M 22240

Reg. No. : .....

Name : .....

VII Semester B.Tech. Degree (Reg./Sup./Imp. – Including Part Time) Examination, November 2012
(2007 Admn. Onwards)
PT2K6/2K6 EC 705(E) : INDUSTRIAL ELECTRONICS

Time: 3 Hours Max. Marks: 100

I. a) Explain one method for measuring rotational velocity. **5**

b) Describe the operation of a seismic accelerometer. **5**

c) Explain the operation of a Knudsen-Gage. **5**

d) Describe the method of torque measurement using optical phase displacement method. **5**

e) Explain the operation of ultrasonic flow meter. **5**

f) Describe the air pressure balance method of measuring density. **5**

g) What is scintilation ? Explain. **5**

h) Explain the operation of a dynamic microphone. **5**

(8×5=40)

II. a) Write short notes on :

i) Free Gyro. **10**

ii) Gauge blocks. **5**

OR

b) i) What is stroboscopic effect ? Explain. **8**

ii) Write short note on :

Angle Blocks. **7**

III. a) Explain, any two methods for measuring force. **15**

OR

b) Explain the working of :

i) Bourdon Tube. **7**

ii) Knetometer. **8**

P.T.O.

IV. a) Explain the working of a turbine flow meter. What are its advantages and drawbacks. **15**

OR

b) Briefly describe any two methods for measuring density of a liquid. **15**

V. a) Explain, G eiger muller mechanism, for detection and measurement of alpha (α), beta (β) and gamma (γ) rays. **15**

OR

b) Explain two methods for measuring relative hurnidity and compare the methods adopted. **15**