

B.Sc. Part—II Semester—III Examination

3S—GEOLOGY

Time : Three Hours]

[Maximum Marks : 80

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

1. (A) Fill in the blanks :— 2
- (i) In trilobita the middle, more rounded part is known as \_\_\_\_\_ and two lateral Parts are \_\_\_\_\_.
  - (ii) In phase rule the temperature and pressure are termed as \_\_\_\_\_.
  - (iii) Cavity filling and replacement are the \_\_\_\_\_ deposits.
  - (iv) Magnetite, Hematite and Limonite are the ore forming minerals of \_\_\_\_\_.
- (B) Choose the correct alternatives :— 2
- (i) Following is acidic igneous rock :
    - (a) Basalt
    - (b) Gabbro
    - (c) Granite
    - (d) None of the above.
  - (ii) Peristome is made up of mouth and surrounding tissue up to the lower margin of :
    - (a) Apical disc
    - (b) Corona
    - (c) Plates
    - (d) Cephalic shield.

(iii) The Magmatic deposits according to its stage of concentration is divided into :

- (a) Epithermal and mesothermal
- (b) Hydrothermal and mesothermal
- (c) Contact and metasomatism
- (d) Early magmatic and late magmatic.

(iv) In echinoides genital plates are larger than :

- (a) Compound plates
- (b) Ocular Plates
- (c) Madreporic plates
- (d) Suranal plates.

(C) Answer the following in **ONE** sentence :-

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- (1) What is Periproct ?
- (2) What is microfossil ?
- (3) What is placer deposits ?
- (4) What is gossan ?

2. Explain the following : -

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- (a) Tenor of Ore
- (b) Metallic and non-metallic minerals
- (c) Cavity filling deposits.

**OR**

- (p) Late magmatic deposits
- (q) Gangue Mineral
- (r) Skarn deposits.

3. Describe the Oxidation and supergene sulphide enrichment processes.

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**OR**

What are residual deposits ? Describe the processes of residual concentration deposits.

4. Explain the following : 12
- (a) Three component system
  - (b) Mixed crystal
  - (c) Eutectic K-Feldspar.

**OR**

- (p) Two component system of Plagioclase Feldspar
  - (q) Concept of phase
  - (r) One component system of Quartz.
5. Explain the following :— 12
- (a) Granite-Granodiorite-Diorite
  - (b) Consanguinity
  - (c) Kindreds of igneous rock.

**OR**

- (p) Mineralogical characters of Alkaline rock
  - (q) Petrographic Provinces and Periods
  - (r) Gabbro-Anorthosite-Peridotite.
6. Describe the classification, morphological characters, environment and geological distribution of phylum foraminifera. 12

**OR**

Describe the classification, morphological characters, environment and geological distribution of Phylum Echinodermata.

7. Explain the following :— 12
- (a) Pygidium
  - (b) Morphology of Anthozoa
  - (c) Applications of Palaeogeographic and Palaeoclimatic reconstruction.

**OR**

- (p) Geological history of Anthozoa
- (q) Applications of Palaeontologic data in Evolution.
- (r) Morphology of Trilobites.

