

Q.No.	Questions	CO	Bloom Taxonomy Category	Marks	
<b>Section I</b>					
1	<b>Short Answer type questions.</b>				
a	Write down the applications of triangulation survey. or	CO1	Remember	<b>4 x 5 = 20</b>	
	Briefly explain First order or primary triangulation.	CO1	Understand		
b	Describe contouring, contour interval and horizontal equivalent. or	CO2	Understand		
	Elaborate Weiss quadrilateral method of correlation.	CO2	Remember		
c	Differentiate between Active and passive remote sensing. or	CO3	Understand		
	What is GIS? What are the components of GIS?	CO3	Remember		
d	What is stereopairs? list out the types of stereopairs. Also mention the application of stereopairs. or	CO4	Understand		
	What do you mean by relief displacement? Write the factors on which the relief displacement is dependent with proper equation.	CO4	Understand		
<b>Section II</b>					
	<b>Long Answer type questions.</b>				
2	Define triangulation surveying and explain its principles. Discuss the classification of triangulation, along with its specifications, and elaborate on its applications in various fields. or	CO1	Understand	<b>3 x 10 = 30</b>	
	Describe the <b>key characteristics</b> of well-conditioned triangles used in <b>triangulation surveys</b> and explain their <b>significance</b> in ensuring accurate measurements.	CO1	Understand		
3	Describe Correlation and classify it in details. or	CO2	Understand		
	Explain in details Shaft plumbing method of correlation survey.	CO2	Understand		
4	What do you understand by electro-magnetic spectrum? State the wave length regions, along with their uses, for remote sensing applications. or	CO3	Analyze		
	Discuss Spectral Reflectance of soil & vegetation & water with proper graph.	CO3	Understand		
<b>Section III</b>					
	<b>Application based questions</b>				
5	An aerial photograph was taken using a camera with a focal length of 200mm, and the average elevation of the ground in the photograph was 180m. Determine: a) The scale of the map if the flying height was 3000m. b) The flying height required to achieve a scale of 1 in 5000. or	CO4	Evaluate	<b>1 x 20 = 20</b>	
	A line <b>2500m</b> long, lying at an elevation of <b>600m</b> , measures <b>12cm</b> on a vertical photograph. The focal length of the camera used is <b>25cm</b> . Determine the scale of the photograph for an area with an elevation of <b>1400m</b> .	CO4	Evaluate		

**COURSE OUTCOME**

CO1 Illustrate & apply various survey instruments like Total Station, Theodolite, EDM used in general and mine survey, through practical and demonstrations.

CO2 Apply knowledge of surveying for understanding, formulating and solving correlation surveying problems & slope surveying.

CO3 Demonstrate GPS used in general mine survey in opencast mine.

CO4 Analyse the application of IT in surveying & GIS.