

M.A./M. Sc. GEOGRAPHY
SEMESTER I (2020-21)

M. A. /M. Sc. Geography Semester I shall consist the following papers:

S. No.	Paper	Title	M. M.		
			Written	Inte. Asse.	Total
1.	I	Geomorphology	80	20	100
2.	II	Climatology	80	20	100
3.	III	Geographical Thought	80	20	100
4.	IV	Geography of India	80	20	100
5.	V	Practical-I : Advanced Cartography	---	---	100

1. The M. A. /M. Sc. Semester I examination in Geography shall consist of 500 marks.

There shall be four theory papers each of 100 marks and one practical of 100 marks as follows:

Paper I	Geomorphology
Paper II	Climatology
Paper III	Geographical Thought
Paper IV	Geography of India
Paper V	Practical-I: Advanced Cartography

2. The theory papers shall be of three hours duration.

3. Candidates will be required to pass separately in theory and practical examinations.

4. (a) In the practical examination the following shall be the allotment of time and marks.

(i)	Practical record	20%
(ii)	Lab work (up to three hours)	70%
(iii)	Viva on i. ii.	10%

(b) The external and internal examiners shall jointly submit marks.

(c) All the candidates shall present at the time of the practical examination their practical record regularly signed by the teachers concerned.

PAPER –I (2020-21)

GEOMORPHOLOGY

Objective:

- It being a course at the interface of geography with earth, the student has to be sensitized to background knowledge of geology and environmental science.
- The objective of the course is to familiarize the students with the need for understanding of geomorphology with reference to certain fundamental concept, focusing on the unity of geomorphology in the earth materials and the processes with or without an element of time. Process component of geomorphology is segmented into the internal and external processes of landscape evaluation.
- Finally a few selected applications of geomorphology to societal requirements and quality of environment are dealt with.

Course contents:

- UNIT – I Nature and scope of Geomorphology; Fundamental concepts-Geological Structures and landforms, uniformitarianism, multicyclic and polygenetic evolution of landscapes, concept of threshold, Environmental change – climatic change and geochronological methods-documentary evidence, artifacts. Applied Geomorphology urban Geomorphology environmental geomorphology Geomorphic Hazards.
- UNIT – II Earth movements – epeirogenic, orogenic and tectonic earth movements. Forces of crustal instability, isostasy, plate tectonics, Interior of the earth and earth quake, Volcanicity, orogenic structures with reference to the evolution of the Himalaya.
- UNIT – III Exogenic Processes : Concept of gradation, Agents and processes of gradation, causes, types and classification of weathering, mass movement erosion, and depositional processes and resultant landforms and soil formation. Slope evolution, down warping, parallel retreat and slope replacement models.
- UNIT – IV Geomorphic processes dynamics of fluvial, glacial, periglacial Aeolian (Arid & Semi Arid) marine, and karst processes and resulting landforms' Erosion surfaces.

Suggested readings:

1. Ahnmed, E.: Coastal Geomorphology of India.
2. Chorley, R. J.: Spatial Analysis in Geomorphology, Methuen, London, 1972.
3. Cooke R.IJ. and Doornkamp, J.C. : Geomorphology in Environmental Management. An Introduction, Clarendon press, Oxford, 1974.
4. Dayal, P. : A Text book of Geomorphology, R.K. Books, New Delhi.
5. Dury, G.H.: The Face of the Earth, Penguin Harmondsworth 1959.
6. Fairbridge, R.W. Encyclopedia of Geomorphology, Reinholdts, New York, 1968.
7. Goudie, A.: The Nature of the Environment Oxford & Blackwell, London, 1993.
8. Gautam, Alka : Geomorphology, Sharda Pustak Bhawan, Allahabad.

9. Garner, H.F. : The Origin of landscape- A Synthesis of Geomorphology, Oxford University Press. London, 1974.
10. Holms, A.: Principles of Physical Geology, Thomas Nelson, London.
11. Jha, V.C. : Geomorphology, Vasundhara Publication, Gorakhpur.
12. Mitchell, C.W.: 'I'erra.ii'i Evaluation. Longman, London, 1973.
13. Oilier, C.D. : Weathering, Longman, London, 1979.
14. Pitty, A.F.: Introduction to Geomorphology, Methuen, London, 1971.
15. Stoddart, D.R. (ed.) : Process and Form in Geomorphology, Roulledge, New York, 1996.
16. Skinner, B.J. & Porter, S.C.: The Dynamic Earth John Wiley. New York, 1995.
17. Sparks, B.W. Geomorphology, Longman, London, 1960.
18. Sharma, H.S. (cd.): Perspective in Geomorphology, Concept, New Delhi, 1980.
19. Singh, S : Geomorphology, Prayag Publication, Allahabad, 1998.
20. Steers, J.A. : The Unstable Earth Methuen, London.
21. Thornbury, W.I.). Principles of Geomorphology, John Wiloy, New York, 1960.
22. Strahler, A.N.: Physical Geography, Willey, New York.
- 23- dkSf"kd] ,l-Mh- % Hkw&vkd`fr foKku ds l]y fl)kar] vkj-ds- cqDI] ubZ fnYyh
- 24- usxh] ch-,l- % Hkw&vkd`fr foKku] vkj-ds- cqDI] ubZ fnYyh
- 25- n;ky] ijess"oj % Hkw&vkd`fr foKku] vkj- ds- cqDI] ubZ fnYyh
- 26- ;kno] jkelqjs"k % Hkw&vkd`fr foKku] xzUFke] jkeckx] dkuiqj] 1976
- 27- flag] lfoUnz ds- Hkw&vkd`fr foKku] "kkjnk iqLrd Hkou] bykgkckn
- 28- izlkn] xk;=h % Hkw&vkd`fr foKku] "kkjnk iqLrd Hkou] bykgkckn
- 29- xkSre] vydk % Hkw&vkd`fr foKku] jLrksxh ifCyds"ku] esjB
- 30- "kekZ] ,p-,l- ,oa izehyk dqekj % Hkw&vkd`fr foKku] iap"khy izdk"ku] t;iqj] 2011

