



R20 Regulation

Subject code: 3P5CE

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech V Semester Supplementary Examinations, November 2025

INSTRUMENTATION CONTROL SYSTEM

(ME)

Maximum Marks: 70

Date: 12.11.2025

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.
 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)		Marks	CO	BTL
1	Define Temperature Indicators.	2M	1	L1
2	Write the function of Rotameter.	2M	1	L1
3	Define Direct method.	2M	2	L1
4	What is Moisture content of gases?	2M	2	L1
5	Write any two practical significance of the gain margin	2M	3	L1
6	What is Solinide valve?	2M	3	L1
7	What is Low pressure measurement?	2M	4	L1
8	When is Thermistor?	2M	4	L1
9	What is the purpose of final control element?	2M	5	L1
10	Define Electrical tachometers.	2M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	Explain L.V.D.T with help of sketch.	10M	1	L2
OR				
12	Explain Various types of stress and strain measurements.	10M	1	L2
13	Describe the Capacitive Transducers. With line diagram.	10M	2	L2
OR				
14	Classification of control system & types of control system with diagram.	10M	2	L2
15	Briefly Measurement of Humidity.	10M	3	L2
OR				
16	Explain with sketch of piezo electric transducer.	10M	3	L2
17	Write short notes on ionization gauge with help of sketch	10M	4	L2
OR				
18	Explain the classifications of instrumentations.	10M	4	L2
19	Explain Sling psychomotor & absorption psychomotor.	10M	5	L2
OR				
20	Explain with a sketch of dial indicator.	10M	5	L2