

Code No: R05311002

R05**Set No. 2****III B.Tech I Semester Examinations, November 2010****INDUSTRIAL INSTRUMENTATION****Electronics And Instrumentation Engineering****Time: 3 hours****Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

1. Explain the measurement of force using gyroscopic transducer. Derive its transfer function. [16]
2. Classify the Rotameters and explain each one of them in brief with principle and diagram. [16]
3. (a) Enumerate the characteristics of comparators? Mention the use of comparator? [6+10]
(b) What are pneumatic comparators? Explain any one in detail. [6+10]
4. (a) What are electrical pressure transducers? Explain in detail. [8+8]
(b) How dead weight gauges are used to measure pressure? Explain. [8+8]
5. How the COUNTERS are used for frequency, phase and time measurement. Explain them with block diagram. [16]
6. Write short notes on Hydrometer. [16]
7. Explain characteristics of photo detectors and explain any one commonly used photo detector. [16]
8. Explain how contact less type tachometers are used to measure rotational speed? With neat sketches. [16]

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R05**Set No. 4****III B.Tech I Semester Examinations, November 2010****INDUSTRIAL INSTRUMENTATION****Electronics And Instrumentation Engineering****Time: 3 hours****Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

1. How the COUNTERS are used for frequency, phase and time measurement. Explain them with block diagram. [16]
2. Explain how contact less type tachometers are used to measure rotational speed? With neat sketches. [16]
3. Explain the measurement of force using gyroscopic transducer. Derive its transfer function. [16]
4. Explain characteristics of photo detectors and explain any one commonly used photo detector. [16]
5. (a) Enumerate the characteristics of comparators? Mention the use of comparator? [6+10]
(b) What are pneumatic comparators? Explain any one in detail.
6. (a) What are electrical pressure transducers? Explain in detail. [8+8]
(b) How dead weight gauges are used to measure pressure? Explain.
7. Classify the Rotameters and explain each one of them in brief with principle and diagram. [16]
8. Write short notes on Hydrometer. [16]

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R05**Set No. 1****III B.Tech I Semester Examinations, November 2010****INDUSTRIAL INSTRUMENTATION****Electronics And Instrumentation Engineering****Time: 3 hours****Max Marks: 80****Answer any FIVE Questions****All Questions carry equal marks**

1. Explain how contact less type tachometers are used to measure rotational speed? With neat sketches. [16]
2. Classify the Rotameters and explain each one of them in brief with principle and diagram. [16]
3. (a) What are electrical pressure transducers? Explain in detail.
(b) How dead weight gauges are used to measure pressure? Explain. [8+8]
4. Explain the measurement of force using gyroscopic transducer. Derive its transfer function. [16]
5. Write short notes on Hydrometer. [16]
6. (a) Enumerate the characteristics of comparators? Mention the use of comparator?
(b) What are pneumatic comparators? Explain any one in detail. [6+10]
7. How the COUNTERS are used for frequency, phase and time measurement. Explain them with block diagram. [16]
8. Explain characteristics of photo detectors and explain any one commonly used photo detector. [16]

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R05

Set No. 3

III B.Tech I Semester Examinations, November 2010

INDUSTRIAL INSTRUMENTATION

Electronics And Instrumentation Engineering

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. Explain the measurement of force using gyroscopic transducer. Derive its transfer function. [16]
2. (a) What are electrical pressure transducers? Explain in detail.
(b) How dead weight gauges are used to measure pressure? Explain. [8+8]
3. Explain characteristics of photo detectors and explain any one commonly used photo detector. [16]
4. (a) Enumerate the characteristics of comparators? Mention the use of comparator?
(b) What are pneumatic comparators? Explain any one in detail. [6+10]
5. Write short notes on Hydrometer. [16]
6. Explain how contact less type tachometers are used to measure rotational speed? With neat sketches. [16]
7. How the COUNTERS are used for frequency, phase and time measurement. Explain them with block diagram. [16]
8. Classify the Rotameters and explain each one of them in brief with principle and diagram. [16]
