

**U.G. 6th Semester Examination - 2025****GEOGRAPHY****[HONOURS]****Discipline Specific Elective (DSE)****Course Code : GEO-H-DSE-T-04A****(Soil and Bio Geography)****[NEW SYLLABUS under CBCS]**

Full Marks : 60

Time : 2½ Hours

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

1. Answer any **ten** of the following: 2×10=20
- i) Define soil profile.
  - ii) What is regolith?
  - iii) Why is soil pH a significant soil property?
  - iv) Differentiate soil erosion from soil degradation.
  - v) Why is soil classification required for land management?
  - vi) What is soil moisture?

*[Turn Over]*

- vii) Distinguish between ecosphere and biosphere.
- viii) What is ecotone?
- ix) Who are scavengers?
- x) How do green plants play a significant role in energy flow of an ecosystem?
- xi) What is meant by land capability?
- xii) Highlight the geographical extension of Tropical rain forest biome.
- xiii) What is biodiversity?
- xiv) What is the IUCN Red List?
- xv) What is the objective of wildlife conservation?

2. Answer any **four** of the following:  $5 \times 4 = 20$

- i) Write down the impact of climate on soil formation.
- ii) Classify and discuss soil structure in brief.
- iii) What is the role of organic matter in soil?
- iv) Bring out the concept of trophic structure.
- v) Why is biogeochemical cycle significant in environment?
- vi) What are the fallouts of deforestation?

3. Answer any **two** of the following:  $10 \times 2 = 20$

- i) Explain the mechanism of podsolisation and profile characteristics of podsol soil with necessary illustrations.
- ii) State the causes and managerial strategies of soil erosion.
- iii) Present soil orders with their major characteristics according to USDA soil taxonomy.
- iv) Discuss different types of biodiversity and causes of biodiversity loss.