

**3 SEM TDC GEO M 1**

**2018**

( 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

( 2 )

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

$4\frac{1}{2} \times 2 = 9$

- (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.

$1+3+5=9$

- 4. (a) Draw an angular unconformity. 1
- (b) Define Hooke's law. 1
- (c) Choose the correct answer : 1  
Fault is a diastrophic/non-diastrophic structure.

( Tectonics )

( Marks : 18 )

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

8

Or

Write about the concept of plate tectonics.

8

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? 1

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