Outcomes:

Geomorphology is essentially a field science, therefore students be taken to the field for effective understanding of geomorphology forms and processes. Department must have good geomorphic lab equipped with photographs of landforms of various climatic regions and toposheets of Survey of India.

On completion of the course, students are able to:

1. Understand the nature, scope and significance of geomorphology and fundamental concepts in subject.
2. To examining the Origin and Evolution of the earth primary relief features by different theories in subject.
3. Understand about Exogenous Processes considering weathering and mass wasting and nature and types of the slope.
4. Evaluate the fundamental Model of Davisian Cycle of Erosion to learn the function of fiver and its landforms development process.

5. Understand formation, process and development of Fluvial and Karst Landforms.

6. To recognize and understand the formation, process and development of Glacial and Aeolian Landforms in geomorphology.

PAPER - II (2020-21)

CLIMATOLOGY

Objective:

- The aim of the course is to provide an understanding of weather phenomena; dynamic of global climates and generating of climatic information and application.
- The objective of the course is to familiarize the students with the need for understanding of climatology with reference to certain fundamental concept, scope and climatic changes.
- Finally a few selected applications of climatology to societal requirements and quality of environment are dealt with.

Course contents:

- UNIT – I Nature and scope of climatology and its relationship with meteorology; composition of atmosphere; Insolation, heat balance of the earth, stability and instability, green house effect, vertical and horizontal distribution of temperature.
- UNIT – II Jet stream; General circulation in the atmosphere; Acid rain; concept of air masses and Front. EL Nino and La Nina. Monsoon winds and cyclones.
- UNIT – III The application of general principles of elementary physical and synoptic meteorology to the study and classification of climate. Climatic classification of Koppen and Thornthwaite. Major climate of the world-tropical, temperate, desert and mountain climate.
- UNIT – IV Climatic changes during geological and historical times, evidences, possible causes, global warming, Applied climatology.

Suggested Readings:

1. Barry, R.G. and Chorley P..1.; Atmosphere, Weather and Climate, Roulledge, London and New York, 1998.
2. Critchfield, J.H. : General Climatology, Prentico Hall, India, New Delhi, 1993.
3. Das, P.K. : Monsoons 'National Book Trust, New Delhi, 1987.
4. Fein, J.S. and Slepens, P.N. : Monsons. Wiley Interscience, 1987.
5. India Met. Deptt : Climatologically Tables of Observatories in India, Govt. of India 1968.
6. Lal, D.S. : Climatology, Chaitanaya Publications, Allahabad, 1986.
7. Lydolph, P.H. : The Climate of the Earth, Rowiman, 1985.

8. Menon, P.A. : Our Weather, N.B.T., New Delhi, 1989.
9. Oliver, C. : Climatology : An Atmospheric Science, R.K. Books, New Delhi.
10. Pelerson, S. : Introduction to Meteorology, Me G-r-aw Hill Book, London, 1969.
11. Robinson, P.J. and Henderson S. : Contemporary Climatology, Henlow, 1999.
12. Sing, Savindra : Climatology, R.K. Books, New Delhi.
13. Thompson, R.D. and Perry, A (ed.) : Applied Climatology, Principles and Practice. Raoutledge, London. 1997.
- 14- frokj h vfuy dqekj % tyok;q foKku] jktLFkku fgUnh xzaFk vdkneh
- 15- flag] lfoUnz % tyok;q foKku] iz;kx iqLrd Hkou] bykgkckn
- 16- usxh] ch-,l- % tyok;q rFkk leqnz foKku-
- 17- yky] Mh-,l- % tyok;q foKku
- 18- xkSre] MkW- vYdk % tyok;q ,oa leqnz foKku
- 19- “kekZ] ch-,y- ,oa frokM+h] vfuy dqekj % tyok;q foKku ds ewy rRo] jktLFkku fgUnh xzUFk vdkneh] t;iqj
- 20- flag] MkW- jkekJ; ,oa mik;/k;] MkW- Mh-ih- % tyok;q foKku vkSj leqnz foKku] olqU/kjk izdk”ku] xksj[kiqj
- 21- yky] Mh-,l- % tyok;q foKku] vkj-ds- cqDI] ubZ fnYyh
- 22- flag] lfoUnz % tyok;q foKku] vkj-ds- cqDI] ubZ fnYyh

Outcomes:

Weather and climatic chart be made available to the students to explain weather conditions. Audio-visual aids be used for effective technique.

