

**B.Sc. (Part—I) Semester—II Examination**  
**GEOLOGY (Old) (Upto Summer—2019)**

Time : Three Hours]

[Maximum Marks : 80

**Note :—** (1) Question No. 1 is compulsory.(2) Solve total **seven** questions.

(3) Draw well labelled diagram wherever necessary.

1. (A) Fill in the blanks :

(i) Twinkling effect is best shown by the mineral \_\_\_\_\_ under plane polarised light.

(ii) Bowen's reaction series is divided into \_\_\_\_\_ and \_\_\_\_\_ series.

(iii) Suture are the characteristic of Phylum \_\_\_\_\_ .

(iv) The valuable economical mineral diamond occurs in \_\_\_\_\_ super group. 2

(B) Choose the correct answer :

(i) The light vibrates only in one plane called as :

(a) Ordinary light

(b) Polarised light

(c) White light

(d) None of above

(ii) The rock with higher percentage of felsic minerals are called as :

(a) Leucocratic

(b) Mesocratic

(c) Melanocratic

(d) All of above

(iii) The common rocks found in Archean super group are :

(a) Igneous Rocks

(b) Sedimentary Rocks

(c) Metamorphic Rocks

(d) None of above

(iv) The two valves of Brachiopod shell are joined together along a line referred to as :

(a) Radial line

(b) Hinge line

(c) Straight line

(d) None of above 2

(C) Answer in **one** or **two** sentences :

(i) What is pleochroism ?

(ii) What is reflection and refraction ?

(iii) What are Rain print ?

(iv) What is dextral coiling ? 4

2. Describe the various optical properties of Mineral under plane polarised light.

**OR**

What is polarising microscope ? Describe in detail, the parts and function of polarising microscope.

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3. Explain the following :

- (a) Physical properties of olivine.
- (b) Optical properties of Hornblende.
- (c) Mode of occurrence of Garnet.

OR

- (p) Physical properties of Muscovite.
- (q) Optical properties of Feldspar.
- (r) Mode of occurrence of Pyroxene.

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4. Describe the following :

- (a) C.I.P.W. classification.
- (b) Basic Igneous rocks.
- (c) Discontinuous Reaction series.

OR

- (p) Tabular classification of Igneous rocks.
- (q) Acidic Igneous rock.
- (r) Granite-Granodiorite.

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5. Explain the following :

- (a) Non-clastic texture.
- (b) Current bedding.
- (c) Schistose structure.

OR

- (p) Granulose texture.
- (q) Slate.
- (r) Classification of metamorphic rocks.

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6. Describe the following :

- (a) Suture of cephalopods.
- (b) Classification of Brachiopoda.
- (c) Geological history of Lamellibranchia.

OR

- (p) Dentition in Lamellibranchia.
- (q) Morphology of Brachiopoda.
- (r) Geological history of Gastropoda.

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7. Describe the classification, geological distribution, lithological characters, fossil content and economic importance of Vindhyan super-group.

OR

Describe the classification, geological distribution, lithology and fossil content and economic importance of Dharwar-Super group.

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