

4. Explain the following :—

- (a) Mineralogical classification. 4
 (b) Ultra basic rocks. 4
 (c) Granite. 4

OR

- (p) Bowens reaction series. 4
 (q) Allcoline rocks. 4
 (r) Basalt. 4

5. What are metamorphic rocks ? Describe the texture and structure of metamorphic rocks.

OR

What are sedimentary rocks ? Describe the classification of sedimentary rocks. 12

6. Describe the following :—

- (a) Dentition in lamellibranchia. 4
 (b) Classification of Brachiopods. 4
 (c) Geological history of Gastropods. 4

AR - 515

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

GEOLOGY

Paper - 2 S

P. Pages : 5

Time : Three Hours]

[Max. 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) Garnet is _____ between cross nicols.
 (ii) The end member of Bowen's reaction series _____.
 (iii) Mylonite is a product of _____.
 (iv) Archean rocks occur in _____. 2

(B) Choose the correct alternatives :—

- (i) Granite is
 (a) Basic rock.
 (b) Ultrabasic rock.

- (c) Acidic rock.
- (d) None of the above.
- (ii) Under cross nicols, feldspars are identified by
- (a) Pleochroism.
- (b) Twinkling.
- (c) Twinning.
- (d) Alteration.
- (iii) Principle rock type of Maharashtra
- (a) Sand stone.
- (b) Lime stone.
- (c) Basalt.
- (d) None of the above.
- (iv) The brachial skeleton is a character of
- (a) Brachiopoda.
- (b) Cephalopoda.
- (c) Gastropoda.
- (d) Pelecypoda. 2

- (C) Answer in **one** or **two** sentence :—
- (i) What is pleochroism ?
- (ii) What are ultra basic rocks ?
- (iii) What is gneissose structure ?
- (iv) Which is the oldest rock in India ? 4

2. What are polarisation colours ? Describe the polarisation colours in anisotropic minerals.

OR

Describe the construction and working of petrological microscope. 12

3. Explain the following :—
- (a) Physical properties of olivine. 4
- (b) Optical properties of amphibole. 4
- (c) Mode of occurrence of mica. 4

OR

- (p) Physical properties of mica. 4
- (q) Optical properties of pyroxenes. 4
- (r) Mode of occurrence of feldspar. 4

OR

- (p) Suture in cephalopods. 4
(q) Morphology of Brachiopods. 4
(r) Geological history of lamellibranchia. 4

7. Explain the following :—

- (a) .Economic importance of Archeans. 4
(b) Classification of Dharwar supergroup. 4
(c) Stratigraphy of Maharashtra. 4

OR

- (p) Vindhyan super group. 4
(q) Sakoli series. 4
(r) Classification of Cuddapah. 4



