

AS-1479

B.Sc. (Part—III) Semester—VI Examination

GEOLOGY

Time : Three Hours]

[Maximum Marks : 80

Note :— (1) **ALL** questions are compulsory.

(2) Draw well labelled diagrams wherever necessary.

1. (A) Fill in the blanks : 2

(i) The instrument is used to view the aerial photograph in 3.D. is called _____

(ii) Conning and quartering method is used for _____

(iii) Art of collection of sample is known as _____

(iv) Seismic method is widely used for prospecting _____

(B) Choose the correct alternative : 2

(i) Sample collected along the line at suitable interval :

(a) Chip sample

(b) Bulk sample

(c) Bore hole sample

(d) None of the above

(ii) The cheapest, easiest and fastest geophysical method is _____

(a) Electrical

(b) Gravity

(c) Seismic

(d) Magnetic

(iii) Drill-hole sampling method is used for :

(a) Ore depo. at greater depth

(b) Ore depo. at shallower depth

(c) Ore depo. at the surface

(d) None of the above

(iv) Failure surface along which the opposite blocks more past each other are called as :

(a) Joints

(b) Faults

(c) Shear

(d) None of the above

(C) Answer the following in **one** sentence : 4

- (i) What is Foliation ?
- (ii) What are Reverse Faults ?
- (iii) Define Remote Sensing.
- (iv) What is Strain ?

2. Explain the following :

- (a) Effect of temperature 4
- (b) Stress-Strain 4
- (c) Types of deformation. 4

OR

- (p) Effect of confining pressure 4
- (q) Strain by initial spherical objects 4
- (r) Inter-relationship of strain and time. 4

3. What are faults ? Describe the nomenclature of fault. 12

OR

What is Lineation ? Describe the various types of Lineation. 12

4. Explain the following :

- (a) Scope of photogeology and remote sensing 4
- (b) Pocket stereoscope 4
- (c) Aerial photograph. 4

OR

- (p) Satellite imageries 4
- (q) Drift and Crab. 4
- (r) Overlap and Sidelap. 4
- 5. Describe in detail the different elements of photo-recognisatoin. 12

OR

- Describe the guidelines for lithological interpretation. 12
- 6. Explain the following :
 - (a) Structural control of ore localisation. 4
 - (b) Drill hole sampling 4
 - (c) Polygon method. 4

OR

- (p) Channel sampling 4
- (q) Conning and quatering method. 4
- (r) Isopach method. 4
- 7. Explain the following :
 - (a) Gravity method 4
 - (b) Geochemical cycle 4
 - (c) Surface geophysical method. 4

OR

- (p) Magnetic method 4
- (q) Resistivity method 4
- (r) Geobotanical method. 4

