---------------------------------------------------------------------------------------------|
| 6. | (a) Deploy               | Right arm fully extended above head and waved from side to side, palm open.                 |
|    | (b) Advance              | Right arm swung from rear to front in 'under arm blowing' fashion.                          |
|    | (c) Halt                 | Right arm raised to full extent above head.                                                 |
|    | (d) Turn About           | Right arm raised and bent above head.                                                       |
|    | (e) Change direction     | Right arm raised to front in line with shoulder.<br>Body then turned in required direction. |
|    | (f) Close                | Right hand place on top of head, elbow to the right.                                        |
|    | (g) Quick Time           | Right hand raised to line of shoulder, elbow close to the side.                             |
|    | (h) Double March         | Right fist clenched, moved up and down between thigh and shoulder several times.            |
|    | (j) Follow me            | Right arm swung from rear to front above the shoulder, in 'over arm bowling' fashion.       |
|    | (k) Last order completed | Right hand to salute, then arm raised in air finger extended.                               |

(l)	Last order Not understood	Both hands, cupped behind the ears.
(m)	Commander to close	Right arm to the side at 45 degrees to the body, first clenched.
(n)	Enemy in sight specific numbers	Both arms waved on sides 'Bird fashion' followed by number, indicated by number of fingers held up.
(o)	Enemy Approaching	Both hands open, palm inwards at waist level, with inwards scooping motion.
(p)	Enemy position suspected	Both hands, first clenched, raised to shoulder level, followed by indication of direction.
(q)	Enemy LMG firing	Right hand thumb down signal.
(r)	Engage Target by Fire	Both hands clasped above the head (boxer fashion).
(s)	Attack	Punching motion with Right or Left hand according to direction of attack.
(t)	Closed to Rendezvous	Close sign followed by both hands clasped in front of body at waist level.
(u)	Infantry obstacle ahead	Both hands crossed in front of body at the waist, palm open downwards.

### **Signals With Weapons**

7.	(a)	Enemy in Sight in small number	Rifle held above the head parallel to the ground, muzzle in the direction of the enemy.
	(b)	Enemy in Sight in large number	As per (a) above, but arm moved up and down several times.
	(c)	Advance	Both arms raised to form the letter 'U'.

### **Signals With Whistle**

8.	(a)	Cautionary Blast	A short blast to draw attention to a signal or order about to be given.
	(b)	The Alarm Blast	A succession of alternate long and short whistle.
	(c)	Enemy Aircraft	A succession of short blasts.
	(d)	Enemy Aircraft departed	Two long blasts repeated at interval of five seconds.



9. **Field signals as means of giving orders.** Field signals are alternate means of giving orders and control troops when voice control is not possible. Control over troops deployed could be exercised better by field signals than by voice control. There are various occasions when voice control is not possible. They are :-

- (a) Battle Noises.
- (b) Need for silence.
- (c) Intervening distances are too large.

8. **Battle noises.** In war, enemy will be using his small arms & automatics, vehicles & tanks moving up & down, enemy arty firing all round and aircraft flying with high speed. This will always create so much noise that voice control may not always be possible.

9. **Need for silence.** There are certain operations which, by design are carried out in utmost silence, eg:-

- (a) Ambush.
- (b) Patrolling.
- (c) Raid.
- (d) Cordon.

10. **Intervening distances are too large.** There are certain deployments like defences in mountains or defences on a linear obstacle like Ditch cum Bund where the commander and troops are invariably beyond audible distance from each other. Under such circumstances we will have to resort to field signals for communication.

11. **Methods to attract attention of troops.** Before any field signal is executed, the commander has to attract the attention of troops. Methods generally used to attract attention of troops are :-

- (a) **A short blast of the whistle.** On hearing the short blast of the whistle, every one looks at the Section Commander, observe the field signal being executed and then take appropriate action. It must be noted that use of whistle to attract attention is used mainly during training of recruits and young soldiers. Also use of whistle is not advisable when we are too close to the enemy.
- (b) **A bird call.** Remember a bird call must never be used if it cannot sound realistic. One must also bear in mind that use only those bird calls which are existing in that area. (Bird calls by volunteer cadets).
- (c) Whistle by mouth which is of lower frequency.
- (d) Clicks by using tongue.

- (e) Clicks by fingers. (These too to be attempted by volunteer cadets)

12. **Other methods of communication.** Besides field signals there are various other means of communication in the Army which can be used depending on their availability. The other methods of inter communication available to us are :-

- (a) **Radio.** It is a very effective and dependable means of communication and very useful while on movement. Pre-fixed signals can be used in the form of pressing the presser switch. It is normally used between commanders or from higher HQ to lower HQ or vice versa. However it is susceptible to an interruption and jamming.

- (b) **Dispatch Rider.** The dispatch rider may be either on a motor cycle or on a bicycle. They are used to carry highly classified messages like marked maps and sketches or orders.

- (c) **Runners.** They can carry verbal/written messages. They are quickest over short distances but where visual inter communication is possible, keep use of runners to the barest minimum. The use of runners should also be avoided for the following reasons:-

- (i) To avoid unnecessary casualties.
- (ii) To avoid unnecessary movement.
- (ii) To avoid unnecessary fatigue.

13. **Field Signals by Day.** Some of the visual signals used during the day are flags and mercury coated mirrors. They are very useful in hilly terrain. Flags are very effectively used by Navy on board a ship.

- (a) **Flags.**

- (b) **Mercury coated mirrors.**

- (c) **Smoke.** We have the smoke ammunition with 51mm Mor, 84mm RL, 81mm Mor and some arty equipment. This could be used to give signals. One drawback is that similar colour combination may be used by the enemy. Even tracers or bursts of fire by automatic weapons could be used.

