

M. Sc. (Previous) Examination, 2001
GEOLOGY
First Paper
Geology, Tectonics and Geomorphology)

Time—Three Hours
Maximum Marks—100

Answer **FIVE** questions in all.
Select at least **TWO** questions from
Section-A and **ONE** each from Section-B & C.
All questions carry equal marks.

SECTION A

1. Write short notes on: **5*4=20**
- (a) Olistotromes
 - (b) Joints
 - (c) Turbidites
 - (d) Diamictites
 - (e) Melange.
2. Write explanatory comments on: — **10+5+5=20**
- (a) Transform faults and their significance.
 - (b) A-C Tension Joints.
 - (c) A-Lineation and B-Lineation.
3. (A) What are Dip-isogones? How do they help in classifying the folds?
(B) What are sheath folds? Comment on their evolution. **5+5+5+5=20**
4. Write short notes on:
- (a) Cleavage fanning and refraction.
 - (b) Transposition of cleavage.
 - (c) Axial plane cleavage.
 - (d) Transacting cleavage.
 - (e) Slaty cleavage. **5*4=20**

SECTION B

5. How does seismicity help in understanding the internal constitution of the earth? **20**
6. Write a brief account of the theory of "Plate Tectonics". **20**
7. What do you understand by crustal types? Describe geological and geophysical features associated with different crustal types. **4+8+8=20**

SECTION C

8. How do the soils form? Explain the processes and give the classification of different types of soils. **5+5+10=20**
9. (A) Discuss the different stages of the evolution of a drainage system.
(B) Comment on different channel patterns. **12+8=20**
10. (A) Describe the Fluvial Cycle.
(B) Comment on Morphometric Analyses. **10+10=20**