



C09-MNG-306

3266

BOARD DIPLOMA EXAMINATION, (C-09)

MARCH / APRIL - 2019

DMNG - III SEMESTER EXAMINATION

MINE SURVEYING - I

Time : 3 Hours]

[Total Marks : 80

PART - A

3×10=30

- Instructions :**
- (1) Answer **ALL** questions.
 - (2) Each question carries **THREE** marks.
 - (3) Answer should be brief and straight to the point.

- 1 List the classification of surveying.
- 2 List the reasons for incorrect length of chain.
- 3 List the steps in chain surveying.
- 4 Define the term reconnaissance.
- 5 Convert the Whole circle bearings (a) $20^{\circ}30'$ (b) $97^{\circ}30'$ into Quadrantal bearings.
- 6 Convert the Quadrantal bearings (a) $N30^{\circ}W$ (b) $S45^{\circ}E$ into whole circle bearings.
- 7 State the purpose of highest flood level.
- 8 State the applicability and merits of reciprocal levelling.
- 9 Define the term index error.
- 10 List the fundamental lines of a transit theodolite.

3266]

1

[Contd...

PART - B**10×5=50**

- Instructions :**
- (1) Answer any **FIVE** questions.
 - (2) Each question carries **TEN** marks.
 - (3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.

- 11 Explain the method of measuring distance on sloping ground (Stepping method) with sketch.
- 12 Describe the method of chaining where vision is free but chaining obstructed with sketch.
- 13 Explain the types of offsets and applicability of each.
- 14 Following are the observed bearings of the lines of a traverse. Calculate the interior angles. Apply usual check.

Line	F.B.	B.B.
AB	107°15 ^l	287°15 ^l
BC	22°00 ^l	202°00 ^l
CD	281°30 ^l	101°30 ^l
DE	189°15 ^l	9°15 ^l
EA	124°45 ^l	304°45 ^l

- 15 Define the terms :
 - (a) Dip (b) Apparent dip (c) Included angle
- 16
 - (a) Explain the fundamental lines of dumpy level.
 - (b) List the temporary adjustments of dumpy level.
- 17 Explain the following with neat sketch :
 - (a) Simple levelling
 - (b) Compound levelling
- 18 Describe the repetition method of measurement of horizontal angle with neat sketch.