

[Total No. of Questions: 09]

[Total No. of Pages: 1]

Uni. Roll No.

Program: B.Tech (ME)

Semester: 5th

Name of Subject: Mechanical Measurement and Control

Subject Code: PCME-113

Paper ID: 16380

Time Allowed: 02 Hours

Max. Marks: 60

NOTE:

15-01-2022(E)

- 1) Each question is of 10 marks.
- 2) Attempt any six questions out of nine
- 3) Any missing data may be assumed appropriately

Q1. Give the need and classification of measurements and instruments.

Q2. What are thermistors? Explain their different forms of construction.

Q3. Explain the construction and working of Mcleod gauge used for measurement of vacuum.

Q4. Describe the properties of materials used for piezoelectric transducers.

Q5. Discuss the various sources of errors in measurement. What precautions/efforts must be made to minimize/eliminate them?

Q6. What is sine bar? How it is used for angle measurement?

Q7. Discuss the construction and working of optical radiation pyrometer. Also enlist its applications.

Q8. Discuss the construction, working and applications of a rope brake absorption dynamometer with the help of a neat sketch.

Q9. Elaborate the application of strain gauges for the measurement of torque.
