AR – 540

Third Semester B. Sc. (Part - II) Examination

3.S : GEOLOGY

P. Pages : 6

Time : Three Hours] [Max. Marks : 80

Note : (1) All questions are compulsory.
(2) Draw neat well labelled diagram wherever necessary.

1. (A) Fill in the blanks :—

(i) In phase diagram the melting point curve is known as _____

(b) Cavity filling and replacement are the _____ type of deposits.

(c) In regular Echinoides the mouth and anus is located at _____

(d) The deposits which are formed simultaneously along with country rock are called as _____ . 2

(B) Choose the correct alternatives.

(a) Waste material associated with the ore mineral is called as -

(i) Guange minerals

(ii) Gems

(iii) Rock forming minerals

(iv) None of the above

(b) The largest septa in corallite is known as -

(i) Primary septa

(ii) Secondary septa

(iii) Tertiory septa

(iv) None of the abvoe

(c) Gabbro-Anorthosite-Periodotite association falls in -

(i) Acidic rock

(ii) Alkaline rock

(iii) Basic and ultrabasic rock

(iv) None of the above

(d) Placer deposits are formed as a result of -

(i) Residual liquid segregation type

(ii) Residual concentration

(iii) Mechanical concentration

(iv) All of above 2

(C) Answer the following in one sentence :-

(a) What are Gossan ?

(b) What is Pygidium ?

(c) What are mixed crystal ?

(d) What are Telethermal deposits. 4

2. Explain the following.

(a) Metalic and non-metalic deposit. 4

(b) Metalogenic epoch and provience. 4

(c) Late magmatic deposits. 4

OR

(p) Tenor of ore 4

(q) Early magmatic deposit. 4

(r) Guange minerals. 4

3. What are placer deposits? Describe the mechanical concentration process. 12

OR

Describe the oxidation and supergene sulphide enrichment process of ore deposits. 12

4. Explain the following :—

(a) Phase-component system. 4

(b) Two component system. 4

(c) Eutectic temperature. 4

OR

(p) One-component system. 4

(q) Mixed crystal. 4

(r) Phase Rule. 4

5. Describe the following :-

(a) Variation diagram. 4

(b) Kindreds. 4

(c) Petrographic province and period. 4

OR

(p) Granite-Granodiorite-Diorite. 4

(q) Consanguinity. 4

(r) Distribution of rock in space and time. 4

6. Explain the following :-

(a) Morphological characters of Echinoidea. 4

(b) Geological history of foraminifera. 4

(c) Basic idea about micropalaeontology. 4

OR

(p) Morphology of foraminifera. 4

(q) Geological history of Echinoidea. 4

(r) Basic idea about Microfossils. 4

7. Describe the Morphological characters. Environment, classification and geological history of Anthozoa. 12

OR

Describe the Morphological characters classification, environment and geological history of Trilobita. 12