On completion of the course, students are able to:

1. Understand the difference between weather & climate and aims, nature, scope of climatology.
2. Understand the origin, composition and structure of atmosphere
3. Getting facts about Heat Budget and factors effects Heat Budget.
4. Understand the concept of horizontal, vertical temperature and inversion of temperature.
5. Identify the Atmospheric pressure and winds humidity and concept of precipitation and its types.
6. Understand the Air masses and Fronts and the Weather Forecasting.

PAPER – III (2020-21)
GEOGRAPHICAL THOUGHT

Objective:

- To introduce the students to the philosophical and methodological foundations of the subject and its place in the world of knowledge.
- To familiarize them with the major landmarks in development of geographic thought at different periods of time.
- Geographical Thought provides a clear and accessible introduction to the key ideas and figures in human geography

Course contents:

- UNIT – I Definition, scope and functions of Geography ; The Field of geography, its place in the classification of science, Geography as a social science, and natural science. Geography as science of relationship, as science of areal differentiation, as spatial science. Spatial Organization, Geography and environmentalism : forms of man-nature relationship and current view; Dualism in geography; Regional Concept.
- UNIT – II The growth of Geographical knowledge from earliest times up to the 15th century. Contributions of Greek and Roman thinkers. Arab Geographers and their contributions. Geographical information in Ancient Indian literature. The Dark age in Geography. The Great Age of Maritime Discovery and Exploration.
- UNIT – III Contributions of various schools of thought in modern Geography:
- | | |
|---------------------------------|-----------------------------------|
| (i) German School | (ii) French School |
| (iii) British School | (iv) American and Russian Schools |
| (v) Status or Indian Geography. | |
- UNIT – IV Scientific explanations: routes to scientific explanation (inductive/deductive); Type of explanation: cognitive description, cause and effect, temporal, functional/ecological and systems; Laws, theories and models in Geography; Quantitative revolution and philosophy of positivism. Behaviouralism, relevance movement and radical geography Changing paradigms.

Suggested Readings:

1. Abler, Ronald; Adams, John S. Gold, Peter : Spatial Organization : The Geographer's view of the world. Prentice Hall, N.J. 1971.
2. Adhikari, S. : Fundamental of Geographical Thought, R.K. Books, New Delhi.
3. Ali S.M. : The Geography of Puranas, Peoples Publishing House, Delhi, .1968.
4. Amedeo, Douglas : An Introduction to Scientific Reasoning in Geography, John Wiley, U.S.A. 1971.
5. Dikshit, R.D. (ed.): The Art & Science of Geography Rand Me Nally & Co., 1959.
6. Hartshorne, R.: Perspectives on Nature of Geography Rand Me Nally & Co., 1959.
7. Hussain, M. : Models in Geography, R.K. Books, New Delhi.
8. Husain, M. : Evolution of Geographic Thought, Rawat Pub., Jaipur, 1984.
9. Johnston, R.J.: Philosophy and Human Geography, Edward Arnold, London, 1983.
10. Johnston, R.J.: The Future of Geography, Methuen, London, 1988.
11. Minshull, R.: The Changing Nature of Geography, Hutchinson University Library, London, 1970.
12. Ali, S. M.- Arab Geography.
13. Taylor, G.: Geography in the 20th Century.
14. Dikshit, R.D.: Geographical Thought : A Contextual History of Ideas, Prentice Hall of India, New Delhi.
15. Harvey D. : Explanation in Geography.
- 16- flag mtkxj % HkkSxksfyd fpUru dk fodkl
- 17- f=ikBh ,oa fcjys % HkkSxksfyd fparu dk fodkl ,oa fof/kra=
- 18- dkSf'kd] ,l-Mh- % HkkSxksfyd fopkj/kkj,a ,oa fof/kra=] vkj-ds-cqDI] ubZ fnYyh] 2010
- 19- flag] txnh" k % HkkSxksfyd fparu dk Øe fodkl] vkj-ds-cqDI] ubZ fnYyh] 2010
- 20- gqISu] ekftn % HkkSxksfyd fparu dk bfrgkl] jkor ifCyds"ku] ubZ fnYyh] 2004
- 21- flag] nsosUnz izlkn % HkkSxksfyd fpUru dh leh{kk} "kkjnk iqLrd Hkou] bykgkckn
- 22- caly] lqjs" k pUnz % HkkSxksfyd fpUru ds ewy rRo] vkj-ds- cqDI] ubZ fnYyh
- 23- JhokLro] oh-ds- % HkkSxksfyd fpUru ds vk/kkj] vkj-ds- cqDI] ubZ fnYyh
- 24- nhf{kr} jes" k nRr % HkkSxksfyd fpUru dk fodkl % ,d ,sfrgkfld leh{kk} vkj-ds- cqDI] ubZ fnYyh
- 25- tkV] ch-lh- % HkkSxksfyd fopkj/kkj,j rFkk fof/kra=] efyd ,.M daiuh] t;ij ,oa fnYyh] 2013

