

Total No. of Pages: 1

7728

Register Number:

Name of the Candidate:

PG DIPLOMA EXAMINATION December 2014

(ELECTRONICS AND INSTRUMENTATION)

120. ELECTRONICS AND DIGITAL INSTRUMENTATION

Time: Three hours

Maximum: 100 marks

SECTION – A

Answer any FIVE questions

(5 x 4 = 20)

1. What is meant by transducer? How they are classified. Give examples.
2. Write a short note on Piezo-Electric Transducers.
3. Briefly explain how temperature is measured using thermistors.
4. Briefly explain how capacitive method is used to measure moisture.
5. Briefly explain the construction and working of GM counter.
6. Write a short note on semiconductor detector.
7. Briefly explain colour CRT Display.
8. Discuss the working of a Digital Gauss Meter.

SECTION – B

Answer any FIVE questions

(5 x 16 = 80)

9. Explain the principle, construction and working of capacitive transducers.
10. Write short notes on:
 - a) Hall effect transducers
 - b) Thermistors.
11. Discuss about the measurement of Linear and Angular displacements using capacitive methods.
12. How force and torque can be measured using strain Gauges.
13. Write short notes on:
 - a) Ionisation chamber
 - b) Radiation Dosimeter.
14. Discuss in detail about the principle, construction and working of dual trace oscilloscope.
15. Explain the principle, construction and working of Digital Storage Oscilloscope.
16. Explain the principle and working of Digital Multimeter.

&&&&&&