- (d) **Miscellaneous.** Various signals can be improvised and pre-arranged. As a matter of interest I would like to mention here that terrorists are known to often make successful use of improvised signals. Some of the common signals used by Vietcong in Vietnam and by the terrorists in the North Eastern Part of our country are:-

- (i) Clothes ostensibly hung out to dry.
- (ii) Hurricane lantern, kept in the window.
- (iii) Flashing of torch is used as morse code.

(iv) Applying various colours/signs on forehead and arms.

14. **Field Signals by Night.** Some of the field signals that can be used at night are :-

- (a) Radio Set.
- (b) Click by fingers.
- (c) Clicks by using Tongue.
- (d) Whistle by the Mouth.
- (e) Use of line bedding.
- (f) Mini Flare.
- (g) Use of blacked out Torch.
- (h) Firing of Weapon.

15. Remember to use the simplest method that will achieve your aim.

### **CONCLUSION**

16. The fighting efficiency of a unit/sub unit depends on sound communication system which helps commanders at all levels to exercise command and control effectively. Every commander must influence the battle by his personal touch which is achieved by good signal communications. At section/platoon level, the commander directly influences the battle by the use of field signals. Victory in battle will come to that section/platoon whose men are conversant and proficient in the use of field signals. Field signals therefore, become a part of movement of a good section/platoon commander. Remember always use discretion while giving field signals. Do not resort to unnecessary movement and noise. Keep the age old maxim (If speech is silver, silence is gold) at the back of your mind.



**LESSON PLAN :FC & BC 7**  
**SECTION FORMATIONS**

Period	-	Two
Type	-	Lecture/Practice
Code	-	FC & BC 7
Term	-	III

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**Training Aids**

1. Computer Slides, Pointer, Charts, Black board & Chalk.

**Time Plan**

- |    |     |                      |   |        |
|----|-----|----------------------|---|--------|
| 2. | (a) | Introduction and Aim | - | 05 Min |
|    | (b) | Section formations   | - | 35 Min |
|    | (c) | Practice             | - | 35 Min |
|    | (d) | Conclusion           | - | 05 Min |

**INTRODUCTION**

3. Various formations are used when contact with the enemy is imminent and the type of formation adopted is entirely dependent on the following four basic factors:-

- (a) Degree of control required to be exercised by the Section Commander.
- (b) Type of terrain.
- (c) Necessity of bringing down maximum fire with minimum delay.
- (d) Task.

4. The position of the various groups within the section, the distance between the individual, and the location of the commander varies with each formation.

5. You are familiar with these formations which are:-

- (a) Single file.
- (b) File.

- (c) Arrow Head.
- (d) Diamond.
- (e) Spear Head.
- (f) Extended Line.

### **AIM**

6. The aim of this lecture is to acquaint cadets with the section formations

7. **Section Formations**

<b><u>Advantages</u></b>	<b><u>Disadvantages</u></b>	<b><u>Terrain condition</u></b>
(a) <b><u>Single File.</u></b>		
(i) Better control and speed.	(i) Not good for producing effective fire	(i) While going on marches at night. to the front.
(ii) Not vulnerable to enfilade fire.	(ii) Vulnerable to frontal fire.	(ii) Walking in close country such as thick jungles.
(iii) Useful for certain types of cover such as hedge, rows, bridges, defile.	-	(iii) For negotiating obstacles like ditches, narrow defiles etc.
(b) <b><u>File.</u></b>		
(i) Same as single file but more compact	(i) Same as single file (ii) While moving along roads and wide nullas.	(i) While going on long route marches or when Enemy threat is not imminent.
(c) <b><u>Arrow Head.</u></b>		
(i) Good for production of effective fire.	(i) Vulnerable to enfilade fire.	(i) While moving in an open country.
(ii) Facilitates - rapid deployment on any flank.	(ii) When enemy threat is imminent.	
(d) <b><u>Spear Head.</u></b>		

(i) Good for providing volume of fire. used	(i) Command and cont when en threat is imminent	(i) This formation is difficult.
(ii) Provides good depth.	-	(ii) For crossing open areas.
(iii) Fire Sp Gp protected and does not come under enemy fire immediately on contact.	-	-
(e) <u>Diamond</u> .		
(i) Good for all round observation.	(i) Presents an easy target to frontal fire.	(i) While negotiating open areas.
(ii) Good for all round production of direction fire	(ii) Not very good for bringing of fire to is not clear	(ii) When enemy threat is imminent but the front...
(iii) Good for command and control. arrow head formation	(iii) Vulnerable and cont is easier than in	(iii) In this form prone to enfilade fire
(f) <u>Extended Line</u> .		
(i) Good for bringing down of effective fire to the front and for bayonet fighting.	(i) Cont difficult because of dispersion.	(i) For crossing gaps such as gaps in large hedge rows.
-	(ii) Vulnerable to enfilade fire.	(ii) During final assault.

8. It will be noted that the field signals generally adopted for the various formations are as follows:-

- (a) Single File. Both arms stretched in the opposite direction in front and behind the body making a straight line at 45 degree angle.
- (b) File. Both arms stretched down wards and behind body kept parallel to each other.
- (c) Arrow Head. Both arms stretched little behind the body opening outwards at an angle of 45 degrees from shoulders.
- (d) Spear Head. Arms raised upward with hands folded on top of the head.
- (e) Diamond. One arm raised with thumbs up sig placed over the head.



- (f) Extended Line. Both arms stretched outwards from the shoulders and kept parallel to ground.

### **Scouts**

9. Now that you have seen section formation, a word about the scouts. Scouts are the eyes and ears of the section. Scouts always work in pairs. They work ahead of the leading section and advance from bound to bound. As scouts, one must be always alert. Apart from ensuring their own security, scouts must also ensure that the section does not walk blindly into an enemy ambush.

10. Some of the essential points which scouts must ensure are as follows :-

- (a) Scouts should move skillfully making proper use of the ground and cover.
- (b) In close country where the enemy threat is imminent, the scouts should employ fire and move tactics. The leading scout should choose bound under observation of the rear scouts and both keep visible contact with each other.
- (c) Scouts should always be alert and observing all around. Their weapons should be carried cocked (With the safety catch applied) in ready position, the latter when contact with the enemy is imminent.
- (d) Scouts keep in touch with each other and the sub unit they are protecting.

