## M.A. /M.Sc. Geography First Semester Paper – II (41362) Geomorphology

#### Unit – I

- a) Development in geomorphology
- b) Concept & Scope of Geomorphology
- c) The solar system, views of james jeans, hoyal and bigbang theory
- d) Development of slopes: approaches to the study of slopes; views of W. Penck, A. Wood and A. N. Strahler

## Unit – II

- a) Isostasy: concept and Theories Continental Drift Theory and Plate tectonic theories
- b) Theories of Mountain building
- c) Processes: Weathering Types of weathering
- d) Processes: Cycle of Erosion, Views of Davis and Penk

# Unit – III

- a) Geomorphic processes and landforms fluvial
- b) Geomorphic processes and landforms glacial and fluvio-glacial
- c) River forms and processes stream flow, hydrographs and flood frequency analysis
- d) Geomorphic processes and landforms eolian

## Unit – IV

- a) Geomorphic processes and landforms coastal
- b) Geomorphic processes and landforms karst
- c) Submarine relief
- d) Geomorphometry: Geomorphology and topographic analysis

## Unit – V

- a) Extra-terrestrial geomorphology
- b) Environmental change causes, effects on processes and landforms
- c) Soil processes and conservation
- d) Dams and reservoirs: geomorphic consideration and environmental impact

## **References:**

- 1. Dayal, P., A Text Book of Geomorphology, Shukla Book Depot, Patna, 1996
- 2. Dury, G. H., The Face of the Earth, Penguins, 1980
- 3. Ernst, W.G., Earth Systems: Process and Issues, Cambridge University Press 2000
- 4. Hugget, Richard, Fundamentals of Geomorphology, Routledge, Taylor & Francis Group, New York, 2007
- 5. ICSSR, A Survey of Research in Physical Geography, Concept, New Delhi, 1983
- 6. Kale, V. and A. Gupta, Elements of Geomorphology, Oxford University Press, Calcutta, 2001
- 7. King, C. A. M., Beaches and Coasts, E. Arnold, London, 1972
- 8. Leopold, L. B. et al, Fluvial Processes in Geography, Eurasia Publishing House, New Delhi

- 9. Pike, R.J., I.S. Evans and T. Hengl, Geomorphometry: A Brief Guide, Developments in Soil Science, Volume 33, Elsevier B.V., 2009
- 10. Pitty, A., Introduction to Geomorphology, Methuen, London, 1974
- 11. Ritter, D.F., R.C. Kochel and J.R. Miller, Process Geomorphology, 4th edition, McGraw Hill, New York, 2002
- 12. Sharma, H. S., Tropical Geomorphology, Concept, New Delhi, 1987
- 13. Shepard, F. P., Submarine Geology, Harper & Sons, New York, 1948
- 14. Singh, S., Geomorphology, Prayag Pustakalaya, Allahabad, 1998
- 15. Small, R. J., The Study of Landforms, McGraw Hill, New York, 1985
- 16. Sparks, B. W., Geomorphology, Longmans, London, 1960
- 17. Strahler, A. H., Introducing Physical Geography, 5th Edition, John Wiley & Sons, 2009
- 18. Summerfield, M. A., Global Geomorphology, Longman, 1991
- 19. Thornbury, W. D., Principles of Geomorphology, Wiley Eastern, 1969