

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-V EXAMINATION – SUMMER 2025****Subject Code:3152208****Date:17-05-2025****Subject Name:Mine Surveying II****Time:02:30 PM TO 05:00 PM****Total Marks:70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

		Marks
<b>Q.1</b>	(a) Define curve and list out its types.	<b>03</b>
	(b) List out the problem faced during curve ranging.	<b>04</b>
	(c) Explain elements of simple curve with neat sketch.	<b>07</b>
<b>Q.2</b>	(a) Define correlation survey.	<b>03</b>
	(b) Define simple curve and compound curve.	<b>04</b>
	(c) Explain any one linear method to setting out simple circular curve.	<b>07</b>
	<b>OR</b>	
<b>Q.3</b>	(c) Give classification of methods for correlation survey.	<b>07</b>
	(a) Write purpose of correlation survey.	<b>03</b>
	(b) Explain various types of vertical curves.	<b>04</b>
	(c) Explain co-planning method of correlation survey.	<b>07</b>
	<b>OR</b>	
<b>Q.3</b>	(a) Write short note on Miner's dial.	<b>03</b>
	(b) Explain principle of photogrammetry.	<b>04</b>
	(c) Explain weisbach triangle method of correlation survey.	<b>07</b>
<b>Q.4</b>	(a) Explain types of photogrammetry.	<b>03</b>
	(b) Write purpose of stope surveying.	<b>04</b>
	(c) Explain scale of vertical photographs with neat sketch.	<b>07</b>
	<b>OR</b>	
<b>Q.4</b>	(a) Differentiate between photographs and maps.	<b>03</b>
	(b) Explain any one method of stope surveying.	<b>04</b>
	(c) Explain basic concept and applications of GPS and GIS in mining industry.	<b>07</b>
<b>Q.5</b>	(a) Write the provisions for the storage of plan and section as per regulations.	<b>03</b>
	(b) Explain remote sensing with its principle.	<b>04</b>
	(c) List out and draw any seven convention symbols used for the preparation of mine plan.	<b>07</b>
	<b>OR</b>	
<b>Q.5</b>	(a) Explain Planimeter.	<b>03</b>
	(b) Write short note on Clinometer.	<b>04</b>
	(c) Explain precautions to be taken during correlation survey.	<b>07</b>

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