### **Drill when scouts come under Effective Fire**

11. Once the scouts come under effective enemy fire they must:-

- (a) Run zig-zag for some distance, go down to the ground and crawl to a fire position. While the Section Commander is coming up, scout should cover each other and move forward by fire and move to a better fire position. A fire position should provide observation of the enemy and enable effective fire to be brought down on the enemy.
- (b) Once the section commander moves up, the scout should indicate the enemy position and its extent, if possible. In case the Section Commander is unable to come up to the scouts due to enemy effective fire, scouts would then have to pass this Infantry by using field signals.
- (c) Once the Section Commander has taken over the situation, further action of the scouts will be ordered by the Section Commander.

### **CONCLUSION.**

12. You have so far learnt the organisation of a section and the various formations adopted by a section in battle. Remember, a section is organised into the Rifle Group and Fire Support Group to facilitate fire and move, the basic of all tactics.

17. As for the section formations, each formation has its peculiar advantages and disadvantages. Remember, need for command and control and the necessity of developing the maximum fire quickly, will determine the formation you as a section commander must adopt.

**LESSON PLAN :FC & BC 8**  
**FIRE CONTROL ORDERS**

Period	-	Two
Type	-	Lecture/Practice
Code	-	FC & BC 8
Term	-	III

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**Training Aids**

1. Computer Slides, Pointer, Charts, Black board & Chalk.

**Time Plan**

2.	(a)	Introduction and Aim	-	03 Min
	(b)	Importance of fire discipline and fire control orders	-	20 Min
	(c)	Important Terms, Points for section commander & Method of Giving the Fire Control Orders.	-	20 Min
	(d)	Sequence of fire control orders	-	25 Min
	(d)	Types of fire control orders	-	10 Min
	(f)	Conclusion	-	02 Min

**INTRODUCTION**

**General**

3. By opening of fire indiscriminately, too early or at too great a range, the defender's position will be disclosed prematurely which will mean wasting of ammunition without advantage. This means Section Commander should be able to control the fire of his section by exercising good fire discipline.

4. It is the duty of the commander to ensure that the enemy is engaged effectively by bringing down the correct volume of fire at the most effective range by using the most appropriate weapon(s). Also in the battle, all personnel of a section/platoon may not be able to observe the enemy and even if they can, they may either not open fire thinking that others would do so or all of them may open fire resulting in wastage of ammunition.



5. It is also the duty of a commander to assess the effect of fire on the enemy and then either stop the fire, or re-adjust it or add the fire of additional weapons to make it effective. Therefore the commander ensures effectiveness of fire and expenditure of ammunition.

### **AIM**

6. The aim of this lecture is to teach you the importance of fire discipline and giving of fire control orders.

### **SCOPE**

7. The lecture will be covered in four parts :-

- (a) Part I : Importance of Fire Discipline and Fire Control Orders.
- (b) Part II : Important Terms, Points for section commander & Method of Giving the Fire Control Orders.
- (c) Part III : Sequence of Fire Control Orders.
- (d) Part IV : Types of Fire Control Orders.

### **PART I – IMPORTANCE OF FIRE DISCIPLINE & FIRE CONTROL ORDERS**

8. Fire discipline is a battle winning factor which will stand you in good stead, especially in situations where surprise is of paramount importance. Indiscipline firing starts with an individual and spreads like wild fire. Should the troops have confidence of correct, accurate and effective fire orders, they may not indulge in opening of premature/indiscriminate firing, thereby giving away position or wasting ammunition. Fire discipline and fire control orders are very important in all operations of war.

9. **Defence.** In defence, if fire is opened up prematurely, it will give away the defender's location allowing the enemy to change his plan and surprise the defender subsequently. Moreover, fire opened up at long ranges, is rarely effective and results in leaving the defender with less ammunition for the eventual attack by the enemy. Therefore good fire discipline and correct fire orders, as I said earlier, assumes added significance in the following cases:-

- (a) During hours of poor visibility/darkness when men are jittery and tend to fire at imaginary targets.
- (b) When enemy patrols try to draw fire from the defender in order to find his disposition.

## **PART II – IMPORTANT TERMS, POINTS TO REMEMBER &**

### **METHOD OF GIVING THE ORDERS**

#### **Important Terms**

10. Certain terms connected with fire control orders are: -

- (a) **Fire Unit.** Any number of men firing under a commander, usually a section. The personal responsibility for giving them the executive order to fire is the fire unit commander.
- (b) **Fire Direction Orders.** These are the orders which the fire unit commander receives from his superior, telling him when, at what target, and with what intensity to open fire. A section commander will receive fire direction orders from his Platoon commander. They may include key ranges and any specific direction about withholding of fire.
- (c) **Fire Control Orders.** These are the orders given by the fire unit commander to direct and control the fire of his fire unit. Emphasis should be on control and surprise. These orders are the final and complete instructions after all factors have been considered and before fire is actually opened.
- (d) **Arc of Fire.** This denotes the area of ground for which the fire unit is responsible and within which it will engage targets. An arc of fire must not be confused with a field of fire, which is the area over which it can fire effectively.

#### **Points for Section Commander**

- 9. There are certain factors which must be remembered before giving fire control orders.
  - (a) **Indication.** No fire order can be effective unless the target is clearly indicated and can be easily recognised by the men of the fire unit.
  - (b) **Range.** Do the range, visibility and vulnerability of the target justify fire at all? Would it be better to wait and get a more vulnerable target or achieve more/complete surprise?
  - (c) **Best Weapons to Use.** What is the best weapon or weapons to use? Although the LMG is the main weapon of the section, the target may be more suitable for rifle fire only, or possibly for a combination of weapons, eg a LMG and rifle grenade.
  - (d) **Rate of Fire.** Should the fire be in single round or in bursts? Should it be rapid or at the normal rate? Rapid rate is justified only on a few occasions, when it allows the max effect to be gained from surprise and volume of fire or when an especially vulnerable target presents itself or to cover move of troops in the final stages of an assault.

