

Roll No.

Total Pages : 2

CMDQ/D-23

5213

GEOPHYSICAL PROSPECTING

Paper–GT–505

Time Allowed : 3 Hours]

[Maximum Marks : 100

Note : Attempt **five** questions in all, selecting **one** question from each Unit. Question No. **1** is compulsory. All questions carry equal marks.

Compulsory Question

1. Write short notes on the following : 4×5=20
- (a) Different electrode configurations in electrical resistivity method.
 - (b) Gravity anomaly.
 - (c) Geophones and Hydrophones.
 - (d) Receiver loop configuration.

UNIT-I

2. Justify importance of geophysical methods of prospecting in growth of economy of nation. 20
3. Write notes on the following : 2×10=20
- (a) Gravity method
 - (b) Bouguer anomaly.

UNIT-II

4. Write a detailed note on magnetic method and its applications. 20
5. (a) Magnetometers and discuss application in magnetic method.
- (b) What are the magnetic anomalies and their importance? 2×10=20

UNIT-III

6. Discuss various seismic methods and their applications in geology. 20
7. Write notes on the following : 2×10=20
- (a) Data acquisition and interpretation of seismic studies in geology.
 - (b) Applications of seismic methods in geology.

UNIT-IV

8. Explain different configurations used in electrical resistivity method. 20
9. Write notes on the following : 2×10=20
- (a) Sounding and Profiling
 - (b) Electromagnetic method.