

AT - 272

First Semester B. Sc. (Part - I) Examination

(Old)

GEOLOGY

P. Pages : 7

Time : Three Hours]

[Max. Marks : 80

- Note :** (1) All the questions are compulsory.
(2) Draw neat diagrams wherever necessary.

1. (A) Fill in the blanks :
- (i) 9 plane, 13 axes and center of symmetry present in ———— system.
 - (ii) The point on the earth surface directly above the focus is known as———.
 - (iii) The kyanite mineral is shown——— form.

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(iv) Concordant igneous bodies that occupy position in the crests and troughs of the fold is known as -----, 2

(B) Choose the correct alternatives :

(i) The hardness of mineral Quartz is :

- (a) Two
- (b) Five
- (c) Seven
- (d) Nine

(ii) Those substance which do not show the phenomenon of double refraction are called.

- (a) Isotropic
- (b) Anisotropic
- (c) Dispersion
- (d) Refractive index.

(iii) The normal class of hexagonal system:

- (a) No plane, no axes and no center

(b) 9 plane, 13 axes and center.

(c) 5 plane, 5 axes and center.

(d) 7 plane, 7 axes and center.

(iv) Poikilitic texture is characterized with :

(a) Presence of small crystal in a fine ground mass.

(b) Presence of large size crystal in a fine ground mass.

(c) Presence of large size crystal only.

(d) None of the above. 2

(C) Answer the following in **One** or **Two** sentences:

(1) Define cleavage.

(2) What is fossil ?

(3) What is windward ?

(4) What is sills ?

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2. Explain the following :—

(A) Nebular Hypothesis.

(B) Composition of Core.

(C) Rubidium–Strontium method.

OR

(P) Planetesimal Hypothesis.

(Q) Mantle.

(R) Carbon 14 method.

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3. What is mineral ? Describe the physical properties of mineral.

OR

What is specific gravity ? Describe the walker steel yard method of specific gravity. 12

4. Explain the following :—

(A) Kinds of metamorphism.

(B) Lopoliths and loccolith.

(C) Pillow and ropy structures of igneous rock.

OR

(P) Dykes.

(Q) Formation of sedimentary rocks.

(R) Equigranular texture of igneous rock. 12

5. Describe in detail the geological work of River.

OR

Describe in detail the geological work of wind.

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6. Explain the following :—
- (A) Cause of earthquakes.
 - (B) Product of volcanoes.
 - (C) Stages in orogenic cycle.

OR

- (P) Seismic belts of India.
- (Q) Seismograph.
- (R) Types of volcanoes.

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7. Explain the following :—
- (A) Extra peninsular.
 - (B) Index and zone of fossil.
 - (C) Order of superposition.

OR

(P) Importance of fossil.

(Q) Elements of correlation.

(R) Geological time scale.

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