### **Method of Giving the Orders**

11. Having decided to open fire, there is then the need to give orders. The four main rules which must be adhered to are: -

- (a) The orders should be given clearly, calmly and concisely.
- (b) It should be given loudly so as to be heard above the noises of the battle.
- (c) It must be given as an order, to be obeyed as such.
- (d) It should be given with adequate pauses, so that those being addressed may have the time to take the correct action. For example there must be time for sight adjustment after the range is given.

### **PART III – SEQUENCE OF FIRE CONTROL ORDERS**

#### **Sequence of Fire Control Orders**

12. Fire control orders must be given in the laid down sequence so as to avoid confusion and misunderstanding. For ease of remembering the sequence for giving fire control orders, remember the catch word 'GRIT'.

- (a) G -The Group of the section which is addressed, i.e the LMG group, the rifle group or the whole section. An order starting 'No 1 Section indicates that the whole section will fire, 'LMG Group' or 'Rifle Group' means that group only is to fire.
- (b) R -The range to the target should be given next. It is to ensure accuracy of fire and to draw attention on a limited area of ground (Instructor to explain why range has to be given before indicating the target).
- (c) I - The indication of the target by the simplest form of indication.
- (d) T - The type of fire to be emp. i.e open fire at once, or on further orders, or when the opportunity arises.

### **PART IV – TYPES OF FIRE CONTROL ORDERS**

#### **Types of Fire Control Orders**

13. There are four types of fire control orders as under :-

- (a) **Delayed Fire Control Orders.** These orders are given as an early warning when enemy is seen approaching at a longer range so that necessary preparations are made by the troops to open fire, as soon as the enemy appears within the effective range of weapons. Delayed fire control orders are executed in two manners:-
  - (i) When the initiative to open fire is left to the man eg



"No 1 Sec - 800 - JUNGLE se dushmankaek sec advkarrahahai. Jab mar keilake men aye to FIRE".

- (ii) When initiative to open fire is with fire unit commander. eg

"No 1 Sec - 800 - JUNGLE se dushmankaeksecadvkarrahahai - mereagalehukamkaintizarkaro".

(b) **Full Fire Control Orders.** As the name suggests these are orders complete in all respects. These fire control orders are given when fire is to be brought down immediately on a target within the effective range of weapons. There are two types of full fire control orders.

- (i) **Distributed Area Target.** This is when the enemy presents itself over an area. eg

"No 1 Sec - 200 - JHARI - DAINE tin baje DARKHT - takdushmanki position. LMG Group char burst, rifle group tin tin round FIRE".

- (ii) **Pin Point Target.** This is when enemy presents itself at one place only. eg

"Rif Gp 300 AkelaDarkhat, Darkhatke niche dushmanka sniper, Rfn No 1 - tin round 'FIRE".

(c) **Opportunity Fire Control Orders.** These orders are given when the target is not continuously seen by every one in the section or when the enemy has taken cover, eg:-

"No 1 Sec 400 tutifutizamin me dusmanchupahuahai, nazarane per FIRE".

(d) **Brief Fire Control Orders.** These are given when time is not available to give out a full fire order. In this only essential details are given. This type of order is normally given when enemy appears at close range and surprises us. eg

"LMG group sights down enemy running left to right - FIRE (Instructor to explain significance of the phrase sights down".

## **CONCLUSION**

14. (a) Necessity of fire discipline and hence fire cont orders to conserve and expend ammunition judiciously and effective. Not to disclose own position prematurely at long ranges, as chances of enemy escaping are more and they would have taken away information of your dispositions, which is not desirable.

- (b) Fire direction orders.

- (c) Components of fire control orders - GRIT.

- (d) Fire orders themselves may be:-

- (i) Full fire control orders.
- (ii) Opportunity fire control order.
- (iii) Brief fire control orders.
- (iv) Delayed fire control orders.

15. Fire Control Orders are essential to maintain surprise, save ammunition and engage targets with speed. The correct sequence must be followed to avoid confusion.

16. Fire discipline should be exercised through fire control orders; however it does not imply that a soldier should never fire without orders. There will be many an occasion when the soldier must use his initiative and fire on the enemy. This applies in defence once the main attack has developed and need for concealing the position no longer exists. An enterprising rifleman can influence the course of the battle by picking on and killing enemy commanders and other key personnel such as radio operators.

**LESSON PLAN :FC & BC 9**  
**FIRE AND MOVEMENT**

Period	-	One
Type	-	Lecture/Practice
Code	-	FC & BC 9
Term	-	III

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**Training Aids**

1. Computer Slides, Pointer, Charts, Black board & Chalk.

**Time Plan**

2.	(a)	When to use Fire & Movement tactics.	-	3 Min
	(b)	Basic consideration for Fire & Movement.	-	5 Min
	(c)	Ground Appreciation.	-	5 Min
	(d)	Types of cover.	-	5 Min
	(e)	Dead Ground.	-	3 Min
	(f)	Command Mistakes.	-	5 Min
	(g)	Map and air photographs.	-	3 Min
	(h)	Selection of fire position.	-	3 Min
	(j)	Fire Control in attack & defence.	-	4 Min
	(k)	Movement.	-	2 Min
	(l)	Conclusion	-	2 Min

**INTRODUCTION**

3. The primary aim of infantry is to close in with the enemy & destroy him. The aim of getting close is achieved by making skilful use of ground. A clever enemy will however, deny you the use of such ground which you may need. When such a cover is denied by the enemy, we may have to movement in open.

