



5699

C16-MNG-406

5699

**BOARD DIPLOMA EXAMINATION, (C-16)
OCTOBER/NOVEMBER-2018
DMNG - FOURTH SEMESTER EXAMINATION**

MINE SURVEYING – II

Time : 3 Hours]

[Total Marks: 80

PART-A

3X10=30

Instructions :

1. Answer **All** questions.
2. Each question carries **Three** marks.
3. Answer should be brief and straight to the point and shall not exceed five simple sentences.

1. State the Bowdich Rule of balancing the traverse.
2. Define the terms (a) Vertical curve (b) Super elevation.
3. Write formula to compute (a) Length of long chord (b) Raise of a simple curve
4. State the purpose of correlation.
5. Write in brief about Weisbach triangle.
6. State the triangle of Tacheometric surveying
7. Write short notes on Anallatic lens.
8. Define the terms (a) Apparent dip (b) Fault
9. List the applications of remote sensing in Mining.
10. List the modern surveying equipment

PART-B

10X5=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. Calculate the length and bearing of the closing line – FA.

Line	Meridian bearing	Hor. Distance in m.
AB	34°	400
BC	305°	250
CD	275°30'	310
DE	225°	260
EF	148° 30'	395

12. Following are the total latitudes and departures of the vertices of a polygon in metres.

Calculate the area of the Polygon in Hectares.

Station	Total Latitude i(m)	Total departure (m)
A	0.00	0.00
B	+76.24	+432.33
C	-411.76	+432.33
D	-600.26	+105.83

13. Explain the method of setting out curve by chord and angle in underground

14. Describe the method of correlation by Co-Planning method

15. Explain the stadia method of Tacheometric surveyy .

16. (a) State the inter relation between true dip, apparent dip and strike of a mineral bed

(b) The full dip of a seam is 1 in 5 due South. Calculate the apparent dip in the direction of S 40° E

17. Three bore holes A, B and C supplied the following information of a coal seam:

Line	Bearing	Gradient
AB	S 40° E	1 in 6.5
BC	S 35° E	1 in 4.5

Calculate the direction and gradient of the true dip of the coal seam

18. State the principle of working of GPS used in Mines.
