

TEE-503

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ODD SEMESTER EXAMINATION 2019-20

B.TECH V SEM (EE/EEE)

APPLIED & ELECTRONIC INSTRUMENTATION

Time: 3 Hours

Max. Marks: 100

Total no. of printed pages: 1

Note: All questions are compulsory.

Q1: Attempt any FOUR questions.

4x5=20

- What is DC Tachometer generator?
- Give classification of Transducer.
- Explain Thermoelectric effects..
- State the advantages of current telemetry system.
- What is RTD?

Q2: Attempt any FOUR questions.

2x10=20

- Give the applications of capacitive transducer.
- Explain Wheatstone bridge method for two active branches.
- What is an analog electronic voltmeter? Explain its working.
- Define the terms 'Data transmission' and 'Telemetry'.
- What is SNR? Why there is a need to improve it? And how improvement of SNR is done?

Q3: Attempt any two questions:

2x10=20

- Explain temperature compensation.
- Classify Digital voltmeters. Explain successive approximation type DVM.
- Explain the methods of improvement of signal to noise ratio.

Q4: attempt any two questions:

2x10=20

- What are the different Telemetry systems?
- Describe briefly how a strain gauge torsion meter is used to measure the torque.
- Explain pulse width modulation.

Q5: Attempt any two questions:

2x10=20

- What is load cell? Explain any one in detail.
- Explain construction and working principle Piezoelectric Accelerometer
- Explain construction and working of LVDT.