# 2024

## GEOGRAPHY — HONOURS

Paper: DSCC-3

(Geotectonics)

Full Marks: 75

The figures in the margin indicate full marks.

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

### Category - A

Answer any ten questions (each within 50 words).

2×10

- 1. What do you mean by radio-carbon dating?
- 2. What is dendrochronology?
- 3. Differentiate between era, period and epoch.
- 4. What is asthenosphere?
- 5. What is Lehmann discontinuity?
- 6. What is 'Pacific Ring of Fire'?
- 7. Define Tripple junction.
- 8. What is MOR?
- 9. What is hotspot?
- 10. Which two plates are involved in formation of the Barren Island?
- 11. What is a caldera?
- 12. What is nappe?
- 13. Define faultline scarp.
- 14. What is mountain front sinuosity?

Please Turn Over

### Category - B

# Answer any five questions (each within 125 words).

5×5

- 15. Differentiate between relative and absolute dating of rocks.
- 16. What were the major events that occurred during the Pleistocene?
- 17. What do you mean by structural differentiation of the earth?
- 18. Differentiate between normal fault and reverse fault with help of diagrams.
- 19. Explain the tectonic characteristics and resulting landforms of an Ocean-Continent convergent plate margin.
- 20. Classify volcanic eruptions on the basis of their explosiveness.
- 21. Why basin asymmetry factor is considered as a morphometric index of tectonic activity?

#### Category - C

Answer any two questions (each within 500 words).

15×2

- 22. Classify folds with suitable diagrams and mention the bases of such classification.
- 23. Explain the major relief features of the ocean floor according to plate tectonics.
- 24. Compare the models of isostasy as proposed by Pratt and Airy and add a short note on their applicability.
- 25. Classify mountains on the basis of their mode of origin and explain each type with the help of suitable diagrams.