

(Following Paper ID and Roll No. to be filled in your
Answer Books)

Paper ID :

Roll No.

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B.TECH.

Theory Examination (Semester-IV) 2015-16

GEOPHYSICAL PROSPECTING METHOD

Time : 3 Hours

Max. Marks : 100

Section-A

1. Attempt all questions (10×2 = 20)

- (a) Define NMO.
- (b) Acoustic impedance.
- (c) Electrical property of rock.
- (d) Define Crossover distance.
- (e) Residual anomaly and regional anomaly.
- (f) Electrical prospecting for oil exploration.
- (g) Give the formula of Seismic P-S wave velocity.
- (h) Give the two example of Paramagnetic substance and diamagnetic substance.

(1)

P.T.O.

- (i) Define skin depth.
- (j) Define wave Attenuation.

Section-B

2. Attempt any five questions [5×10=50]

- (a) Explain Geophysical method commonly used in oil & gas exploration.
- (b) Explain instruments used for gravity survey.
- (c) Explain MT Surveying.
- (d) Explain seismic source. EXPLOSIVE and NON-EXPLOSIVE Source.
- (e) Explain four electrode configuration methods.
- (f) Discuss principle of CDP and CMP with diagram.

Section-C

Attempt any two questions (15×2=30)

- 3. (a) Principle instruments used for magnetic field measurement PPM in Detail.
- (b) Gravity anomalies of horizontal and sphere geological features.

4. Describe-

- (a) Explain self potential method. Type and field measurement in detail.
- (b) Explain principle of equivalence and suppression in data interpretation.

5. (a) Seismic wave, their characters and law

(b) Up hole Surveys

(c) Explain 3-D Seismic survey