4. Once we are forced to movement in open, a part of our force will have to fire on en position & force him to keep his head down. This would render the en incapable of bringing down aimed fire at us while we are on the movement. This process of keeping one element on



the ground to give covering fire, while the other element is on movement, is called fire & movement. This is the basic tactics of all infantry & mechanised ops.

### **AIM**

5. The aim of this lecture is to teach basic infantry fire & movement tactics.

### **PREVIEW**

6. This lecture will be conducted in following eleven parts: -

- (a) Part I. When to use Fire & Movement tactics.
- (b) Part II. Basic consideration for Fire & Movement.
- (c) Part III. Ground Appreciation.
- (d) Part IV. Types of cover.
- (e) Part V. Dead Ground.
- (f) Part VI. Command Mistakes.
- (g) Part VII. Map and air photographs.
- (h) Part VIII. Selection of fire position.
- (j) Part IX. Fire Control in attack & defence.
- (k) Part X. Movement.

### **PART I : WHEN TO USE FIRE AND MOVEMENT TACTICS**

7. Fire & movement tactics may be used in following circumstances: -

- (a) The enemy has opened SA fire which is effective.
- (b) When own troops have seen the enemy first - within 400 to 700 meters.
- (c) When the enemy is known or suspected to be in a certain area, then fire & movement tactics may be adopted when the troops reach within the effective range of enemy weapons/observation. (Instructor to explain as to what could be the effective range of enemy's personal weapon)
- (d) To cross obstacles by day or by night, e.g. nullahs/rivers.

(Instructor should explain the meaning of effective en fire. Details of the same are provided in the chart and demo part of this script)

## **PART II : BASIC CONSIDERATIONS**

9. There are five basic considerations for fire & movement. These are as under:-

- (a) **No movement on exposed ground without covering fire.** Cadet, the advantages of covering fire are obvious, but this does not mean that fire will be brought down continuously when you are movement. Whenever you have ground providing you cover, you must use it. Whenever you have to movement in open, fire must be brought down on the en in small bursts to keep his head down.
- (b) **Control by the commander.** The sec can remain a viable force only when it is under the control of its commander. Otherwise, it is likely that the required fire support will not be brought down at the required place & time. In a section, Gentlemen, control is ex by voice command & hand signals. As a rule, sec commander must keep his section within range of voice or visible control.
- (c) The angle of covering fire from direct firing weapons should be as wide as possible w/o loss of control or time. It is to ensure that own troops are not coming under effective fire of own fire sp. It also ensures that the fire support is provided till as late as possible so that assault troops are able to close in with the en.
- (d) **Full use of available cover.** Full use should be made of cover provided by the ground. Various types of cover have already been taught to the cadets.
- (e) **Optimum use of all available weapons.** All available weapons should be used for producing covering fire.

## **PART III : APPRECIATION OF GROUND**

10. In battle, fire & movement is applied according to the type of ground over which we are op. In open country, the problem is to find cover; in close country, there is difficulty in finding positions with good observation & field of fire. Skillful use of ground can help achieve surprise & save lives. It is therefore required to develop an eye for ground. Ground should be considered from the enemies point of view & it should be appreciated for the following :-

- (a) Fire positions.
- (b) Observation positions.
- (c) Cover from fire.
- (d) Cover from view.
- (e) Obstacles.

(Instructor to explain that while movement, sec commander & every member of the sec is responsible to continuously look for nearest cover which he may have to take once en

opens effective fire. He is also responsible to appreciate various fire positions & types of cover being provided by that particular cover)

#### **PART IV : TYPES OF COVER**

11. Cover from view is often not cover from fire, especially if the movement to cover has been seen by the enemy. Concealment from enemy air and ground observation is the chief means of gaining surprise. Some of the main types of cover are:-

- (a) Undulating ground which is the least obvious form of cover; when skillfully used, it protects from direct fire and gives no ranging marks to the enemy.
- (b) Sunken roads, beds of streams and ditches which give good cover from view and often from fire as well. However, there is always a danger that the enemy may pay special attention to them; they may be mined or booby-trapped and precautions against ambush must be taken. If the roads or ditches are straight, the enemy will be able to fire down them in enfilade.
- (c) Hedges and bushes give cover from view but not from fire. In open country they may make good ranging marks for the enemy.
- (d) Standing crops give cover from view but movement through them can generally be detected.
- (e) Woods which give cover to men and vehicles from enemy air and ground observation. They give some protection from small arm fire but HE bombs and shells will explode in the branches of trees and will cause heavy casualties unless troops are dug in and have overhead protection.
- (f) Buildings and walls afford concealment and protection from small arms fire and shell splinters. When isolated they make good ranging marks for the enemy.

#### **PART V : DEAD GROUND**

12. Ground which a soldier can not see from his position is called dead ground. Platoon and section commanders should be able to recognise ground which is likely to be dead to the enemy. Ground can only be described as dead in relation to the position of an observer. Troops under cover or in dead ground are safe from enemy observed fire but not from indirect fire. These areas are always likely to be selected by the enemy as defensive fire tasks for his artillery and mortars. Dead ground is also safe from detection by battle field surveillance radars, as these have line of sight limitations.

#### **PART VI : COMMON MISTAKES**

13. The wrong use of ground may lead to casualties and loss of surprise; some common mistakes are:-



- (a) Carelessness by troops while making a reconnaissance, such as unfolding a map in the open or not using a covered approach to an OP.
- (b) Unnecessary movement in a position overlooked by the enemy.
- (c) Using conspicuous landmarks such as isolated trees, bushes or cottages.
- (d) Halting troops near road or track junctions or other mapped features which are always registered as targets by the enemy.
- (e) Bad track discipline.
- (f) Failure to guard against enemy air observation.

