

(M.A PREVIOUS SYLLBUS)
GEOMORPHOLOGY

Paper-II

- Unit 1 Nature and scope of Geomorphology. Fundamental concepts- Geological structures and landforms. Uniformitarianism Multi Cyclic and polygenetic evolution of landscapes concepts of threshold, Environmental change-climatic change and geochronological methods- Documentary evidence, Artifacts, Major horizons, Dendrochronology, Pollen-thermo luminescence.
- Unit 2 Earth movements-epirogenic, organic and tectonic earth movements. Forces of crustal instability, Isotacy, Plate tectonics, Seismicity, Volcanicity. Orogenic structures with reference to the evolution of the Himalayas.
- Unit 3 Exogenic processes: Concept of gradation, agents, and processes of gradation Causes, Types and classification of weathering, Mass movement erosional and Depositional processes and result and landforms and soil formation, Slope Evolution, down wearing, parallel retreat and slope replacement models.
- Unit 4 Geomorphic processes dynamics of fluvial, glacial, Aeolian, marine and Karst Processes and resulting landforms complexities in geomorphologic Processes
- Unit 5 Applied geomorphology; Application of geomorphic mapping and Evolution, Digital elevation model (DEM) and triangulated irregular network (TIN) unit, land capability and land suitability classification, hydro-geomorphology, urban-geomorphology, Environmental geomorphology, Geomorphic hazards.

Books Recommended

- Cooke, R.U. and Doornkamp, J. C. 1974. Geomorphology in Environmental management- An introduction. Clarendon Press, Oxford.
- Dury, G.H. 1959. The face of the earth, Penguin Harmondsworth.
- Goudie, A. 1968 The nature of the Environment. Oxford and Blackwell, London.
- Gamer, H.F. 1974 The origin of landscape-A synthesis of Geomorphology, Oxford University Press, London.
- Pitty, A.F. 1971 Introduction to Geomorphology, Methuen, London.
- Sharma, H.S. (ed) 1980 Perspectives in Geomorphology, Concept, N-Delhi.
- Singh, S. 1998 Geomorphology, Prayag Publication, Allahbad.