

C14-MNG-405

4469

BOARD DIPLOMA EXAMINATION, (C-14) 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
- 1. List the fundamental lines of a transit theodolite
- 2. Define the terms (a) Transiting (b) Face Left
- 3. List the methods of Balancing the traverse.
- 4. Define (a) Simple curve, (b) Reverse curve.
- 5. State the purpose of correlation.
- 6. Define the term Weisbach triangle
- 7. State the principle of tacheometric Surveying
- 8. List the methods of tacheometric survey.
- 9. Define the terms (a) Dip (b) Strike.
- 10. The amount and direction of full dip is 1 in 2 due South. What is the gradient of a road driven on a bearing S40°W?

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Instructions:

- 1. Answer any **five** questions. Each question carries **ten** marks.
- 2. Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer
- 11. Describe the repetition method of measurement of horizontal angle.
- 12. Describe the continuous Azimuth, method of traverse.
- 13. Under noted are the details of a closed traverse:

Line	Bearing	Distance
AB	N 85° E	439m
BC	Due south	488m
CD	$\mathrm{S}~60^{\mathrm{o}}\mathrm{W}$	377m
DA	$ m N~10^{o}~W$	609.5m

Calculate the area of traverse ABCD by co-ordinate. Tabulate your calculation in proper form.

- 14. List the methods of setting out curve by chord and angle method in underground.
- 15. Describe the method of correlation by Co-Planing or Exact alignment method.
- 16. A Tacheometer is set up at an intermediate points on a traverse course AB, and the following observations are made on a vertically held staff:

Staff Stn.	Intercept	Mid-wire reading	Bearing	V. angle
A	7.42	6.71	218° 38'	-5° 30'
В	6.80	6.40	38° 37'	-6° 30'

The instrument is fitted with an anyllactic lens, and the constant is 100. Compute the length AB and the R.L. of B given that A being 226.8 units above M.S.L.

17. Derives a formula relating between true dip, apparent dip and strike of a mineral bed.

Three boreholes A, B and C supplied the following information of a the coal seam:

Line	Bearing	Gradient	
AB	S 40°W	1 in 5	
AC	S 35°E	1 in 3	

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