

B.Sc. (Part-III) (Semester-VI) Examination
GEOLOGY

Time : Three Hours]

[Maximum Marks : 80

Note :— (1) All questions are compulsory.

(2) Draw neat and well labelled diagrams wherever necessary.

1. (A) Fill in the blanks :-

- (i) An assembly of vertical photos of an area, cut & pasted together is known as _____.
 - (ii) If the amount of dip of fault plane is less than 45° , the fault is called as ____ fault.
 - (iii) Channel sampling method is best suited for ____ deposits.
 - (iv) The movement & distribution of elements in the earth crust is referred as ____.
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(B) Choose correct alternatives :-

- (i) In gravity fault, the hanging wall moves-
 - (a) Upwards
 - (b) Downwards
 - (c) Obliquely
 - (ii) When prismatic or columnar minerals orient themselves parallel to one another, the texture is called as-
 - (a) Lineation
 - (b) Foliation
 - (c) Crenulation.
 - (iii) The magnetic method is suitable for-
 - (a) Iron deposits
 - (b) Copper deposits
 - (c) Coal deposits.
 - (iv) The oblique photographs in which the horizon is not seen are known as-
 - (a) High oblique
 - (b) Low oblique
 - (c) Tilted photograph.
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(C) Answer in one or two sentences :-

- (i) What is thrust fault?
 - (ii) What is geobotanical prospecting?
 - (iii) Write down the principle of gravity method.
 - (iv) What is elastic strain?
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2. Define stress and strain. Describe in detail the deformation of rocks & various types of deformation. 12
- OR**
- Describe in detail determination of stress by deformed conglomerate method. 12
- OR**
3. Explain the following :-
- (a) Throw & Heave. 4
 - (b) Dip slip fault & strike slip fault. 4
 - (c) Kinds of foliation. 4
- OR**
- (p) Hanging wall & foot wall. 4
 - (q) Horst & Graben. 4
 - (r) Origin of lineation. 4
4. Describe in detail the construction & working of pocket & mirror stereoscopes. 12
- OR**
- What is photogeology? Describe in detail aerial photographs and its types. 12
5. Discuss the following :-
- (a) Tone & texture. 4
 - (b) Guidelines for geomorphic interpretation. 4
 - (c) Applications of remote sensing. 4
- OR**
- (p) Vertical exaggeration. 4
 - (q) Lithological guidelines 4
 - (r) Applications of photogeology. 4
6. Describe the following :-
- (a) Structural controls of ore localization. 4
 - (b) Coning & quartering. 4
 - (c) Calculation of ore reserves. 4
- OR**
- (p) Sampling & its types. 4
 - (q) Stratigraphic controls of ore localization. 4
 - (r) Calculation of grades of ore. 4
7. Give an account of the following :-
- (a) Magnetic method. 4
 - (b) Self potential method. 4
 - (c) Geochemical cycle. 4
- OR**
- (p) Seismic method. 4
 - (q) Resistivity method. 4
 - (r) Geobotanical prospecting. 4