DG-3188
Third Year B. Sc. (Sem. V) Examination
March/April – 2016
Electronics : Paper - X
(Measurement Systems & Industrial Instrumentation)

Time : Hours] [Total Marks : 50

Instructions :

(1) Fill up strictly the details of \( \square \) signs on your answer book.

Name of the Examination :
T. Y. B. Sc. (SEM. 5)

Name of the Subject :
Electronics : Paper - 10

Subject Code No. : 3 1 8 8 Section No. (1, 2, ....) : Nil

Seat No. :

(2) Q. 1 is compulsory.

(3) Figures at extreme right indicates full marks

Q. 1 Answer in brief.

A) State first order measurements systems 8
B) State the methods used to rectify interfering inputs.
C) What is dynamic error?
D) Write the time constants of a second order system.

Q. 2
A) Discuss fully EM flow meter along with its advantages and disadvantages. 8
B) Sketch the step and ramp input of unit amplitude. 6

OR

Q. 2
A) What is LVDT? Explain its working principle along with its advantages and disadvantages. 8
B) Discuss fully the frequency response of first order system. 6

Q. 3
A) Define second order measurement system and fins its step response and discuss any two cases in detail 8
B) Explain C-type Bordon tube and its application. 6

OR

Q. 3
A) Discuss fully the step response of first order system. Also discuss the operational impedance. 8

B) Discuss any one electrical method to measure pressure. 6

Q. 4 Write short note. (Any TWO) 14

A) Operational transfer function
B) Ultrasonic flow meter
C) Laser anemometer
D) Sinusoidal transfer function.