[This question paper contains 3 printed pages]

Your Roll No. :

Sl. No. of Q. Paper : 5726

Unique Paper Code : 2193012003

Name of the Paper : Introduction to Field

Geology

Name of the Course : B.Sc.(Hons.)

Geology (NEP)

Semester : IV

Time: 2 Hours Maximum Marks: 60

Instructions for Candidates:

- (a) Write your Roll No. on the top immediately on receipt of this question paper.
- (b) Attempt any **four** questions in **all**. **All** questions carry equal marks.
- 1. Write short notes on the following:
 - (a) Clast roundness
 - (b) Mud cracks
 - (c) Load structures
 - (d) Stretching lineation.
 - (e) Map scale

- 2. (a) Briefly describe the geomorphic features associated with normal faulting.
 - (b) With the help of a diagram, briefly describe the dip and strike of an inclined plane. Also, define the rake of a lineation present on that inclined plane.
 - (c) How do the climbing ripples form?
- 3. (a) What is magnetic declination? How does it affect the bearing measured through the Brunton compass?
 - (b) Describe the morphology of a river valley. Make a contour diagram of a river valley with a prominent knick point.
- 4. (a) How do topographic contours provide valuable information about the land surface's elevation, slope steepness, and the overall terrain characteristics, and how can this information be utilized in geological mapping?
 - (b) Using suitable diagrams, briefly describe the different components of a Brunton compass and its application . 5

- **5.** (a) How do we prepare the litholog of a sedimentary succession?
 - (b) Briefly describe the aeolian landforms produced by erosive processes.
 - (c) How do the fluvial terraces form?
- **6.** How do you differentiate between the following in the field?
 - (a) Fluvial terrace and alluvial fan
 - (b) Normal grading and reverse grading
 - (c) Dextral and sinistral strike-slip faulting
