R09

Code: 9A10502

## B.Tech III Year I Semester (R09) Supplementary Examinations, May 2013 INDUSTRIAL INSTRUMENTATION

(Electronics & Instrumentation Engineering)

Time: 3 hours Answer any FIVE questions Max. Marks: 70

All questions carry equal marks

- (a) With neat schematic diagram, explain pneumatic type comparator.
  - (b) Explain in detail about dial – type protractors for angle measurement.
- With neat schematic diagram, explain revolution counters. 2 (a)
  - Explain about rotational velocity measurement. (b)
- 3 Explain with diagram, the vibrating wire force transducer. (a)
  - Describe the working and construction of gyroscopic force measurement. (b)
- Discuss about dead weight gauge. (a)
  - Discuss about Mc leod gauge. (b)
- 5 (a) Explain about mass flow meter.
  - Explain about vertex shedding type flow measurement. (b)
- Explain about radiation pyrometer with neat sketch. 6 (a)
  - Explain the laws of thermocouple. (b)
- 7 Describe the different electrical methods for measurement of liquid level.
- Explain the different methods used for measurement of humidity. 8