

AS-1381

**B.Sc. (Part-I) Semester-II Examination
GEOLOGY**

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) During Crystallization Foreign material caught up within the clear crystal are known as _____.
- (ii) Hornblende show _____ type of extinction.
- (iii) The most common rock occurring in Maharashtra state _____.
- (iv) Brachial skeleton is a character of phylum _____.

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(B) Choose the correct answer :

- (i) The mineral that shows darkness throughout the rotation of the stage under-cross-nicol is called as :
 - (a) Anisotropic
 - (b) Isotropic
 - (c) Pleochroic
 - (d) None of above.
- (ii) The Nicol are said to be crossed when two nicols are :
 - (a) Parallel to each other
 - (b) Right angle to each other
 - (c) Oblique to each other
 - (d) None of above

- (iii) In Ultrabasic igneous rock, the silica content is :
- (a) More than 60%
 - (b) 60–50%
 - (c) Less than 45%
 - (d) None of above
- (iv) Mineral which are produced in the metamorphic rock under the influence of stress is known as :
- (a) Stress-minerals
 - (b) Anti-stress-minerals
 - (c) Brecciated minerals
 - (d) None of above

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(C) Answer in **ONE** or **TWO** sentence :

- (i) What are polaroids ?
- (ii) What is Becke-line ?
- (iii) What is Basic igneous rock ?
- (iv) What are foliated rock ?

4

2. What is Petrological Microscope ? Describe in detail the parts and functions of Petrological Microscope.

12

OR

What is Nicol-Prism ? Describe the construction and working of Nicol-prism.

12

3. Describe the following :

- (a) Physical properties of Muscovite.
- (b) Optical properties of olivine.
- (c) Modes of occurrence of feldspar.

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OR

- (p) Physical properties of Hornblende
- (q) Optical properties of Augite
- (r) Mode of occurrence of Garnet.

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4. Explain the following :
- (a) Classification of igneous rock on the basis of colour index 4
 - (b) Continuous reaction series 4
 - (c) Characteristics of Acid igneous rock. 4

OR

- (p) Tabular classification of igneous rock 4
- (q) Discontinuous reaction series 4
- (r) Characteristics of Alkaline igneous rock. 4

5. Describe the following :

- (a) Ripple mark 4
- (b) Gneissose-structure 4
- (c) Conglomerate 4

OR

- (p) Graded bedding 4
- (q) Schistose-structure 4
- (r) Slate. 4

6. Explain the following :

- (a) Dentition in Lamellibranchia 4
- (b) Suture in Cephalopoda 4
- (c) Morphology of Brachiopoda. 4

OR

- (p) Morphology of Gastropoda 4
- (q) Geological history of Lamellibranchia 4
- (r) Classification of Brachiopoda. 4

7. Describe the classification, geological distribution, lithological characters, fossil content and economical importance of Vindyan supergroup. 12

OR

Describe the classification, geological distribution, lithological characters, fossils content and economical importance of Cuddapah supergroup. 12

