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**1 SEM TDC GEO M 1**

**2018**

( November )

**GEOLOGY**

( Major )

Course : 101

**( General Geology )**

Full Marks : 80

Pass Marks : 32/24

Time : 3 hours

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

**UNIT—1.1**

**( Introduction to Geology )**

( Marks : 15 )

1. Fill in the blanks : 1+1=2

(a) Dunite is a monomineralic rock composed almost entirely of \_\_\_\_\_ mineral.

(b) Plutonic equivalent of volcanic rhyolite is \_\_\_\_\_.

2. What are the different branches of Geology?  
How is Geology related to Physics and  
Chemistry? 1+4=5
3. Describe the Standard Geological Time Scale  
and write on its use. 8

Or

Define different types of fossil. Write on  
significance of each type of fossil in Geology.

3+5=8

UNIT—1.2

**( Physical Geology )**

( Marks : 25 )

4. Fill in the blanks : 1×3=3
- (a) The intensity of 1950 Assam  
Earthquake was \_\_\_\_\_ in the Richter  
scale.
- (b) The type of geosyncline in which  
volcanic activities are largely found to  
occur is called \_\_\_\_\_.
- (c) Cauliflower shaped dark clouds of ash  
is the characteristic feature of \_\_\_\_\_ type  
of volcanic eruption.
5. What do you mean by half-life of a  
radioactive element? Describe the suitable  
methods of dating of older and younger  
rocks. 3+3+3=9

6. Write a short note on any one of the following : 4

- (a) Isostasy  
(b) Solar system

7. What do you mean by sea-floor spreading? Explain the relationship between sea-floor spreading and plate tectonics. 3+6=9

Or

Define paleomagnetism. How does paleomagnetism help in explaining the concept of sea-floor spreading and plate tectonics? 2+7=9

UNIT—1.3

( Geomorphology )

( Marks : 25 )

8. Fill in the blanks : 1×3=3

(a) Slow downward movement of rock and soil down a low-grade slope is known as \_\_\_\_\_.

(b) Cirque is an example of \_\_\_\_\_ landform.

(c) A maturely dissected sedimentary structural dome generally develops \_\_\_\_\_ type of drainage pattern.

9. Define weathering. Describe in brief the different types of weathering. 2+7=9

10. Describe the geomorphic features developed in either fluvial or aeolian environment. 9

Or

Write an essay on geomorphology of Indian subcontinent. 9

11. Write a short note on any one of the following : 4
- (a) Geomorphic cycle
- (b) Soil profile and its use

UNIT—1.4

( Principles of Geochemistry )

( Marks : 15 )

12. Fill in the blank : 1
- The most abundant mineral in the earth's continental crust, which make up of about 41% of the crust, is \_\_\_\_\_.
13. Write a short note on any one of the following : 4
- (a) Geochemistry of the meteorites
- (b) Geochemical environment
14. Write on Goldsmith's geochemical classification of elements. 10

Or

Write in detail about geochemical mobility and association of elements. 5+5=10

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