

2025

M.Sc. 1st Semester Examination

GEOGRAPHY

Paper : GEOE402A0/B0

Full Marks : 50

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 : GEOE402A0

**(Population Geography and
Global Economic Crisis, Geopolitics)**

Group - A

Answer any *four* questions :

2×4=8

1. What is gerrymandering?
2. Define the concept of dependency ratio.
3. What is meant by step migration?
4. Explain the concept of the Gender Development Index (GDI).
5. What is 'glocalization'?

P.T.O.

(2)

6. Explain Maternal Mortality Ratio.

Group - B

Answer any *four* questions : $4 \times 4 = 16$

7. Distinguish between logistic and exponential models of population growth.
8. Describe the arithmetic method of population projection and discuss its limitations.
9. Discuss the propositions of the Malthusian theory of population growth.
10. Explain the significance of the Gender Empowerment Measure in promoting women's participation in economic and political decision-making.
11. Analyse the relevance of the Rimland theory in understanding present-day geopolitics in a globalised world.
12. Examine the benefits and constraints of globalisation on the Indian agricultural sector.

Group - C

Answer any *two* questions : $8 \times 2 = 16$

13. Examine how the Demographic Transition Theory explains migration patterns in Zelinsky's Mobility Transition Model.

(3)

14. Analyse the role of liberalisation, privatisation, and globalisation in shaping industrial development in India.
15. Discuss the critical issues faced by the Ageing population in India.
16. Explain the relevance of the Sustainable Development Goals on poverty and hunger, with reference to emerging policies to attain them.

Internal Assessment - 10 marks

P.T.O.

(4)

Paper : GEOE402B0

(Landscape Ecology and Planning)

Group - A

Answer any *four* questions : $2 \times 4 = 8$

1. What are the components of landscape metrics?
2. Make a comparison between species richness and evenness.
3. What is meant by disturbance in landscape ecology?
4. What is an invasive alien species? Give example.
5. Mention two main causes of human-wildlife conflict.
6. How does fragmentation affects species dispersal.

Group - B

Answer any *four* questions : $4 \times 4 = 16$

7. Write a note on corridor networks and their ecological importance.
8. Discuss source-sink dynamics in landscape ecology.
9. Explain the importance of landscape mosaics and its influence on ecological processes and biodiversity patterns.
10. Discuss, in brief, how habitat arrangement affects species movement, and ecosystem stability.

(5)

11. Explain the role of landscape heterogeneity in biodiversity conservation.
12. Evaluate the role of Traditional Ecological Knowledge (TEK) in conserving landscapes and biodiversity.

Group - C

Answer any *two* questions : $8 \times 2 = 16$

13. Explain the interdisciplinary nature of Landscape ecology and state its relevance in modern geography and ecology.
14. Explain the concepts of patch, corridor, and matrix and their significance in Landscape ecological analysis. Give suitable examples.
15. Elucidate the importance of landscape metrics in measuring habitat heterogeneity, with special reference to Shannon Diversity Index and Simpson Diversity Index.
16. Critically examine the anthropogenic modification of landscapes, focusing on land-use change, urbanization, agriculture, and infrastructure development.

Internal Assessment - 10 marks
