

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. What is interferometric comparator? Explain how interferometric comparator used for comparing the length of two gauge blocks?
2. (a) Explain the working of electromagnetic transducer.
(b) Explain strain gage accelerometer.
3. (a) Describe how pendulum scale is used for measurement of force and weight.
(b) Explain in detail the principle and operation of torque measurement by using an optical method with a figure.
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 strain gauge load cell method.
7. Define radiometers and explain the fundamentals of radiation.
8. Which instruments are used for determining phase sequence of three phase supplies, classify them and explain.