



R20 Regulation

Subject code: 3P3AC

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech III Semester Supplementary Examinations, December 2024

SURVEYING & GEOMATICS (Civil Engineering)

Maximum Marks: 70

Date: 06.12.2024

Duration: 3 hours

- Note:
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks (10X2M=20) Marks)		CO	Bloom Tx
1	Write the principles of survey?	1	L1
2	What is plumb Bob, with neat sketch?	1	L1
3	What is Compass survey?	2	L1
4	Define Level Line?	2	L1
5	Name the Sources of errors in theodolite?	3	L1
6	Write the formula for Trapezoidal rule?	3	L1
7	Name the methods used for setting curves?	4	L1
8	What is stadia method of Tacheometry?	4	L1
9	What are the different components of GPS?	5	L1
10	What is Total Station? Write the applications?	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		CO	Bloom Tx
11	A) Define true meridian, local attraction, magnetic declination, dip of needle and differentiate between Quadrantal bearing and whole circle bearing. [5M] B) What are the Objectives of surveying? [5M]	1	L2
OR			
12	What are the obstacles in chain surveying. Explain them with neat sketches? [10M]	1	L2
13	Explain different methods of locating Contours. [10M]	2	L2
OR			
14	Explain stadia method and tangential method in tacheometry. [10M]	2	L2
15	A) Explain in brief the various temporary adjustments of a theodolite? [5M] B) What are the different types of errors which can occur in theodolite surveying? How would you avoid them? [5M]	3	L2

	OR		
16	Briefly explain about the measurement of horizontal angle by reiteration method. And repetition Method. [10M]	3	L2
17	A) What are the principles of tacheometry? [5M] B) Explain the types of curves and their necessity? [5M]	4	L2
	OR		
18	A) Derive relation between Degree and Radius of curve? [5M] B) What are the types of simple and explain the setting out of simple curves? [5M]	4	L2
19	Explain about the electromagnetic wave theory. [10M]	5	L2
	OR		
20	What is Electromagnetic wave theory? Explain Electromagnetic distance measuring system. [10M]	5	L2

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