

M.A./M.Sc. 1st Semester Examination, 2023

GEOGRAPHY

PAPER – GEO-104

Full Marks : 50

Time : 2 hours

Answer all questions

The figures in the right hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

PAPER – GEO-104.1

*(Foundations of Biogeography
and Environment)*

GROUP – A

Answer any two questions of the following :

2 × 2

1. Define Autecology.

(Turn Over)

2. What is Ecological Niche ?
3. Give a short note on the IUCN Red list.
4. Make a comparison between eutrophic and oligotrophic lakes.

GROUP – B

Answer any **two** questions of the following : 4×2

5. Give a brief account of the extent of ecological tolerance with a suitable example.
6. Identify the economic and ecological impacts of invasion.
7. What are the roles of soil nutrients in determining the ecosystem process ?
8. Elucidate the eco-physiological adaptations of mangrove plants in coastal India.

GROUP – C

Answer any **one** question of the following : 8×1

9. Explain the role of water, nutrients and energy in determining ecosystem processes. Give suitable diagrams in support of your answer.
10. Explain, with map, the distribution of Biomes and its relation with Global pattern of rainfall.

PAPER – GEO-104.2

(*Landscape Ecology and Planning*)

GROUP – A

Answer any **two** questions from the following :
 2×2

1. What are the core themes in landscape ecology ?
2. Differentiate richness from evenness.

3. Make a comparison between landscape composition and configuration.
4. Mention the importance of heterogeneity in landscape ecology.

GROUP—B

Answer any **two** questions from the following :
4 × 2

5. Explain the concept of sustainable landscape.
6. Identify the types of corridors and state their role in ecosystem processes.
7. Elucidate the role of GIS in landscape planning.
8. Explain the landscape assessment methods using landscape heterogeneity.

GROUP-C

Answer any **one** questions from the following :

8 × 1

9. Give an account of the development of the landscape ecology with special reference to European and North American view.
10. Discuss the causes and effects of habitat fragmentation in a forest landscape.

[**Internal Assessment — 10 Marks**]