#### 2022

# 1st Semester Examination GEOGRAPHY

Paper: GEO 101

Full Marks: 40

Time: Two Hours

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

Paper: 101.1

(Geotectonics)

Group - A

Answer any two of the following questions:

 $2 \times 2 = 4$ 

- 1. What is Courie Point?
- 2. State the implication of  $Q_n >> 1$ .
- 3. What is Hubble's constant?
- 4. How torque is related to the genesis of magnetic property inside materials?

### Group - B

Answer any two of the following questions:

 $4 \times 2 = 8$ 

- 5. How does radioactivity help to find the dates of geological deposits?
- 'Palaeomagnetism and plate tectonic movements are interwoven' — briefly explain this idea.
- State the salient features of neotectonic movements seen in India.
- 8. Differentiate paramagnetism from ferromagnetism.

### Group - C

Answer any one of the following questions:

 $8 \times 1 = 8$ 

- 9. What is remanent magnetism? Describe, in detail, about all types of remanent magnetism which are observed in geological formation.
- 10. Elucidate orogenesis in the light of plate tectonics with special reference to Andes mountain.

Paper: 101.2

(Geomorphology)

# Group - A

Answer any two of the following questions:

 $2 \times 2 = 4$ 

Define active base level.

- 2. What is unloading stress?
- 3. What is cation exchange capacity?
- 4. Define repose angle.

# Group - B

Answer any *two* of the following questions:  $4 \times 2 = 8$ 

- Justify the nature of scale dependency in process-form relation.
- 6. How does rheological property control velocity of substance?
- 7. Assess the importance of high-magnitude rare events in geomorphology.
- 8. Why is unpaired terrace called non-cyclic?

# Group - C

Answer any one of the following questions:

 $8 \times 1 = 8$ 

- 9. Elucidate the models of drainage development with illustrations.
- 10. Explain the mechanism of floodplain development.