

B.Sc. (Part-I) Semester-I Examination**1S : GEOLOGY (NEW)****(General Geology, Physical Geology, Mineralogy, Crystallography and Field Geology)**

Time : Three Hours]

[Maximum Marks : 80

Note :— (1) All questions are compulsory.

(2) Draw neat and well labelled diagrams wherever necessary.

1. (A) Fill in the blanks :

(i) Study of mineral is called _____.

(ii) Solar system consists of _____ number of planets.

(iii) Pot holes are formed by _____ erosion.

(iv) Pleochroism is studied under _____ light.

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(B) Choose the correct alternatives :

(i) Polarising microscope has _____.

(a) Fixed stage

(b) Rotating stage

(c) Vertical rotating stage

(d) Revolving stage

(ii) Nebula is :

(a) Rotating cloud

(b) Solid cloud

(c) Flying cloud

(d) None of the above

(iii) Mechanical weathering is called :

(a) Physical weathering

(b) Chemical weathering

(c) Biological weathering

(d) Erosional weathering

(iv) Products of Volcano include :

(a) Volcanic sand-stone

(b) Volcanic bomb

(c) Sedimentary rocks

(d) Metamorphic rocks

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(C) Answer the following in **one/two** sentences :

(i) What is crystal ?

(ii) What is axis of symmetry ?

(iii) What is seismogram ?

(iv) What is plane polarised light ?

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2. Explain the following :

(a) Branches of Geology.

(b) Planetesimal hypothesis.

(c) Composition of mantle.

OR

- (d) Rb-Sr method of age determination of rocks.
(e) Crust and mantle.
(f) Nature of core. 12
3. Describe in detail geological work done by wind.

OR

- Describe in detail geological activity of river. 12
4. Explain the following :
- (a) Epierogeny and orogeny.
(b) Types of volcano.
(c) Measurement of earthquake.

OR

- (d) Elastic rebound theory.
(e) Product of volcano.
(f) Causes of earthquake. 12
5. Describe in detail construction and working of petrological microscope.

OR

- What is form of a mineral ? Describe in detail various forms of a mineral. 12
6. Explain the following :
- (a) Elements of a crystal symmetry.
(b) Symmetry elements of cubic system.
(c) Law of constancy of interfacial angle.

OR

- (d) Symmetry elements of Hexagonal system.
(e) Parameter system of Weiss.
(f) Contact Goniometer. 12
7. Explain the following :
- (a) Toposheet.
(b) Latitude and Longitude.
(c) Signs on Toposheets.

OR

- (d) Plane table survey.
(e) Clinometer compass.
(f) Dumpy level. 12