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: $2\frac{1}{2}$ 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: $2 \times 10 = 20$
 - 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?

- vii) Distinguish between ecosphere and biosphere.
- viii) What is eeotone?
- 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: $10 \times 2 = 20$
 - Explain the mechanism of podsolisation and profile characteristics of podsol soil with necessary illustrations.
 - ii) State the causes and managemental 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.