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Roll No. /030744

4th Sem. Branch: Civil, Constr. Mgmt., Highway Engg.
Sub : Surveying-II

Time : 3 Hrs. M.M. : 100

SECTION-A

Note: Multiple type Questions. All Questions are compulsory. (10x1=10)

- Q.1 Which method of contouring is most suitable for hilly terrain_____.
a) Cross-section method b) Square method
c) Tachnometric method d) Direct method
- Q.2 The Horizontal Distance between two points on consecutive contours is Known as_____.
a) Horizontal equivalent b) Contour elevation
c) Contour interval d) Both A & C
- Q.3 A series of closed lines on map represents a depression if _____.
a) Lower values are outside
b) Lower values are inside
c) Higher values are inside
d) None of the above
- Q.4 The axis of telescope and the line of collimation are_____.
a) One and the same b) Different
c) Perpendicular d) None of these

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- Q.5 For balancing the traverse, Correction values are determined by_____.
a) Transit Method b) Swing Method
c) Parallax method d) None of these
- Q.6 During temporary adjustment of a level _____ is used to eliminate parallax error.
a) Focusing b) Centering
c) Swinging d) Leveling
- Q.7 The multiplying constant in tachometry is
a) f/I b) $(f+d)$
c) (f/d) d) $f+i$
- Q.8 The necessity of providing a simple circular curve on the route is to change the_____.
a) Direction b) Grade
c) Both A & B d) None of the above
- Q.9 Total Station can be used for _____.
a) Elevation measurement
b) Linear measurement
c) Angular Measurement
d) All of the above
- Q.10 EDM is used for the measurement of _____ in primary triangulation and precise traversing.
a) Long Distances b) Short Distances
c) Medium Distances d) None of these

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Section-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 Contour lines cross each other in the case of _____.
- Q.12 When several contours coincides, it shows as _____.
- Q.13 For measuring the angle _____ Clamp should be unclamped.
- Q.14 Define Orientation.
- Q.15 The raising of the outer rail is known as _____.
- Q.16 Tachometry is best suited to survey a _____ ground.
- Q.17 The angle between the back tangent and forward tangent of a curve is known as _____.
- Q.18 The shift of the curve is equal to _____.
- Q.19 E.D.M. Stands for _____.
- Q.20 Planimeter is used for _____.

Section-C

Note: Short answer type Question. Attempt any twelve questions out of fifteen Questions. (12x5=60)

- Q.21 Explain indirect method of Contouring?
- Q.22 Define horizontal equivalent and contour interval.
- Q.23 Describe the process of measuring horizontal angle by repetition method.
- Q.24 List various sources of errors in Theodolite.
- Q.25 Describe the method of determining tachometric constants.

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- Q.26 What is the difference between degree of curve and radius of curve? Explain.
- Q.27 What are various types of curves used in surveying? Explain.
- Q.28 Two tangents intersect at an angle of 160° . If they are to be connected by a 10° curve then, Calculate a) length of the curve b) Apex Distance c) Tangent Length.
- Q.29 Write the procedure of measuring magnetic bearing.
- Q.30 Explain the process of measuring vertical angle.
- Q.31 Describe the Principle of EDM.
- Q.32 Write the elements of simple circular curve.
- Q.33 Write a short note on PGS systems.
- Q.34 What are the characteristics of tachnometry?
- Q.35 Define remote sensing and GIS.

Section-D

Note: Long answer questions. Attempt any two question out of three Questions. (2x10=20)

- Q.36 What are the different methods of contouring? Explain in detail.
- Q.37 Give a list of permanent adjustment of Theodolite and explain the purpose of each.
- Q.38 Calculate tachometric constants if, Two distance of 90m and 250m were accurately measured out and the intercepts on staff held vertical were 0.895 and 2.495 respectively.

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