



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)

नीचे दशांशिक निशानीवाणी विगतो उत्तरवही पर अवश्य कभवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="text" value="T. Y. B. Sc. (SEM. 5)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="Electronics : Paper - 10"/>	<input type="text"/>
Subject Code No. : <input type="text" value="3"/> <input type="text" value="1"/> <input type="text" value="8"/> <input type="text" value="8"/>	<input type="text"/>
Section No. (1, 2,.....) : <input type="text" value="Nil"/>	
Student's Signature	

(2) Q. 1 is compulsory.

(3) Figures at extreme right indicates full marks

- Q. 1 Answer in brief. 8
- A) State first order measurements systems
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.
