

2021
GEOGRAPHY
[HONOURS]
Paper : II

Full Marks : 75

Time : 4 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.*

GROUP-A
(Soil Geography)
[Marks : 35]

1. Answer any **three** questions: $1 \times 3 = 3$

- a) Define Pedon.
- b) What is wilting water?
- c) Define soil air.
- d) Define Pedology.
- e) What is humus?

2. Answer any **five** questions : $2 \times 5 = 10$

- a) What is laterisation?

b) State the characteristics of the 'B' horizon of soil.

c) What are the basic characteristics of azonal soils?

d) What is meant by the term *histosols*?

e) Define soil pH.

f) Differentiate eluviation from illuviation.

g) Why saline soil is alkaline in nature?

h) What is solonchak?

3. Answer any **two** questions: $6 \times 2 = 12$

a) Highlight the characteristics of *chernozems* and *laterites*.

b) Diagrammatically represent an ideal soil profile showing the main horizons.

c) Give an outline of the soil composition with a suitable diagram.

4. Answer any **one** question: $10 \times 1 = 10$

a) Outline soil orders and their major characteristics according to USDA soil taxonomy.

b) Describe the soil forming factors in brief with necessary illustrations.

GROUP-B
(Biogeography)

[Marks : 40]

5. Answer any **two** questions: $1 \times 2 = 2$

- a) Define ecology.
- b) What is meant by primary producer?
- c) Define biosphere.
- d) What is energy flow?

6. Answer any **two** questions: $2 \times 2 = 4$

- a) What is meant by bio-geochemical cycle?
- b) Narrate the global distribution of tropical rainforest biome.
- c) What do you mean by 'biodiversity loss'?
- d) Differentiate *food chain* from *food web*.

7. Answer any **four** questions : $6 \times 4 = 24$

- a) Explain moisture as a controlling factor in the distribution of plant over the globe.
- b) Account for the life forms of tropical grassland.
- c) Illustrate the mechanism of carbon cycle in the biosphere.

- d) Elaborate the biogeographic characteristics of the tropical desert biomes.
- e) Outline the scope of Biogeography.
- f) Illustrate the flow of energy in a lake ecosystem.

8. Answer any **one** question: $10 \times 1 = 10$

- a) Establish the relationship between the global distribution of precipitation and the distribution of the world biomes.
- b) Account for the effects of climate and topography on the distribution of plants.