

## CONTINUOUS INTERNAL EVALUATION - 2

Dept: Civil	Sem / Div: 4A	Sub: Advanced Surveying	S Code: 18CV45
Date: 5/8/22	Time: 9:30-11:00	Max Marks: 40	Elective: N

Note: Answer any 2 full questions, choosing one full question from each part.

QN	Questions	Marks	RBT	CO's
<b>PART A</b>				
1	a Explain classification of triangulation.	8	L1	CO1
	b What are the important features to be considered in selection of site for a base line?	8	L2	CO1
	c From a Satellite station S, 5.8m from main triangulation station A, the following directions were observed.	9	L3	CO1
	A                      0°                      0'                      0"			
	B                      132°                      18'                      30"			
	C                      232°                      24'                      6"			
	D                      296°                      6'                      11"			
	The lengths of AB, AC and AD were computed to be 3265.5m, 4022.2m and 3086.4m respectively. Determine the directions of AB, AC and AD.			
<b>OR</b>				
2	a Explain Satellite station and reduction to centre.	8	L2	CO1
	b Explain important points to be kept in mind while selecting triangulation stations.	8	L2	CO1
	c From an eccentric station S, 12.25m to the west of the	9	L2	CO1

	<p>main station B, the following angles were measured.  <math>\angle BSC = 76^{\circ}25'32''</math>, <math>\angle CSA = 54^{\circ}32'20''</math>, .          The stations S and C are to the opposite sides of the line AB. Calculate the correct angle ABC if the lengths AB and BC are 5286.5 and 4932.2m respectively.</p>			
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**PART B**

3	a	Mention the advantages of total station and also explain the working principles of total station.	8	L2	CO4
	b	Define remote sensing. Explain the stages of idealized remote sensing system.	8	L3	CO4
	c	Explain the properties of electromagnetic waves and electromagnetic spectrum with neat sketches.	9	L2	CO4

**OR**

4	a	What is GIS? Explain the components of GIS.	8	L2	CO4
	b	What is GPS? Explain the applications of GPS in civil engineering.	8	L2	CO4
	c	What are the advantages of LIDAR technology?	9	L2	CO4

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Prepared by:

*(Signature)*  
HOD