



UNIVERSITY OF NORTH BENGAL
B.Sc. Honours 2nd Semester Examination, 2021

CC4-GEOLOGY

STRUCTURAL GEOLOGY

Full Marks: 40

ASSIGNMENT

The figures in the margin indicate full marks.

Answer any four questions from the following

10×4 = 40

1. What do you understand by rheology of rock, discuss about its application w.r.t. rock deformation.
2. What do you understand by lineation? Discuss its relation with major structures.
3. Write short notes on the following:
 - (a) Stress and strain curve relationships
 - (b) Foliation.
4. Explain the term “neutral fold”. How many types of neutral fold can be found in nature? Name and describe them with neat sketches. 2+2+6
5. Define primary structure. Name four primary structures (at least one from sedimentary rock and one from igneous rock). Elaborate how you can conclude that a rock sequence is inverted with the help of primary structure(s). Draw sketch(es) to establish your conclusion. 2+2+4+2
6. (a) In a folded area, both the limbs of a fold are found to be dipping in the same direction. When one limb has 30° dip, the other limb shows 65° dip. How will you decide whether the fold is an antiform or a synform? 5+5
(b) Repetition of beds on map can occur in case of both fold and fault. How will you confirm that the repetition you observe is due to a fold or a fault? Explain with sketch(es).
7. Define “net slip” and “dip separation” of a fault. Draw a strike slip fault having both strike separation and dip separation values. Under which condition a strike slip fault will show no strike separation and dip separation. 4+4+2

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