#### 2022

# 1st Semester Examination GEOGRAPHY

Paper: GEO 104

Full Marks: 40 Time: Two Hours

The figures in the margin indicate full marks. Candidates are required to give their answers in their own words as far as practicable.

### Paper: 104.1

# (Foundations in Biogeography and Environment)

Group - A

Answer any *two* of the following questions:  $2 \times 2 = 4$ 

- Comment on the anthropogenic impact on aquatic ecosystems.
- 2. What is biomagnification?
- 3. Mention the factors leading to rarity, vulnerability and extinction of species.
- 4. Define flagship species.

#### Group - B

Answer any *two* of the following questions:  $4 \times 2=8$ 

- 5. Explain the factors of ecological tolerances and amplitude.
- 6. Elucidate Eco-physiological adaptation of xerophytic plants in arid and semi-arid environments.
- 7. Make a comparison between the patterns of survival among the K and R selected species.
- 8. Identify the salient features of protected area network.

#### Group - C

Answer any *one* of the following questions:  $8 \times 1=8$ 

- 9. Give an account on the different factors of ecosystem and their relationships. Use suitable diagram in support of your answer.
- 10. Describe the status of biodiversity in the major biogeographic zones of India.

## Paper: 104.2

# (Landscape Ecology and Planning)

# Group - A

Answer any *two* of the following questions:  $2 \times 2 = 4$ 

1. Differentiate extinct species from endangered species. Give example.

- 2. What is the concept of sustainable landscape?
- 3. Explain the role of TEK in conserving landscape.
- 4. Define landscape mosaic with proper example.

#### Group - B

Answer any *two* of the following questions:  $4 \times 2 = 8$ 

- 5. Enumerate the methodology to calculate Shannon Diversity Index with suitable example.
- 6. Identify the ecological role of landscape corridors.
- 7. Mention the role of keystone species in a habitat.
- 8. Elucidate the relevance of landscape ecology for managing resources.

### Group - C

Answer any *one* of the following questions:  $8 \times 1 = 8$ 

- 9. Define Landscape and briefly discuss the structure of landscape and their role in characterizing the same.
- 10. Critically assess the impact of anthropogenic activities which modify natural landscape. What is edge effect?