

**3 SEM TDC GEO M 1**

**2 0 1 8**

**( November )**

**GEOLOGY**

**( Major )**

**Course : 301**

**( Structure and Tectonics )**

*Full Marks : 48*

*Pass Marks : 19/14*

*Time : 2 hours*

*The figures in the margin indicate full marks  
for the questions*

**( Structural Geology )**

**( Marks : 30 )**

1. What is fold? Describe the structural elements of folded surface. Write about the morphological classification of fold.  $1+4+4=9$

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2. Write notes on any *two* of the following :

4½×2½

- (a) Joints and their classification
- (b) Criteria for recognition of faults
- (c) Stress and its types

3. What is a fault? Show the structural elements of fault with diagrams. Write on the geometric classification of faults.

1+3+5

4. (a) Draw an angular unconformity.

(b) Define Hooke's law.

(c) Choose the correct answer :

Fault is a diastrophic/non-diastrophic structure.

( Tectonics )

( Marks : 18 )

5. Write about the broad structural framework of North-East India.

Or

Write about the concept of plate tectonics.

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( 3 )

6. Write on any *two* of the following :

4×2=8

- (a) Volcanic and earthquake belt
- (b) Island arc
- (c) Deep sea trenches and mid-oceanic ridge

7. (a) Fill in the blanks :

1

Himalaya is situated between \_\_\_\_ and \_\_\_\_ tectonic plate.

(b) What is triple junction?

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