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) Describe in detail about the advantages and disadvantages of various types of comparators?

(b) What are Hydraulic Comparators? Explain any one in detail.

2. (a) Explain the procedure of relative velocity measurement by using magnetic and photoelectric pulse counting methods.

- (b) Explain slipping clutch tachometer.
- 3. Explain about the elastic sensors of measuring torque.
- 4. What is vacuum gauge? What are the different types of vacuum gauges? Explain.
- 5. Write short notes on flow Nozzles.
- 6. Write short notes on strain gauge load cell method.
- 7. Write short notes on radiation pyrometers.

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8. What is the use of Microphone and explain the types of Microphones.