

**V.P. & R.P.T.P. SCIENCE COLLEGE**

**B.Sc. 6<sup>th</sup> semester**

**Instrumentation (Vocational)**

**US06CINV01**

**Process Measurement Techniques II**

**Internal Test**

**Monday, 10/03/2014**

**Time: - 3:30 PM To 5:00 PM**

**Marks: - 30**



**Q1 Answer the following questions (Any three) (6)**

- (1) Give the name of quantities which can be estimated by measuring the level of fluid in the tank.
- (2) Explain working principle of the capacitance type level gauge.
- (3) Give an account on distillation method for moisture measurement.
- (4) Discuss the relationship between time and temperature in the thermal drying method of moisture measurement.
- (5) List the factor that governs the flow of fluids in closed pipes.
- (6) Explain the need for the converging and diverging cone in venturi flow meter

**Q2 Write a note on Indirect type methods of liquid level measurement. (8)**

**OR**

**Q2 Write a note on Resistance and Capacitance type methods of liquid level measurement. (8)**

**Q3 Draw the schematic diagram of the Industrial dew point apparatus (8) and explain it briefly.**

**OR**

**Q3 Explain Absorption Hygrometer and Psychrometer with necessary diagrams. (8)**

**Q4 Explain various types of the Flow Nozzles in detail and derive an expression for flow rate through flow nozzles. (8)**

**OR**

**Q4 Explain Venturi meter in detail. Mention its advantages and disadvantages. (8)**