CLASS: BTECH   SEMESTER: IV
BRANCH: CIVIL   SESSION: SP/2020

SUBJECT: CE208 SURVEYING

TIME: 2 HOURS   **FULL MARKS: 25**

INSTRUCTIONS:
1. The total marks of the questions are 25.
2. Candidates may attempt for all 25 marks.
3. Before attempting the question paper, be sure that you have got the correct question paper.
4. The missing data, if any, may be assumed suitably.
5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.

			CO	BL
Q1 (a)	Convert the following fore bearings of the lines into back bearings. (i) AB 12°24', (ii) BC 119°48', (iii) CD 266°30', (iv) DE 354°18'	[2]	CO1	Remember understand
Q1 (b)	What are the different systems of designation of bearings? Explain each system with neat sketches.	[3]	CO1	Remember understand
Q2 (a)	What is the principle of plane table survey?	[2]	CO1	Remember
Q2 (b)	Define the term "Radiation" of plane table survey with neat sketches.	[3]	CO1	Remember
Q3 (a)	What is error of closure?	[2]	CO1	Remember
Q3 (b)	Balance the traverse by Bowditch's method	[3]	CO2	Understand Analyze

Q3 (b)
LINE	LENGTH(m)	BEARING
AB	230	S 10 W
BC	160	S 30 E
CD	120	N 80 W
DE	195	N 15 W
EA	205	N 40 E

			CO	BL
Q4 (a)	What is principle of leveling?	[2]	CO2	Remember
Q4 (b)	The following staff readings were taken successfully with dumpy level: 0.875, 1.235, 2.310, 1.385, 2.930, 3.125, 4.125, 0.120, 1.875, 2.030 and 3.765 m. The instruments have been moved forward after the second, fourth and eight reading. Assume the Reduce level (BM) of the first point as 132.135 m. calculate the R.L. of all points by Height of Instrument method.	[3]	CO2	Understand Analyze
Q5 (a)	Explain the difference between direct and indirect method of contouring.	[2]	CO2	Understand
Q5 (b)	Explain characteristics of contours.	[3]	CO2	Understand