### **PART VII : MAPS AND AIR PHOTOGRAPHS**

14. Maps and air photographs should be used together to obtain the best picture of the ground. The two aids are complementary as is shown by listing the advantages and limitation of air photographs:-

- (a) Advantage.
  - (i) Are more up-to-date.
  - (ii) Gives more detail.
  - (iii) Show the size and shape of features accurately.
  - (iv) Allow gradient to be seen in relief with a stereoscope.
- (b) Limitations
  - (i) Complete geographical cover almost impossible.
  - (ii) Expensive to produce.
  - (iii) Scales vary.
  - (iv) Details of heights not given.

15. Only the topographical information given by air photographs needs to be understood. The interpretation of the details of enemy defences is the task of the experts. Very little time need be spent in mastering the theoretical knowledge of map reading but a great deal of practice is required. The use of the prismatic compass and the protractor must also be mastered by sub-unit commanders. Navigation is a science and never a guess. An officer must have complete trust in his compass; this only comes with practice.

### **PART VIII : SELECTION OF FIRE POSITIONS**

16. The ideal fire position should:-

- (a) Provide cover from fire.
- (b) Provide cover from view.
- (c) Afford a good view of the ground to be watched or target to be engaged.
- (d) Provide room in which to use the weapon freely.
- (e) Have a covered approach.
- (f) Be easy to advance from.

17. The selection of fire positions requires a knowledge both of the characteristics of weapons and of the use of ground. A direct firing weapon must be sited with an eye at the level from which it is to fire. A target which is clear to a man standing may be invisible to one lying down.

18. Sometimes it may be necessary to site fire positions on trees, rooftops, haystacks or walls to produce fire effect. This may result in plunging fire, but this must be overcome by accurate shooting. Cunning concealed fire positions will puzzle the enemy, protect the troops from observed fire and safeguard them against air attack.

### **PART IX : FIRE CONTROL IN ATTACK AND DEFENCE**

19. There is a big distinction between fire control in attack and in defence. In attack men should be allowed a great deal of latitude in opening fire. Speed and immediate fire effect is what is required. With a well concealed enemy it will often be necessary to "neutralise" an area by fire since few definite targets will be visible. In defence, the vital factor in fire control is that early opening of fire may give away positions to the enemy and jeopardize concealment. Normally, a section commander will lay down a line in front of his section post beyond which fire will not be opened without his orders. This is particularly important where a long field of fire is available. In any case fire will normally be opened on the orders of the section commander.

### **PART X : MOVEMENT**

20. Movement in the face of the enemy should be covered by fire. This does not mean that it is impossible to movement unless a heavy weight of fire is brought down on the enemy. An important part of an attack is the movement towards the objective, supporting fire is one of the aids to that movement. A knowledge of how to movement and how to use ground for movement is essential to enable troops to close with the enemy with minimum casualties, undetected in the zone of arc of battle field surveillance radars.

**CONCLUSION.**

21. Usually, troops advancing by day in action will move at a brisk walking pace until they make contact; in the final stages of the assault, they will double. They may have to double or crawl at other times; for example if attacking troops move into enemy defensive fire, it is usually best to double forward and through it; to lie down is often dangerous as well as useless. Doubling and crawling are both tiring however, and should only be used in short spells in critical situations particularly for crossing open ground in full view of the enemy. The commander must himself decide on his pace from his personal knowledge of the state of fitness of his men. In general the aim must always be to keep movement determinedly towards the enemy at the best possible speed.



**LESSON PLAN :FC & BC 10**  
**KNOTS AND LASHINGS**

Period - Two

Type - Lecture/Practice

Code - FC & BC 10

Term - II

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**Training Aids**

1. Ropes, Ballies, Pointer, Charts, Black board & Chalk.

**Time Plan**

- |    |     |                      |   |        |
|----|-----|----------------------|---|--------|
| 2. | (a) | Introduction         | - | 05 Min |
|    | (b) | Tying of knots       | - | 35Min  |
|    | (c) | Lashing and Splicing | - | 35 Min |
|    | (d) | Conclusion.          | - | 05 Min |

**INTRODUCTION**

3. The ability to join two pieces of natural material together, and so increase their length, gives man the ability to make full use of many natural materials found locally. Sailors probably did more to develop order in the tying of knots, because for them it was necessary not only to tie securely but also to be able to untie, often in the dark and under conditions of bad weather and with rain-tightened ropes.

4. In the defence work probably half a dozen knots would suffice, but knots and knotting have a fascination for many people the world over, and a comprehensive range of knots, plain and fancy, and, with these, splices, whipping, plaits, and net making are included in this lecture with information of general use. Knot tying is a useful exercise to obtain better coordination between eyes and fingers. The identification of knots by feel is an excellent means of developing recognition through touch.

**AIM**

5. Aim of this lecture is to acquaint cadets with knots and lashings commonly used.

## PREVIEW

5. (a) Part I : Tying of knots  
(b) Part II : Lashings and splicing

### PART I: TYING OF KNOTS

6. A brief description of the use to which the knot may be put is given in this lesson plan. The diagrams will explain how the knot is tied. The letter "F" means the free or untied end of the rope, and the letter "S" means the standing or secured end.

#### 7. Knots For Rope Ends Or For Grips On Thin Rope

- (a) **Thumb Knot:** To make a stop on a rope end, to prevent the end from fraying or to stop the rope slipping through a sheave, etc.



- (b) **Overhand Knot:** Overhand knot may be put to the same use as the thumb knot. It makes a better grip knot, and is easy to undo.



- (c) **Figure Eight:** This knot is used as the thumb knot. Is easy to undo, and more ornamental.



#### 8. Knots For Joining Ropes

- (a) **Sheet Bend:** To join or bend two ropes of unequal thickness together. The thicker rope is the bend.



- (b) **Double Sheet Bend:** Similar to single sheet bend, but gives greater security, also useful for joining wet ropes.



- (c) **Crossover Sheet Bend**: This holds more securely than either the single or double sheet bend and has occasional real uses such as fastening the eye of a flag to its halyard where the flapping might undo the double sheet bend.



