

FIRST SEMESTER
Core Course: C-1: Understanding
Geography Total Marks:
100
60 (Th) + 20(P) + 20(IA)
Total Credit: 6 (Total Number of Classes: 60)

Unit 1: Field of Geography (20 classes)

- Nature and scope of Geography: Geography as a spatial science, present day relevance of Geography
- Physical Geography and Human Geography: Nature, Contents and Interrelationship

Unit 2: Fundamental Concepts in Geography (15 classes)

- Relation of Geography with natural and social Sciences
- Spatial and temporal variation, spatial association, spatial interaction, spatial diffusion, system concept, Man-Environment Relationship
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Unit 3: Map and Geography (15 classes)

- Importance of map in Geography, Types of map
- Representation of interrelationship among the physical and cultural features from Topographical Maps and Interpretation

Unit 4: Practical (10 classes)

- Elements of map reading and Interpretation of toposheet
- Representation of interrelationship among the physical and cultural features from Topographical Maps and Interpretation

Books Suggested:

1. Hussain, M., 1989: Evolution of Geographic Thought, Rawat Publications, Jaipur
2. Dikshit, R.D., 1997: Geographical Thoughts: A Contextual History of Ideas, Printice Hall of India, New Delhi
3. Adhikari, S., 1992: Geographical Thought, Chaitanya Pustak Allahabad
4. Abler, R., Adams, J. and Gould, P.P., 1971: Spatial Organization: the Geographers' View of the World, Prentice Hall, Englewood Cliff
5. Hussain, M.: Human Geography, Rawat Publications, Jaipur 3
6. Brunhes, J., 1920: Human Geography, edited by Isaisah Bowman
7. Hartshorne, R., 1939: The Nature of Geography, Rand Mckully, Chicago
8. Knox, P.L., 1975: Social Well-being: A Spatial Perspective, Oxford University
9. Smith, David M., 1977: Human Geography: A Welfare Approach, Edward Arnold, London
10. Chorley, R.J. and Hagget, P. (eds.) 1967: Models in Geography, Methuen, London
11. Hartshorne, R., 1959: Perspective on the Nature of Geography, Indians edition, Scientific Publishers, Jodhpur
12. Johnston, R.J. (ed): The Dictionary of Human Geography, Oxford, Basil, Blackwell
13. Harvey, D., 1969: Explanation in Geography, St. Martin Press, New York
14. Dikshit, R.D., 1994: The Art and Science of Geography, Printice Hall of India, New Delhi

Core Course: C-2:
Geomorphology Total
Marks: 100
60(Th) + 20(P) + 20(IA)
Total Credit: 6 (Total Number of Classes: 60)

Unit 1: Basics of Geomorphology (10 classes)

- Geomorphology: Definition, Nature and Scope, Evolution of Geomorphological Thoughts
- Theories of origin and Evolution of Earth (Big Bang theory)
- Earth: Chemical Composition and Interior Structure of the Earth

Unit I1: Earth Movements (10 classes)

- Continental Drift Theory, Isostasy, Plate Tectonics, Mountain building (Orogeny) L. Kober and Arthur Holmes
- Volcanoes and its location

Unit III: Geomorphic Processes (20 classes)

- Weathering, Mass Wasting, Cycle of Erosion (Davis and Penck)
- Evolution of Landforms (Erosional and Depositional): Karst and Coastal

Unit IV: Practical (20 classes)

- Relief representation through serial profiles, superimposed profiles, composite profiles and Projected profiles
- Demarcation of basin and representation of basin relief through profiles, interpretation
- Preparation of Relative Relief Map using Smith's Method from Topographical Maps
- Drawing and analysis of Average Slope Map by Wentworth's Method

Books Suggested:

1. Bloom A. L., 2003: Geomorphology: A Systematic Analysis of Late Cenozoic Landforms, Prentice-Hall of India, New Delhi
2. Bridges E. M., 1990: World Geomorphology, Cambridge University Press, Cambridge.
3. Christopherson, Robert W., (2011), Geosystems: An Introduction to Physical Geography, 8 Ed., Macmillan Publishing Company
4. Kale V. S. and Gupta A., 2001: Introduction to Geomorphology, Orient Longman, Hyderabad.
5. Knighton A. D., 1984: Fluvial Forms and Processes, Edward Arnold Publishers, London.
6. Richards K. S., 1982: Rivers: Form and Processes in Alluvial Channels, Methuen, London.
7. Selby, M.J., (2005), Earth's Changing Surface, Indian Edition, OUP
8. Skinner, Brian J. and Stephen C. Porter (2000), The Dynamic Earth: An Introduction to physical Geology, 4th Edition, John Wiley and Sons
9. Thornbury W. D., 1968: Principles of Geomorphology, Wiley.
10. Gautam, A (2010): Bhautik Bhugol, Rastogi Publications, Meerut

Generic Elective Paper

Generic Elective: Physical Geography Total Marks: 100

60(Th) + 20(P) + 20(IA)

Total Credit: 6 (Total Number of Classes:
60)

Unit 1: Field of Geography (5 classes)

- Nature and scope of Geography, Physical Geography and Human Geography: Nature, Contents and Interrelationship
- Earth: Chemical Composition and Interior Structure of the Earth

Unit 2: Basics of Geomorphology (15 classes)

- Types of landform – First order, second order and third order, Forces for landform development - endogenetic and exogenetic, Landform development processes- weathering, erosion, transportation and deposition
- Landform development under different conditions – fluvial, and arid
- Cycle concepts in geomorphology Weathering, Mass Wasting, Cycle of Erosion (Davis and Penck)
- Evolution of Landforms (Erosional and Depositional): Fluvial, and Aeolian

Unit 3: Climatology and Oceanography (15 classes)

- Atmosphere: Composition, Structure and Functions
- Elements of Weather: Temperature, Pressure, Wind and Humidity
- Heat Zones, Atmospheric Pressure Belt and Atmospheric Circulation; Mechanism of Monsoon
- Koppen's Climatic Classification
- Ocean Basin: Major features of the ocean floor; Coral reefs and atolls: types and factors
- Ocean Current and Tides

Unit 4: Practical (12 classes)

- Relief representation through serial profiles, superimposed profiles, composite profiles and Projected profiles.
- Demarcation of basin and representation of basin relief through profiles, interpretation.
- Drawing and analysis of Average Slope Map by Wentworth's Method
- Drawing and interpretation of rainfall-temperature-humidity graph of tropical, sub-tropical and temperate regions/stations.
- Study of weather condition depicted by Indian Weather maps and prediction of weather conditions for next 48hours.

