

[This question paper contains 2 printed pages.]

Sr. No. of Question Paper : 898

E

Your Roll No.....

Unique Paper Code : 219604

Name of the Course : B.Sc. (H) Geology

Name of the Paper : Exploration Geology [ET-3]

Semester : VI

Duration : 3 Hours

Maximum Marks : 75

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. All questions carry equal marks.
3. Answer any five questions.

1. Write short notes on :

- (a) Bore hole logging
- (b) Resistivity logging
- (c) Channel sampling

2. Write notes on :

- (a) Open pit mining versus Underground mining
- (b) Geochemical prospecting

3. Briefly describe the utility of geophysical methods in prospecting of mineral deposits. Discuss in detail the gravity method.

4. What are geochemical anomalies ? What is primary dispersion ? How do they take place ?

5. Write notes on :
 - (a) Usefulness of core drilling in exploration
 - (b) Prospecting guides

6. Discuss briefly the following in terms of UNFC classification :
 - (a) Codification
 - (b) Quantification

7. Define the following in terms of sampling (**any five**) :
 - (a) Mean
 - (b) Mode
 - (c) Median,
 - (d) Standard deviation
 - (e) Symmetrical and non-symmetrical variation
 - (f) Krigging

8. What are the principles of reserve estimation ? Describe reserve estimation based on geometrical models (square blocks and triangular blocks).