MVR COLLEGE OF ENGINEERING AND TECHNOLOGY :AUTONOMOUS
II B.Tech I Semester Regular Examinations : February 2023
SURVEYING
(Civil Engineering)

Time :3 hours   Max.Marks:70

Answer any five Questions one Question from Each Unit
All Questions Carry Equal Marks
UNIT -I

1	A)	What is Linear Measurement? Explain various types of linear measurement devices.	7M
	B)	Explain the different operations involved in working with plane table?	7M

OR

2	A)	Classify and explain in detail about the method of surveying based upon the instruments used.	7M
	B)	What do you mean by Whole Circle Bearing? What are the Instruments Used in Prismatic Compass Survey ?	7M

UNIT -II

3	A)	What are the Characteristics and uses of Contour Maps?	7M
	B)	How do you calculate the capacity of the reservoir from the contour map?	7M

OR

4	A)	Explain the principle of leveling?	7M
	B)	The following offsets were taken at 15 m intervals from a survey line to an irregular boundary line 3.50,4.30, 6.75, 5.25, 7.50, 8.80, 7.90, 6.40, 4.40, 3.25 m Calculate the area enclosed between the survey line, the irregular boundary line, and the offsets, by: a) the trapezoidal rule b) simpson's rule	7M

UNIT -III

5	A)	Describe the following with respect to theodolite: i) Centering ii) Transiting iii) Face left observations iv) Face right observations v.)Swinging vi) Telescope normal vii) Telescope inverted.	7M
	B)	Two points A and D are connected by a traverse survey ABCD and the following records are obtained. AB = 219m , BC = 170.5, CD = 245.75m. angle ABC = 118degree 15 min, angle BCD = 180degree 50 min, assuming that AB is in meridian, determine the latitude and departure of D relative to A. Determine length AD?	7M

OR

6　A)　Explain about Omitted measurements in surveying?　　7M

　　B)　　　　　　　　　　　　　　　　　　　　　　　　　7M
　　　What is Traversing? What are the Principles of Traversing**?**

UNIT -IV

7　A)　What is curve? With neat diagram explain the the following　7M
　　　curves?
　　　　　I.　Simple curve
　　　　　II.　Compound curve
　　　　　III.　Reverse curve
　　　　　IV.　Transition curve

　　B)　Explain the method of setting out a simple curve by two　7M
　　　theodolites?

OR

8　A)　What are traditional and Modern surveying methods? What are　7M
　　　the benefits of Traditional vs Modern surveying techniques?

　　B)　Explain the principles of tachometry in detail? State the　7M
　　　advantages of Tachometric surveying?

UNIT -V

9　A)　What are the Application of Photogrammetry? Mention various　7M
　　　Advantage & Disadvantage of Photogrammetry?

　　B)　With neat diagram explain relief, tilt displacements?　7M

OR

10　A)　Explain any two photographic mapping methods?　7M

　　B)　What is aerial and radial triangulation?　7M