Outcomes:

1. Students of geography may be encouraged to interact with their counterparts from other disciplines and discuss the nature of their subject.

2. The students may be encouraged to collect information on any theme amenable to geographical interpretation.
3. To study and understand the founding concepts of human geography in the nineteenth century academy, the authors examine the range of theoretical perspectives that have emerged within human geography over the last century from feminist and Marxist scholarship, through to post-colonial and non-representational theories.

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PAPER – IV (2020-21)
GEOGRAPHY OF INDIA

Objective:

- To understand Physiographical and biological scope and prosperity of India and state of Chhattisgarh.
- The objective of the course is to familiarize the students with the need for understanding about natural resources of India and Chhattisgarh.
- To sensitize the students with development issues and policies and programmers' designed for regional development.

Course contents:

- UNIT – I Physical and Biological elements in the Geography of India: Geological structure, relief, climate Drainage, vegetation and soils.
- UNIT – II Agriculture: Major characteristics and problems, Impact of infrastructural and institutional factors on agriculture. Important crops-wheat, rice, cotton, sugarcane, oil-seeds, tea and coffee, Agricultural regions. Green revolution, Agro-climatic regions.
- UNIT – III Sources of power: Coal; Petroleum, Natural gas. Hydroelectricity and Atomic energy. Mineral resources with special reference to iron ore, manganese and bauxite. Industrial development with special reference to iron and steel, cement, cotton, jute, sugar and paper industries; Industrial regions.
- UNIT – IV Regional division of India: Purpose and Methodology. Major schemes of regions of India: O.H.K. Spate and R.L. Singh. Physical and cultural geography of Chhattisgarh State.

Suggested Readings:

1. Centre for Science & Environment (1988) State of India's Environment, New Delhi.
2. Desphande C.D. India. : a Regional Interpretation ICSSR & Northern Book Centre 1992.
3. Dreza, Jean & AMartya. Sen (ed.) India Economic Development and Social opportunity Oxford University Person, New Delhi. 1996.
4. Gautam, Alka : Advanced Geography of India, Sharda Pustak Bhawan Allahabad.
5. Khullar, D.R. : India : A Comprehensive Geography, R.K. Books, New Delhi.
- . Kundu A. Raza Moonis : Indian Economy : the Regional Dimension Speclaum Publishers, New Delhi, 1992.
5. Robinson, Francs : The Cambridge Encyclopedia of India, Pakistan, Bangladesh, Sri Lanka, Nepal, Bhutan & Maldives Cambridge University Press, London, 1989.
6. Singh R.L. (ed.) : India - A Regional Geography National Geographical Society, India Varanasi, 1971.
7. Spale OHK & ATA Learnont-India & Pakistan Methuen, London. 1967.
8. Tirtha R. & Gopal Krishna, Emerging India Reprinted by Rawat Publications, Jaipur 1996.
9. Sharma T.C. and O. Coutinho : Economic and Commercial Geography of India.
- 10- vxzoky ih-lh- Hkkjr dk HkkSfrd Hkwxksy] ,f"kk izdk"ku da-]jk;iqj 2003
- 11- caly lqjs"kpau] Hkkjr dk Hkwxksy] feuk{kh izdk"ku] esjB-
- 12- oekZ jkefokl] Hkkjr % ,d HkkSxksfyd foospu] Hkonh; izdk"ku Ja`xkj?kkV&v;ks;/k] QStkckn] fiu &224123] 2007-

Outcomes:

- On completion of the course, students are able to:
- 1. Understand the about the physiographic division of India and the geography of Chhattisgarh State.
- 2. Understand the India Drainage system of India Rivers.
- 3. Understand the climatic variation in India and climatic region of India and Chhattisgarh State.
- 4. Examine and understand the types of vegetation of India and Chhattisgarh.
- 5. Understand the variation in industrial development in India and Chhattisgarh State.
- 6. Examine and understand the developed and underdeveloped states in India.

PAPER – V (2020-21)
PRACTICAL I - ADVANCED CARTOGRAPHY

Objective:

- To apprise the student with latest trends in the development of cartography as a tool in mapping thematic and quantitative data to facilitate spatial analysis and synthesis.
- To provide training in application of modern tools and techniques to data in a variety of topical and regional studies at local, regional and national levels.
- To attempt regional synthesis by the use of cartographic and quantitative techniques.