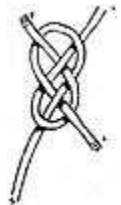
- (d) **Reef Knot**: To securely join two ropes of equal thickness together. Notice the difference in position of the free and standing ends between this and the thief knot.



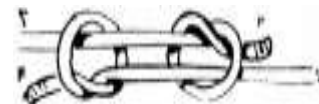
- (e) **Thief Knot**: To tie two ropes of equal thickness together so that they will appear to be tied with a reef knot, and will be retied with a true reef knot. This knot was often used by sailors to tie their sea chests, hence the name.



- (f) **Carrick Bend**: This bend is for the secure fastening of two ropes of even thickness together. It is particularly suitable for hawsers and steel cables. It can be readily undone and does not jam, as do many other bends and knots.



- (g) **Fisherman's Knot**: For joining two springy materials together; suitable for wire, fishing gut or vines. Two thumb knots (one on each rope) pulled tight. The knots lock together.





## 9. Knots To Make Loops In Rope

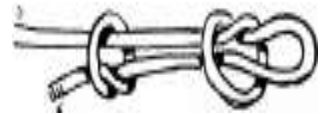
- (a) **Bowline**: To form a loop that will not slip on a rope end.



- (b) **Bowline On A Bight**: To make a double loop that will not slip on a rope end. Also called a bo'sun's chair.

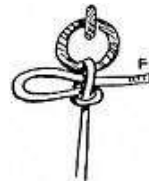


- (c) **Fisherman's Eye Knot**: This is the best method of making a loop or eye in a fishing line. The strain is divided equally between the two knots.



## 10. Knots For Fastening Ropes

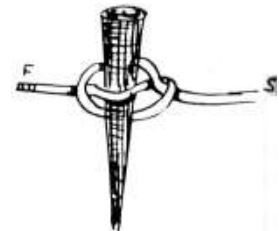
- (a) **Slippery Hitch**: Very useful because of the ease with which it can be released in emergency. It holds securely for so long as there is a strain on the standing end.



- (b) **Clove Hitch**: For securing a rope to a spar. This hitch, if pulled taut, will not slip up or down on a smooth surface. A useful start for lashings.



- (c) **Boat Knot**: This is a method of securing a rope to a hole pin or other small piece of wood on a boat. It is quickly released.

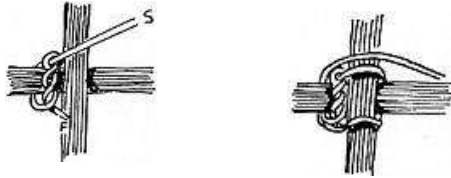


- (d) **Double Boat Knot**: A bight is simply passed through the ring and a marlin spike or other round piece of wood is put between the bight or the rope. Withdrawal of the spike quickly releases the knot.

## **PART II: LASHING**

11. The methods employed to tie with ropes poles or any rope to a stationary object to securely hold it in place is known as lashing.

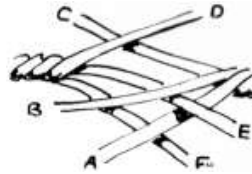
(a) **Square Lashing**: to join poles at right angles. Start with a timber hitch or a clove hitch below cross bar. If using a timber hitch see that the pull is straight through the eye and not back from it. Pulling back will cut the lashing material. Put lashing material tightly around upright and cross bar about four complete times.



(b) **Frapping turns**: Make about two or three frapping turns. These are turns that go round the lashing and pull it taut. These pull the lashing tight. Secure end of frapping turns either by half-hitches or by passing between lashing at the crossover and secure with a half hitch. Diagonal Lashing: for bracing or joining spars at irregular angles.

13. **Splices**

(a) **Short Splicing**: Unlay the strands and marry them together; butt hard up to each other. The strand D first goes under the standing end of A, but over strand B and over C on the standing end. Thus each strand at either end goes over one strand of the standing end on the opposite side and under the next strand, so that there is a strand of the standing end between each short side of the splice. Continue working the free strand of each end four or five times into the strands of the standing end.



(b) **Long Splicing**: The strands are unlay for a considerable length and then married as for the short splice. Then the one strand is unlay and its married counterpart is laid along its place in the rope. The two centres are simply held with a crossover knot, and the strands thinned down and spliced as for a short splice. The end strands are finished with a crossover knot and again the strands are thinned down and finished as for a short splice. This long splice does not appreciably thicken a rope which may be thus spliced to go through a sheave.

**LESSON PLAN :FC & BC 11**  
**SECTION BATTLE DRILL**

Period	-	Four
Type	-	Lecture/Practice
Code	-	FC & BC 11
Term	-	III

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**Training Aids**

1. Computer Slides, Pointer, Charts, Black board & Chalk.

**Time Plan**

2.	(a)	Introduction	-	03 Min
	(b)	Essentials of Section Battle Drill	-	10 Min
	(c)	Stages of Section Battle Drill.	-	25 Min
	(d)	Conclusion.	-	02 Min
	(e)	Practice	-	2h

**INTRODUCTION**

3. In battle, we react to certain situations in a set manner to save time & avoid confusion. In military language Battle Drill means reaction by units, sub units or groups to certain common situations. Battle Drills are very useful in tackling minor tactical problems. They save time, ensure rapid reaction & avoid confusion. Thus, it accomplishes the mission in minimum possible time & maintains the momentum of advance with minimum casualties.

4. The action of a section from the time it comes under effective enemy fire till the time it has cleared the opposition is carried out as a drill. This drill is flexible & relies on the logical sequence of actions to be undertaken by the section commander in order to overcome the opposition. It is based on the elementary principle of fire & movement. There are two aspects to section battle drill. These are the essentials & parts of section battle drill.

**AIM**

5. Aim of this lecture is to acquaint cadets about the procedure of section battle drill.



### **PREVIEW**

6. (a) Part I : Essentials of Section Battle Drill
- (b) Part II : Stages of Section Battle Drill.

