

Roll No.

24358

B. Tech. 6th Semester

(Mechanical Engineering)

Examination - May, 2012

Measurement & Instrumentation

Paper : ME - 310 - F

Time : Three Hours]

[Maximum Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complain in this regard, will be entertained after examination.

Note : Attempt any five questions out of eight.

1. (a) Explain with diagram Pneumatic controllers. 10
(b) Describe advantages & disadvantages of Pneumatic controllers. 10
2. (a) Describe signal flow graphs. 10
(b) Describe feed back control system with diagram. 10
3. Write short note on the following :
(a) Time Domain representation 10
(b) Laplace transform representation 10

4. (a) Describe with diagram Rectangular plots & also mention its merits. 10
- (b) Explain with diagram Nichols Plots with suitable application. 10
5. (a) Explain with diagram Linearly Variable Differential Transformer with advantages. 10
- (b) Explain Piezoelectric transducer. 10
6. (a) Describe bonded Resistance strain gages. 10
- (b) Describe Photo conductive transducer with suitable examples. 10
7. (a) Describe with diagram Hydraulic load cell. 10
- (b) Describe Pneumatic load cell with diagram. 10
8. (a) Explain with diagram Flow rate meters. 10
- (b) Explain principle, construction & working of Rotameters with applications. 10
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