Course contents:

GRAPHS AND DIAGRAMS: Triangular graph. Logarithmic and semi logarithmic graphs, scatter graphs; climatograph. Proportional circles, spheres and cubes.

THEMATIC MAPS: Choropleth maps, isolines, Flow maps, isochrones and class intervals. Morphometric Analysis: Profiles, Slope Analysis; Altimetric, and Clinographic curves; Block Diagrams.

Suggested Reading:

1. Monk house F.J. & H.R. Wilkinson: Maps and Diagrams, Methuen, London.
- 2- ekWd gkml rFkk fofYdUlu ¼vuq-izks-izsepUn vxzoky½ % ekufp= rFkk vkjs[k] e-iz- fganh xzaFk vdkneh-
- 3- ghjkyky % izk;ksfxd Hkwxksy] fdrkc ?kj] dkuiqj

- 4- pkSgku] ih-vkj- ,oa oh-ds- JhokLro % iz;ksxkRed Hkwxsy] olqU/kjk izdk”ku] xksj[kiqj
- 5- flUgk] ,e-ih- % dkVksZxzkQh] “kkjnk iqLrd Hkou] bykgkckn
- 6- pkSgku] ih-vkj- % iz;ksxkRed Hkwxsy] olqU/kjk izdk”ku] xksj[kiqj] 2009

Outcomes:

The students need to be trained in the use of conventional vis-à-vis modern tools and techniques of cartographic analysis.

On completion of the course, students are able to:

1. Understand the types and scales of Data measurement.
2. Use data representation by various techniques of maps and Diagrams.

M.A./M. Sc. GEOGRAPHY (2020-21)

SEMESTER – II

M. A. /M. Sc. Geography Semester II shall consist the following papers:

S. No.	Paper	Title	M. M.		
			Written	Inte. Asse.	Total
1.	VI	Economic and Natural Resource Management	80	20	100
2.	VII	Oceanography	80	20	100
3.	VIII	Regional Development and Planning	80	20	100
4.	IX	Social Geography	80	20	100
5.	X	Practical-II : Map Projections, Map Interpretation and Surveying	---	---	100

1. The M. A./M. Sc. Semester II examination in Geography shall consist of 500 marks.

There shall be four theory papers each of 100 marks and one practical of 100 marks as follows:

- | | |
|------------|---|
| Paper VI | Economic and Natural Resource Management. |
| Paper VII | Oceanography |
| Paper VIII | Regional Development and Planning |
| Paper IX | Social Geography |
| Paper X | Practical-II : Map Projections, Interpretation and Surveying. |

2. The theory papers shall be of three hours duration.
3. Candidates will be required to pass separately in theory and practical examinations.
4. (a) In the practical examination the following shall be the allotment of time and marks.

(i) Practical record	20%
(ii) Lab work (up to three hours)	40%
(iii) Field work (up to three hours)	30%
(iv) Viva on i, ii & iii above	10%
- (b) The external and internal examiners shall jointly submit marks.
- (c) Candidates shall be examined in survey individually. They will however be allowed to take the help of a labourer each at their own expense.
- (d) All the candidates shall present at the time of the practical examination their Practical record regularly signed by the teachers concerned.

PAPER- VI (2020-21)

ECONOMIC AND NATURAL RESOURCE MANAGEMENT

Objective:

The economy of the world is changing in recent times. The changes in primary, secondary and tertiary stage is dynamic in nature. In view of this, the objectives of this course are to integrate the various factors of economic development to acquaint the students about dynamic aspects of economic geography.

To understand the concept and approaches of natural resource. To examine use and misuse of various resources and to analysis future prospect.

To analyze the natural resource scenario through use of different techniques, especially Remote Sensing and GIS. To understand the concept of sustainable and integrated resource management and its application.

Course contents:

- UNIT – I Nature and scope of economic Geography; fundamental concepts in economic geography; classification of economies, sectors of economy (primary, secondary, tertiary). Meaning, nature and classification of resources, Resource appraisal : human want and social objective, technological status and resources. resource adequacy and scarcity, limits to growth.
- UNIT – II World pattern of major natural resources: land and soils, biotic resources, water resources mineral and energy resources, oceanic resources.
- UNIT – III Classification of Industries, Theories of industrial location; case studies of selected industries; Iron and Steel; Aluminum, Chemical, Textile. Means of

transport, International trade, trade blocks, globalization and Indian economy.

UNIT – IV Conservation and management of resources; evolution of the concept, principles, philosophy and approaches to conservation, resource conservation and management methods. Policy making and resource management; sustainable development of resources.

