5118 C M.A. (Final) Geography Paper - IV (C) : Environmental Geography

<u>Unit - I</u>

- a) Environmental geography: definition scope and concepts.
- b) Ecology: meaning, scope and concepts.
- c) Environment: meaning, elements, and types.
- d) Principles of environmental geography.
- e) Man-environment relationship: review of different perspectives.

<u>Unit - II</u>

- a) Ecosystem: concept, definitions, characteristics and types.
- b) Components and functioning of ecosystem.
- c) Trophic level, food chain and ecological pyramids.
- d) Energy flow in ecosystem.
- e) Geo-chemical cycles and circulation of element in the ecosystem: carbon cycle, nitrogen cycle and oxygen cycle.

<u>Unit - III</u>

- a) Fresh water ecosystems: meaning, types and their properties.
- b) Marine ecosystems: meaning, types and their properties.
- c) Terrestrial ecosystems: meaning, types and their properties.
- d) Biomes: concept, types, characteristics and distribution.
- e) Detail study of alpine and tropical desert biomes.

<u>Unit - IV</u>

- a) Environmental hazards and disasters: meaning, types and impacts.
- b) Environmental degradation: meaning, process, causes, types and impacts.
- c) Environmental pollution: meaning, causes, types and impact.
- d) Environmental planning and management: concept, objectives and strategies.
- e) Sustainable development: concept, need, problems and strategies.

<u>Unit - V</u>

Case studies of man induced environmental and ecological changes:

- a) Ecology of tropical farming systems.
- b) Mountain ecosystem with special reference to Aravalli hills.
- c) Big dams with reference to Sardar Sarovar. Environmental legislation:
- d) The Stockholm Conference and the Earth Summit.
- e) Environmental laws in India related to: wild life, water, forest and environment.

Suggested Readings:

- Ackerman, E.A., Geography as a Fundamental Research Discipline, University of Chicago Research Papers, 1958.
- Agarwal, A. and S. Sen, The Citizens Fifth Report, Centre for Science and Environment, New Delhi, 1999.
- Bertalanffy, L., General Systems Theory, George Bragiller, New York, 1958.
- Bodkin, E., Environmental Studies, Charles E. Merril Publishing Co., Columbus, Ohio, 1982.
- Chandna, R.C., Environmental Awareness, Kalyani Publishers, New Delhi, 1998.
- Chorley, R.J., Geomorphology and General Systems Theory, U.S.G.S. Professional Paper, 500 B, 1962.
- Eyre, S.R. and G.R.J. Jones (eds.), Geography as Human Ecology, Edward Arnold, London, 1966.
- Haggett, R.J., Geo-ecology: An Evolutionary Approach, Routledge, London, 1995.
- Kormondy, E.J., Concepts of Ecology, Prentice Hall, 1989.
- Moore, R., Man in the Environment, McGraw Hill.
- Murphy, E.F., Man and His Environment, Harper & Row.
- Odum-Fugene, P., Fundamentals of Ecology, W.B. Sounders Co.
- सिंह, सविन्द्र, पर्यावरण भूगोल, प्रयाग पुस्तक भवन, इलाहाबाद
- सिंह, सविन्द्र, भौतिक भूगोल, वसुन्धरा प्रकाशन, गोरखपुर
- लोढ़ा, आर.एम. एवं माहेश्वरी, दीपक, पर्यावरण भूगोल, हिमांशु पब्लिकेशन, उदयपुर
- दुबे, डॉ राजेश, पर्यावरण शिक्षा, प्रकृति भारती प्रकाशक, लखनऊ