

**B.E., DEGREE EXAMINATIONS: MAY/JUNE 2013**

Sixth Semester

**ELECTRONICS AND INSTRUMENTATION ENGINEERING**

EIE109 : Industrial Instrumentation II

**Time: Three Hours**

**Maximum Marks: 100**

**Answer all the Questions:-**

**PART A (10 x 1 = 10 Marks)**

1. ----- is the difference between the measured and the atmospheric pressure.
  - a) Gauge pressure
  - b) Absolute Pressure
  - c) Vacuum
  - d) Differential Pressure
2. ----- is used for low pressure measurement.
  - a) Bellows
  - b) Manometers
  - c) Capsules
  - d) Diaphragm
3. Flow nozzle is a variation of -----
  - a) Venturi tube
  - b) Orifice tube
  - c) Pitot tube
  - d) Dall tube
4. ----- is also called as Herschel type flow meter
  - a) Orifice
  - b) Venturi
  - c) Flow nozzle
  - d) Dall tube
5. Piston flow meters are -----
  - a) Variable area flow meter
  - b) Quantity meter
  - c) Differential flow meter
  - d) Variable head flow meters
6. \_\_\_\_\_ is used for residential water service.
  - a) Helix type meter
  - b) Nutating disk type meter
  - c) oval gear type
  - d) reciprocating piston type
7. Electrodes of Electromagnetic flow meter are made of
  - a) Copper
  - b) Stainless steel
  - c) Iron
  - d) Aluminium
8. Dynamic weighing method is also called as \_\_\_\_\_.
  - a) hydroweighing
  - b) gravimetric method
  - c) thermo-dynamic method
  - d) none of the above



**(OR)**

b) Explain in detail about calibration procedures of flow meters.

24. a) Describe with neat sketch the construction and working of Electromagnetic flow meter. Also explain about excitation schemes used in it.

**(OR)**

b) Explain about different solid flow rate measurements.

25. a) Explain the following with necessary diagram:

(i) Level measurement using displacer. (7)

(ii) Measurement of level using Torque tube. (7)

**(OR)**

b) Explain how boiler drum level is measured using hydra step system.

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