### **PART I : ESSENTIALS OF SECTION BATTLE DRILL**

7. The basic essentials of any battle drill are born out of the necessity to ensure rapid reaction without any confusion so that the task is completed in minimum possible time. This maintains the momentum of advance & ensures minimum casualties, so that combat effectiveness is retained for a longer period. It also ensures maximum use of all available weapons. The following are the basic essentials of section battle drill:-

- (a) Quick Appreciation.
- (b) Orders.
- (c) Fire & Move .

### **PART II : STAGES OF SECTION BATTLE DRILL**

**Stage I :** Action on coming under effective fire.

8. The Section Commander, as he advances, will constantly be on the look out for:-

- (a) New reference points for fire control orders. He may describe these to the section as they advance and each may acknowledge with a signal or shout 'Not seen' if he had failed to recognize the reference points.
- (b) Position where the section can take cover in the event of coming under effective fire. Whenever possible the section commander will indicate such positions in form of anticipatory orders e.g. 'if we come under effective fire, LMG group takes cover in those bushes, rifle group along that bank'.

9. It is instinctive to most men to drop down on the ground, when under fire. The men should not go to ground till the effective fire of the enemy is brought down or the order 'Take Cover' is given by the Section Commander. On receiving order for taking cover the following action will normally be taken by each man of the section:-

- (a) Run to the nearest cover or that already indicated by the Section Commander in his anticipatory orders.
- (b) Every man will dive or drop into the cover and crawl away so that the enemy has not got his sights on anyone when he re-appears.
- (c) Take position and observe the enemy.
- (d) Apply sight and fire on spotting the enemy without waiting for an order from the section commander.

(e) Bunching together should be avoided at times and apart from No 1 and 2 of the LMG group, when necessary, no man in the open by day should ever be less than 5 yards from his nearest fellow, depending on the cover available.

(f) On 'TAKE COVER' order by the section commander, DASH-DOWN-CRAWL-OBSERVE-SIGHT-FIRE (If the enemy has been located).

## **Stage II :** Locating and Neutralizing the Enemy

10. **Locating.** The location of enemy and its fire is usually not easy. The following drill will be followed for locating the enemy.

(a) **By Observation.** Look in the area from which the 'thump' came. The time between the 'crack' and the 'thump' gives an indication of the range. If nothing is seen after about 30 seconds or so, it is very unlikely that enemy will be located by looking.

(b) **By Fire.** The section commander will give a fire control order to a couple of rifleman to fire two shots each into likely cover. The rest of the section will observe their area of observation carefully. If there is no answer to fire, then the section commander should try another couple of rifleman at some other target. If there is still no enemy fire, either they are well trained or they have withdrawn.

(c) **By Movement.** The section commander will order one or two men to get up and double forward about 10 yards to a different cover. He might do this again if it draws no fire. If the enemy troops are there, they must be extremely well trained not to fall for these tricks and start firing at such poor targets. (A man getting up and moving fast for about 10 yards is a very difficult target to hit). If there is still no enemy reaction then the section commander must continue the advance.

## **Target Indication**

11. If any soldier of the section located the enemy before the section commander, he will insert a tracer round into his rifle, shout 'Watch my Tracer' and fire and continue to fire until the section commander issues fire control orders or orders to stop the fire.

## **Neutralisation**

12. (a) As soon as the section commander knows the position of the enemy he must give a fire control order to bring on the enemy sufficient weight of the section fire power to neutralize them. If certain individuals have already started the firing, the section commander will resume control by preceding his fire control order with the order 'STOP'.

(b) Having won the fire fight, the section commander must retain the fire initiative by cautiously bringing fire down on the enemy whilst he manoeuvres closer in order to assault them.

**Stage III :** The Assault

13. The section commander will decide whether to attack from the flank or right flank depending upon the position of the LMG group, the position of the enemy and the routes available.
14. The section commander's orders, for the assault are confined to :-
  - (a) LEFT or RIGHT flanking (to indicate which side of the LMG group, the rifle group will work).
  - (b) Which group will move first?
  - (c) Place to which LMG group will move, if it is to move first.
15. The main points to note are:-
  - (a) The section commander will lead the rifle group in person, he is normally in the centre.
  - (b) Covering fire will be provided for all movements in the open. The angle of the fire should be as wide as possible.
  - (c) When the rifle group gets down into fire position after a bound, the LMG group must move forward into a new fire position automatically. Once the LMG group is in a position from which it can support the assault from a good angle, the rifle group will move in one bound. Before the assault goes in, the rifleman armed with the grenade discharger cup and the projector strim grenade should be ordered to remove these from their rifle, if necessary.
  - (d) Normally the assault will start at the 'walk' with firing being carried out from the shoulder or the hip (marching fire). The section doubles only during last 100 to 50 yards when the section commander gives order 'CHARGE'.
  - (e) No 1 and No 2 of the LMG group must carry sufficient magazines to support a normal section attack.
  - (f) As the assault goes in, the LMG group will fire as long as possible and then switch its fire across the objective just in front of the rifle group.

**Stage IV :** Re-Organisation

16. Once the assault is made the following action will take place as drill:-
  - (a) The LMG group will rejoin the fire group 'at the double' immediately it sees the rifle group take cover after the assault.
  - (b) The section commander will organize a search of the area of the objective for any enemy hiding or wounded. Rifle numbers detailed to search will be covered by other rifleman.



- (c) The section commander will check positions of rifleman and LMG group, allot arcs of observation and detail reference points.
- (d) The section commander will check:-
  - (i) Casualties,
  - (ii) Ammunition expenditure, and
  - (iii) Refilling of LMG magazine.
- (e) The section commander will await the platoon commander for further orders.

### **CONCLUSION.**

17. A defender will make use of small detachments/parties to cause delay and casualties to the advancing enemy. At the same time the attacker must be fully prepared to neutralize these minor impediments. Hence battle drills must be rehearsed and practiced so that minimal delay is imposed.