Suggested Reading:

- Ahemd, Jaleel - Natural Resources in Low Income Countries.
- Bennet, II.II. - Elements of Soil Conservation.
- Ciriacy, Wantrup,S.V.& Persons (eds.) - Natural resources: Quality & Quantity
- Betall,R.C. & R.O.Buehanan - Industrial Activity and Economic Geography.
- Edvard and Rosers - Agricultural Resources.
- Freeman, T.W. - Geography and Planning.
- Fryer, D.M. - World Economic Development.
- Isard, Walter - Method of Regional Analysis.
- Mehta, M.M. - Human Resource Development Planning.
- Owen, O.S. - Natural Resource Conservation.
- Peach, W.N.& James, A. - Zimmerman’s World Resources Contenting and Conservation.
- Parkin’s,E.A. & J.R. Whitakr - Our Natural Resource and their conservation.
- Renner, G.T. - Conservation of National Recourses.
- Stamp, L.D. - Land of Britain Its use and Misue.
- Smith, G.H.(ed.) - Conservation. of Natural Recourses.
- Symoos, L. - Agriculture Geography.
- Thomas W.L.(et.al.reds.) - Man’s Role in Changing the face of the Earth.
- Wales, H.& H.O. Lathrop - The Conservation of Natural Recourses.
- Wheeler, T.O. et al - Economic Geography, John Wiler New York 1995.
- xkSre] vYdk % vkfFkZd Hkwxsy ds ewy rRo] “kkjnk iqLrd Hkou] bykgkckn ekS;Z] ,l-Mh- % lalk/ku ,oa i;kZoj.k] iz;kx iqLrd Hkou] bykgkckn] 2006 jko] ch-ih- % lalk/ku vkSj i;kZoj.k] olqa/kjk izdk”ku] xksj[kiqj] 2010

Outcomes:

The students should be acquainted with the different branches of economic geography with examples. They should be motivated to interact with the teacher to identify economic activities of the people residing in different parts of the world.

On completion of the course, students are able to:

1. Students Understand about the Nature and Scope, approaches of Economic Geography and recent trends of economic geography.
2. Understand about the basic Economic Processes- Production, Exchange, Consumption and its applications.
3. Understand the fundamental theories in economic geography.

4. Review, understand and apply the modes of economics development by various models.
5. Compare the economic environment and economic development in the world.
6. Understand the economies scale, transportation and communication and nature and role of international trade in economic development of India.
7. To Students Understand about the definition, types and Forms of energy and classified material based and process based energy resources.
8. To study the locations of industry and their activities primary and secondary and its factors responsible for same.
9. To review on world distribution of some industries and selected countries and understand the global nature of industrialization and related problems,
10. Study the physical, economic, social and political factors influencing on national and international trade
11. Understand types, characteristics, merits and demerits of modes of transportation at state, national and international level.
12. Understand the various problems of transportation in urban areas.

PAPER – VII (2020-21)

OCEANOGRAPHY

Objective:

The objective of the course are to introduce students to the many facts of oceans, such as, evaluation of the oceans, physical and chemical properties of sea water, atmospheric and oceanographic circulation, the fascinating world of marine life and the characteristics of marine environment and the impact of man on the marine environment.

Course contents:

- UNIT – I Nature and scope of Oceanography; Distribution of land and water; Major features of ocean basins; Marine sediments. Physical and chemical properties of sea water.
- UNIT – II Interlink between atmospheric circulation and circulation pattern in the oceans, surface currents, thermohaline, waves and tides.
- UNIT – III Marine biological environment: Bio geochemical cycle in the ocean. biozones, types of organisms; plankton, nekton and benthos, food and mineral resources of the sea. Major marine environments; coastal : estuary, deltas, barrier island, rocky coasts : Open : reefs, continental shelf, continental slope and deep : Pelagic environment and floor of the ocean basins.

UNIT – IV Impact of Humans on the marine environment. Law of the sea; exclusive economic zone; marine deposits and formation of coral-reefs.

Suggested Readings:

1. Davis Recharad J.A. : "Oceanography-An Introduction to the Marine Environment". Wm. C. Brown Iowa, 1986.
2. Duxbury, C.A. and Duxbury B. : An Introduction to the world's Oceans-C. Brown. Iowa 2nd ed., 1986.
3. Garrison, T. : "Oceanography - An Introduction to Marine Science" Books/Cole, Pacific Grove, USA, 2001.
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6. Lal, D.S. : Oceanography, Sharda Pustak Bhawan, Allahabad
7. Sharma, R. C. "The Oceans" Rajesh N. Delhi, 1985.
8. Urnmerkutty, A.N.P. Science of the Eceans and Human life, NBT, New Delhi, 1985.
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Outcomes:

Detailed charts and maps showing oceanic relief, currents and circulation of water be used for teaching. Audio visual aids be provided for teaching.

On completion of the course, students are able to:

1. Understand the meaning, nature and scope, modern trends in Oceanography.
2. Understand the ocean floor and relief of the ocean bottom.
3. Understand the properties like temperature, density, salinity of ocean water.
4. Understand the characteristics and properties of factors affecting on formation of sea waves.
5. Understand the tides, tide generating forces, types of tides and tidal effects in coastal areas.

