

BACHELOR OF SCIENCE (B.Sc.) SIXTH SEMESTER  
**B.Sc. 4524 - GEOLOGY : Paper-I (Structural Geology)**

P. Pages : 1

Time : Three Hours



**GUG/W/18/1349**

Max. Marks : 50

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- Notes : 1. All questions are compulsory and carry equal marks.  
2. Draw neat sketches wherever necessary.

1. What is rock deformation? Describe various types of rock deformation.

**OR**

Define an Unconformity. Describe its various types.

2. What are folds? Describe any five types of folds with neat sketches.

**OR**

Give a detailed account of geometric classification of faults.

3. Describe the following :-

- |                               |                 |
|-------------------------------|-----------------|
| a) True dip and apparent dip. | b) Overlap      |
| c) Nappe                      | d) Thrust fault |

**OR**

Write short notes on :-

- |                    |                     |
|--------------------|---------------------|
| e) Rake and plunge | f) Diapir           |
| g) Columnar joints | h) Horst and Graben |

4. Write short notes on the following :-

- |                        |                            |
|------------------------|----------------------------|
| a) Compass clinometer, | b) Inlier,                 |
| c) Sheet structure     | d) Foliation and lineation |

**OR**

Write notes on :-

- |                                 |                        |
|---------------------------------|------------------------|
| e) Scope of structural Geology, | f) Outlier,            |
| g) Master joints,               | h) Ductile shear zone. |

5. Write on the following in not more than two sentences Attempt **any ten** :-

- |                          |                       |                |
|--------------------------|-----------------------|----------------|
| a) Magnetic declination, | b) Outcrop,           | c) Strike,     |
| d) Synclinal hill,       | e) Anticlinal valley, | f) Klippe,     |
| g) Axis of fold,         | h) Plunge of fold,    | i) Dip joints, |
| j) Throw of fault,       | k) Heave of fault,    | l) Tear fault  |

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