

M.A./M.Sc. Geography
Third Semester
Paper – III (43363B) Biogeography

Unit - I

- a) Nature, scope, development and relevance of biogeography
- b) Zoogeographical provinces
- c) Floral kingdom
- d) Altitudinal zoning; eco-geographic trends

Unit – II

Biogeography processes and patterns

- a) Evolution, adaptation, speciation and extinction
- b) Dispersal and colonization
- c) Habitats and microhabitats, limits of distribution and endemics
- d) Relicts, disjunction patterns, patterns of rarity and patterns of biodiversity

Unit – III

Physical limitation of life

- a) Environmental gradients; interaction of factors and patterns of climate
- b) Biomes and life forms; soil; ecological succession, the ecosystem and microclimates
- c) Island as an area of isolation, problems of access; variety of island habitats
- d) Hazards of island life; opportunity for adaptive radiation

Unit – IV

Terrestrial major biomes: Study of biomes with reference to regional climate, vegetation, structure, ecological succession, species richness, geographical affinities, soils, faunal adaptations, mapping at a global level (Applicable for both Unit – IV and Unit - V)

- a) Tundra and taiga
- b) Temperate broadleaf
- c) Deciduous forest
- d) Tropical broadleaf evergreen forest

Unit – V

- a) Tropical savannas
- b) Desert scrub,
- c) Mid-latitude grassland
- d) Mediterranean scrub

References:

1. Cox, C.D. and Moore P.D., Biogeography: An Ecological and Evolutionary Approach 5th edn., Blackwell, 1993
2. Huggett, R.J., Fundamentals of Biogeography, Routledge, 2004
3. Llies, J., Introduction to Zoogeography, McMillan, London, 1974
4. Khoshoo, T.N. and Sharma M. (ed.), Indian Geo-sphere-Biosphere Har-Anand Publication, Delhi, 1991

5. Lapedes, D.N. (ed), Encyclopedia of Environmental Science, McGraw Hill, 1974
6. Mathur H.S., Essentials of Biogeography, Anuj Printers, Jaipur, 1998
7. Pears, N., Basic Biogeography 2nd edition, Longman, London, 1985
8. Simmon I.G., Biogeography, Natural and Cultural, Longman, London, 1974
9. Tivy, J., Biogeography: A study of Plants in Ecosphere, Oliver an Boyd, 1992
10. Ian, N Healey, C. Barry Cox, Peter D. Moore, Biogeography: An Ecological and Evolutionary approach, Blackwell, Oxford, 1972
11. Pielou E.C., Biogeography, John Wiley, New York, 1973
12. Husain M., Biogeography, Anmol Publication, New Delhi, 1994