6. Get knowledge about distribution of lithogenous, biogenous, and hydrogenous sediments on ocean floor.

PAPER – VIII (2020-21)

REGIONAL DEVELOPMENT AND PLANNING

Objective:

- To understand and evaluate concept of region in geography and its role relevance in regional planning.
- To identify the issues relating to the development of the region through the process of spatial organization of various attributes and inters relationship.
- To identify the causes of regional disparities in development, perspective and policy imperatives.

Course contents:

UNIT – I Regional Planning: Definition, Scope, evolution and Objectives. Region and Regionalism, Planning Regions: Concept and Delineation. Type of Regions. Central Place Theory, Concept of core and periphery Friedmann's Model of Spatial Organisation and Economic Growth.

UNIT – II Regional Development Theories: Development Theories of Myrdal and Hirschman, Economic and Export Base model, Frank's Theory of Under development.

UNIT – III Approaches and Strategies of Regional Development: Growth Pole Theory Agropolitan Development, Community Development, River Basin Planning, Metropolitan Planning (with reference to India)

UNIT – IV Regional Planning in India. Regional Imbalances and Inequalities, Indicators of Regional Development; Regional Policies in Five Year Plans, Centre State Relations and Multilevel Planning, Planning for special problem Regions: Hill area, Tribal areas, Drought prone areas, Command areas and River basins. Regional development and planning in India.

Suggested Reading:

1. Daysch, C.H.J. & others: Studies in Regional Planning.
2. Deckinson R.E. : City Region and Regionalism.
3. Freeman, E.W. : Geography and Planning.
4. Golksin A. : Regional Planning and Development.
5. Keeble, L. : Principle and Practice of Town and Country Planning.
6. Stamp L.D. : The Land of Britain : Its use and Misuse.
7. Sdasyuk. Gatina and Dengueta, P. : Economic Regionalization of India problems and Approaches.
8. Desai, P.B. & others : Regional Perspective of Industrial and Urban Growth the case of Kanpur, Bombay, 1969.
9. Prakash, Rao V.L. & S.P. : Regional Planning.
10. Censuses of India : Economic and Socio Cultural Dimensions of regionalization (An Indo-USSR Collaborative Study)
11. Friedmann J. & Alonso : Regional Development and Planning, M.I.T. Press.
12. Misra R.P. (ed.) : Regional Planning : Concept; Techniques, Policies and case studies Mysore 1969.
13. Misra, R.P. & others : Regional Development and Planning in India.
14. Timbergen : Essays on World Regional Planning.
15. Lord, W. : Methods of Regional Analysis, M.I.T., 1960.
16. Zimmerinan, E.W. : World Resources and Industries.
17. Burton & Kates : Reading in Resource Management Conservation.
18. Burton & Kates : Regional Planning in India.
19. Ahamed, Enayet : Regional Planning with particular Reference to India. Vol. I and II New Delhi.
20. Bhatt L.S. and others: Micro level planning - A Case Study of Karnal Area, Haryana (K.B. Publishing, New Delhi)
21. Bhatt LS : Regional Planning in India, Statistical Publishing Society, Calcutta, 1973.
22. Gosal GS, and G. Krishanan : Regional Disparities in levels of Socio-economic Development in Punjab, Vishal Publications Kurukshetra, 1984.
23. Chandna, R.C. : Regional Planning : A comprehensive Text-Kajyani Publishers. Chand, Pun; Regional Planning in India, 2009, RK Books, New Delhi.
24. Chandna, RG. Regional development and Planning 2009, RK Books, New Delhi.
24. Ray Choudhari, Jayasri : An Introduction to Development and Regional Planning Orient Longman.
25. Sundaram, KV (ed) Geography and Planning, Essays in honour of VLS Prakasa Rao, Concept Publishing Co., New Delhi, 1985.
26. Raza, Meomis (ed) Regional Development, Heritage Publishers, Delhi, 1988.
27. Mishra R.P. et al : Multilevel Planning, Heritage Publishers Delhi, 1980

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30. "kekZ] jkthoykspu % izknsf"kd ,oa uxjh; fu;kstu] fdrkc ?kj] dkuiqj] 2005
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Outcomes:

1. The students should be made to do seasonal assignments based on diverse data to formulate region at the local, regional levels, and identify the regional differentiations.
2. They should be made conversant with the trends in development of the regional concepts, using 'space' in the multi disciplinary approach to regional development.

PAPER – IX (2020-21)

SOCIAL GEOGRAPHY

Objective:

- To familiarize the students with the understanding of the society through concepts and social theory, philosophical approaches and spatial processes.
- To examine the process of social region formats in India with the help of social cultural and historical factors.
- To examine social distortion and regionalize the various components of social well-being in India; to review problems and suggest alternatives to improve the well-being in environmentally problematic areas.

