

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. 2

(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 2

(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 ? 4

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) Epirogeny 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