

2007 JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

III B.TECH I SEMESTER REGULAR EXAMINATIONS
INDUSTRIAL INSTRUMENTATION
(ELECTRONIC AND INSTRUMENTATION ENGINEERING)

NOVEMBER 2007

TIME: 3 HOURS
MARKS: 80

Answer any FIVE Questions
All Questions carry equal marks

MARK [5*16]

1. (a) Explain how trapezoidal method is used to measure area.
(b) Explain how planimeter is used to measure area enclosed by finite boundaries with example.
2. What are different types of electrical tachometers? Explain in detail.
3. (a) Explain in detail the measurement of force using hydraulic load cell method.
(b) Explain the working principle of electric torque measuring type with a neat sketch.
4. What is vacuum gauge? What are the different types of vacuum gauges? Explain.
5. Explain the principle used in electromagnetic type flow meters with a circuit and Write its advantages and limitations.
6. Write short notes on Hydrometer.
7. Write short notes on Photon detectors.
8. What is the use of Microphone and explain the types of Microphones.