

Total No. of Printed Pages—4

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)

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

(3)

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

★ ★ ★