Code No: E105309 **RA**

III B.Tech I Semester Regular Examinations, November 2008
INDUSTRIAL INSTRUMENTATION
(Instrumentation & Control Engineering)

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. Describe in detail about absolute and relative length measurement situations with examples. [16]
2. What are different types of electrical tachometers? Explain in detail. [16]
3. What is gyroscope? How gyroscopic principle are used to measure force and torque? Explain with relevant diagrams. [16]
4. (a) What is momentum transfer gauge? Explain.
   (b) What is liquid barometer? Explain with neat sketch. [8+8]
5. Write short notes on ultrasonic type flow meters and write their advantages and limitations. [16]
6. Write short notes on strain gauge load cell method. [16]
7. Explain how an infrared radiation detector is scanned across an object. [16]
8. Explain STROBOSCOPE and STROBOSCOPIC METHODS for measurement of frequency of flash light. [16]

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