B. Sc. 2nd Semester (Honours) Examination, 2021 GEOLOGY

Course Id: 22012 Course Code: SHGEL-202C-4(T)

Course Title: Structural Geology

Time: 1 Hour 15 Minutes Full Marks: 25

The figures in the right-hand side margin indicate full marks.

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

1. Answer *any five* of the following questions:

1x5 = 5

- a. What is a noncylindrical fold?
- b. Define a graben.
- c. What is slaty cleavage?
- d. What is mullion?
- e. What is recumbent fold?
- f. What type of repetition is expected if a sequence of layered rocks is subjected to folding?
- g. Define an enechelon fault.
- h. What is cleavage fan?
- 2. Answer *any two* of the following questions:

5x2 = 10

- a. Give a comprehensive classification of faults with sketches, based on the attitude of net slip.
- b. Describe the criteria for recognition of an unconformity.
- c. Discuss with block diagrams, the orientation of principal axes of stress in normal, reverse and strike slip faults.
- d. Mention the criteria to discriminate between shear and tension joints.
- 3. Answer *any one* of the following questions:

10x1 = 10

- a. Describe with sketches the uses of axial plane cleavage in geometric analysis of an area.
- b. Briefly discuss with necessary sketches the characteristics of buckle folds.
