

**2024**

**GEOGRAPHY — HONOURS**

**Paper : DSE-A-1 and DSE-A-2**

*The figures in the margin indicate full marks.*

*Candidates are required to give their answers in their own words  
as far as practicable.*

**Paper : DSE-A-1**

**(Fluvial Geomorphology)**

**Full Marks : 50**

**Category - A**

Answer **any five** questions (each within **50** words).

2×5

1. How are paired terraces formed?
2. What is meant by stream competence?
3. Define 'Belt of no erosion'.
4. Differentiate between point bar and mid-channel bar.
5. What is river bank failure?
6. Differentiate between subcritical and supercritical flow.
7. Discuss gully erosion in brief.

**Category - B**

Answer **any four** questions (each within **150** words).

5×4

8. Discuss the scope of fluvial geomorphology.
9. Explain Horton's model of channel initiation and network development.
10. Write a short note on morphology of a delta.
11. How do channel form adjust to base level changes?
12. 'Construction of dams disturbs the equilibrium of a fluvial system.'— Justify.
13. State the principles of Integrated Watershed Management.

**Please Turn Over**

**(0460+0459)**

**Category - C**

Answer *any two* questions (each within **600** words).

10×2

14. Discuss the characteristics of large rivers of the tropics with examples.
15. Explain the mechanism of sediment entrainment with reference to Hjulström curve.
16. Classify streams according to Rosgen's stream classification system.
17. Give an account of the impact of land-use change on river degeneration.

**Paper : DSE-A-2****(Climate Change : Vulnerability and Adaptations)****Full Marks : 50****Category - A**Answer *any five* questions (each within **50** words).

2×5

1. What is electromagnetic spectrum?
2. What are proxy data?
3. Mention two human health issues of urban areas related to climate change.
4. State the purpose of climate fund.
5. Define clean development mechanism.
6. State any two adaptive strategies to combat contemporary climate change.
7. Write two steps that can be taken by the educational institutions for public sensitization on climate change.

**Category - B**Answer *any four* questions (each within **150** words).

5×4

8. What is the significance of dendochronology in climate change research?
9. Briefly discuss the heat balance of the earth.
10. Mention the role of IPCC in addressing the climate change.
11. State the impact of climate change on flora habitat.
12. What are the main goals of Kyoto Protocol?
13. Discuss the functions of COP.

**Category - C**Answer *any two* questions (each within **500** words.)

10×2

14. Explain the nature of climate change with reference to the geological time scale.

**Please Turn Over****(0460+0459)**

- 15.** What are the major greenhouse gases? Assess the impact of global warming with suitable examples.
  - 16.** Highlight the Key issues of the National Action Plan on climate change in India.
  - 17.** Discuss the role of urban local bodies and panchayats on climate change mitigation, awareness and action programmes.
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