



Regulation R18

Subject code: 2E7CA

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VII Semester Supplementary Examinations, April 2024

**INSTRUMENTATION CONTROL SYSTEM
(ME)**

Maximum Marks: 70

Date: 29.04.2024 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 10 questions. Answer any 5 questions 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)

- 1 Write Basic principles of measurement.
- 2 List any two Measurement of Levels.
- 3 List the two types Flow Measurement.
- 4 Define Pyrometers.
- 5 What is electrical strain gauge?
- 6 Classification and elimination of error.
- 7 What is Low pressure measurement?
- 8 Define Bourdon pressure gauges.
- 9 Explain the open loop system.
- 10 What McLeod pressure gauge?

Part-B

Answer All the following questions.

(10MX 5=50Marks)

- 11 Explain with a sketch of dial indicator. [10]
OR
- 12 Explain with sketch of piezo electric transducer. [10]
- 13 Classifications of instrumentations. [10]
OR
- 14 Describe the dead weight piston gauge. [10]
- 15 Explain Torsion meters, Dynamometers. [10]
OR
- 16 Explain McLeod pressure gauge with a neat sketch. [10]
- 17 Explain Electrical Humidity Sensing Absorption Hygrometer. [10]
OR
- 18 What is mechanical tachometer? Explain any two methods. [10]
- 19 Explain the Servo mechanism system. [10]
OR
- 20 Explain Sling psychomotor & absorption psychomotor. [10]