Course contents:

- UNIT – I Definition, meaning and scope of Social geography and it's Nature and relationship with other Social sciences. Development of Social Geography, Approaches to the study of Social Geography.
- UNIT – II Concept of Society – Social Environment, Geographic bases of Social Formation. Social Geography of India - Social Stratification, Caste and Class. Social organization and groups, Social transformation and change in India, Religion and linguistic group of India. Evolution of Socio-Cultural Regions of India.
- UNIT – III Social well- being– meaning and indicators of Social well- being. Quality of life, Pattern and bases of rural and urban society. Deprivation and discrimination issues relating to women and under privileged groups. Cultural Realms and Cultural Region of the World.
- UNIT – IV Social development planning – meaning and importance. Public policy and Social planning in India : Review of Five year Plans strategies to improve Social well being.

Suggested Readings:

- 1 Ahmad Aijazuddin, Social Geography, Rawat Publication, New Delhi, 1999.
- 2 De Blij. H.D. Human Geography. John Wiley and son, New York.
- 3 Dreze Jean, Amariya Sen, Economic Development and Social opportunity. Oxford University Press. New Delhi. 1996
- 4 Dubey. S.C : Indian Society. National Book Trust, New Delhi, 1991.
- 5 Gregory. D . and J. Larry (Eds.) Social. relations and spatial structures. MCMillan. 1985.
6. Haq. Mahbul : Reflections on Human Development. Oxford University Press, New Delh6.
7. Jones, Emrys, Reading in Social Geography, Oxford University Press, Ely House, London, 1977.
8. Jones, Emrys and John Eyles, An Introduction to Social Geography, Oxford University Press, London, 1977.
9. Maione. Clarence: People of South Asia, Winston, New York, 1974.
10. Planning Commission, Government of India: Report on Development of Tribal areas, 1981.
11. Rao, M.S.A.. Urban Sociology in India, Orient Iongman, 1970.
12. Schwartzberg Joseph : An Historical Atlas of South Asia, University of Chicago Press, (Chicago, 1978.
13. Sen, Amartya & Dreze Jean. Indian Development : Selected Regional Perspectives. Oxford University Pres-s, 1996
14. Sharma, K.L. : Indian Social Structure and Change, Rawat Publication, Jaipur, 2011
15. Smith, David: Geography : A welfare Approach, Edward Arnold, London, 1977.
16. Sopher, David. An Expoloration of Inda, Cornell University Press, 1980.

17. Subba. Rao. Personality of India : Pre and Proto Historic foundation of India and Pakistan, M.S. University Baroda. Vadodai'a, 1958
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- 19- vkgwtk] jke] Hkkjrh; lekt] vkj-ds- cqDI] ubZ fnYyh] 2004-
- 20- “kekZ] ds-,y- % lkekftd Lrjhdj.k] jkor ifCyds”ku] t;iqj] 2011

Outcomes:

The students should familiarize themselves with different areas to understand the patterns of socio-economic differentiation/ segregation and social and cultural habitants. They should also interact with other disciplines like sociology/ psychology and demography for understanding the social issues.

On completion of the course, students are able to:

1. Understand the nature, scope and concept, relationship between culture and social Environment and right of information act.
2. To examining the cultural complex and traits of culture and its concepts.
3. Evolution to civilization and various cultural development and cultural system according to religion, language and geography and global cultural changes.
4. To study the origin and growth of culture and agriculture and its basic concepts. Understand the concept of space and social process and present status.
5. Understand difference in rural and urban social and cultural life style with reference of Settlement patterns.

PAPER – X (2020-21)

PRACTICAL II- MAP PROJECTIONS, TOPOSHEET] INTERPRETATION AND SURVEYING

Objective:

- To apprise the student with latest trends in the development of cartography as a map projections.
- To provide training in application of modern methods of topographical surveying involving the use of Theodolite and Dumpy level.
- To attempt regional synthesis by the use of cartographic and quantitative techniques of topographical information.

Course contents:

Map Projections: Mathematical construction of world projections.

Interpretation of Maps: Geological Maps.

Principles and methods of topographical surveying involving the use of Theodolite and Dumpy level. Solution of problems in Surveying.

Topographical Information – International series, South east Asia Series, Indexing, Classification & Interpretation of topographical sheets.

Suggested Readings:

1. Davis, R. C. & E. S. Forte : Surveying : Theory and Practical.
2. Kanetkar, T.R. & S.V. Kulkarni: Surveying and leveling part I & II A.V.G. Prakashan, Poona.
3. Monkhouse F.J. & H.R. Wilkinson: Maps and Diagrams, Methuen, London.
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Outcomes:

The students need to be trained in the use of conventional vis-à-vis modern tools and techniques of cartographic analysis.

On completion of the course, students are able to:

1. Understand the map projections definitions, method, techniques and the types of prospective and non prospective, conventional and classification of Map Projections.
2. Understand the Principles and methods of different topographical surveying techniques.
3. Use the topographical data and understand of thematic maps.