

B.Sc. (Part-I) Semester—I Examination
GEOLOGY

Time : Three Hours]

[Maximum Marks :80

N.b. :— (i) **ALL** the questions are compulsory.

(ii) Draw neat diagrams wherever necessary.

1. (A) Fill in the blanks :

2

(i) The hardness of mineral orthoclase is _____.

(ii) Process of decomposition & disintegration is collectively known as _____.

(iii) Petrified wood is an example of _____.

(iv) _____ is a natural vibration of ground.

(B) Choose the correct alternatives :

2

(i) The admantine lustre is shown by :

(a) Hornblende

(b) Quartz

(c) Diamond

(d) Hypersthène

(ii) The normal class of Triclinic System had :

(a) One plane, no axis and centre

(b) No plane, one axis and centre

(c) One plane, one axis and no centre

(d) No plane, no axis and centre.

(iii) Magma changes from liquid to solid state is known as :

(a) Mineralisation

(b) Crystallisation

(c) Fractionation

(d) Differentiation

(iv) Bedding plane is the :

- (a) Junction between different Beds
- (b) Plane between planar surface
- (c) Junction between the same Beds
- (d) None of the above.

(C) Answer the following in one or two sentences :

4

- (1) What are open and closed forms ?
- (2) Name the types of Seismic waves.
- (3) What are imprints ?
- (4) Define streak.

2. Explain the following :

12

- (A) Mohorovicic discontinuity.
- (B) Fundamental Branches of Geology.
- (C) Radio-activity.

OR

- (P) Planetesimal hypothesis.
- (Q) Composition of Mantle.
- (R) Potassium-Argon method.

12

3. Explain the following :

- (A) Plane of Symmetry.
- (B) Symmetry characters of Tetragonal System.
- (C) Fracture.

OR

- (P) Colour of the mineral.
- (Q) Axis of symmetry.
- (R) Jolly's spring balance.

4. Describe the various intrusive and extrusive forms of Igneous rocks. 12

OR

What is metamorphism ? Describe the different kinds of metamorphism.

5. Explain the following : 12

- (A) Pedestal rock.
- (B) Physical weathering.
- (C) Meandering and oxbow lakes.

OR

- (P) Chemical weathering
- (Q) Channel deposits
- (R) Types of Dunes.

6. What are Volcanoes ? Describe the different types of volcanic eruptions. 12

OR

What are earthquakes ? Describe the construction and working of seismogram and seismograph.

7. Explain the following : 12

- (A) Uses of fossils.
- (B) Indo-Gangetic plains.
- (C) Orders of super position.

OR

- (P) Peninsular India.
- (Q) Carbonisation.
- (R) Geological time scale.

