Total No. of Questions : 6]

SEAT No. :

P538

[Total No. of Pages : 2

TE/Insem/APR-138

T.E. (Chemical)

PROCESS INSTRUMENTATION AND CONTROL

(2015 Pattern) (Semester - II)

Time : 1 Hour] *[Max. Marks : 30*

Instructions to the candidates :

1) ***Figures to the right indicate full marks.***
2) ***Your are advised to attempt not more than three questions.***
3) ***Neat diagram must be drawn wherever necessary.***
4) ***Use of logarithmic tables, slide rule, Mollier charts, electronic pocket calculator and steam table is allowed.***
5) ***Assume suitable data, if necessary.***

Q1) Define Instrumentation and classify the instruments based on function. **[10]**

OR

Q2) a) Explain the difference between accuracy & precision in an instrument. **[5]**

b) Write short note on digital signal transmission and processing. **[5]**

Q3) a) Explain classification of temperature measuring instruments. **[5]**

b) Explain the working of the mercury glass thermometer with the help of neat diagram. **[5]**

OR

Q4) a) Explain Seebeck effect and its application in working of a temperature measuring instruments. Name the instrument with its working diagram. **[5]**

b) Distinguish between RTD and Thermistor. **[5]**

P.T.O.

Q5) Write short notes on : **[10]**

a) Bourdon tube

b) Bellows

c) Diaphragm

OR

Q6) a) What are transducers? Explain types of transducers. **[5]**

b) Explain classification of Pressure measuring instruments. **[5]**

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