

Four Year Under-Graduate Programme

Subject: Geography

Semester: III

Course Name: Geography as a Spatial Science
(Compulsory)

Course code: GGY0300104

Course Level: Intermediate

100 Marks (Theory =80 Marks, Internal Assessment = 20 Marks)

Theory (4 Credits, 80 marks, 60 classes of one-hour duration)

Course Objective:

- To introduce students to the fundamental concepts of geography as a spatial science.
- To provide students with a strong foundation in spatial data analysis and visualization.
- To enable students to understand and critically analyze the spatial dimensions of a range of geographic processes.
- To equip students with the skills to develop and apply spatial models and technologies to solve geographic problems.

Course outcome:

1. *Understand and explain the multidisciplinary nature of geography and its evolution*
2. *Grasp the concept of space, place, region and learn about spatial processes & patterns*
3. *Analyze different geographical approaches including systematic, regional, ideographic, and nomothetic approaches.*
4. *Apprehend spatial analysis in Geography through concepts of location and area patterns*
5. *Recognize various scientific approaches in Geography, including inductive, deductive methods and different modes of explanations*

Unit I:

Defining the field of Geography: Study of the earth as the home of man; Place of geography in relation to natural and social sciences; the changing definitions of geography and its multi-disciplinary nature.

Unit II:

Geography as a spatial science and spatial concepts in geography: Concept of space, place, territory, and region; Geographic space (Absolute Space and Relative Space); Spatial Processes and Patterns (only basic concept) – Spatial distribution, Spatial concentration, Spatial organization, Spatial relationship.

Unit III:

Basic Approaches in Geography: Systematic and⁷ Regional; Ideographic and Nomothetic; Pure and Applied.

Unit IV:

Spatial Analysis in Geography: Concept of location; Concept of point, line, and area patterns.

Unit V:

Scientific Approaches in Geography: Inductive and Deductive methods; Harvey's modes of explanations in Geography (only basic concept): Cognitive, Morphometric, Cause and effect, Temporal, Functional and System analysis.

Reading List

1. Abler, R., Adams, J. and Gould, P.P., 1971: Spatial Organization: The Geographers' View of the World, Prentice-Hall, Englewood Cliff.
2. Ackerman, E.A., et al, 1965: The Science of Geography, Washington D.C., National Academy of Science/ National Research Council Pub. No. 1277.
3. Adhikari, Sudepta, 2015: Fundamentals of Geographical Thought, Orient Blackswan Pvt.Ltd., New Delhi.
4. Chorley, Richard, J. and Haggett, Peter (eds), 1967: Models in Geography, Methuen, London.
5. Chorley, Richard, J., 1973: Directions in Geography, Methuen, London.
6. Dikshit, R.D., 1994: The Art and Science of Geography, Prentice Hall of India, New Delhi.
7. Haggett, P., 2001: Geography: A Global Synthesis, Pearson Education, Essex, UK.
8. Hartshorne, R., 1939: The Nature of Geography, Association of American Geographers, Lancaster, Penn.
9. Hartshorne, R., 1959: Perspective on the Nature of Geography, Rand McNally, Chicago.
10. Harvey, D., 1969: Explanation in Geography, St. Martin's Press, New York, 1969.
11. Johnston, R.J. et al.(eds), 1986: The Dictionary of Human Geography, Oxford, Basil Blackwell.

Theory Credit : Four (4)

Practical Credit : Zero (0)

No. of Required Classes : 60

No. of Contact Classes : 40

No. of Non-Contact Classes : 20

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