

- Q.29 Discuss basic of printing devices.
- Q.30 Describe five merits of recorders.
- Q.31 Explain the effect of environment on instruments.
- Q.32 Explain the significance of measurement.

SECTION-D

Note: Long answer type questions. Attempt any three questions out of four questions. 3x10=30

- Q.33 Explain the different types test signals used in instrumentation system.
- Q.34 Explain the performance of first order system for unit step input.
- Q.35 Explain the construction and working of seven segment display.
- Q.36 Explain the various sources of errors in instruments.

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3rd Sem. / E.I./I.C Subject : Principles of Instrumentation

Time : 3 Hrs.

M.M. : 100

SECTION-A

Note: Objective type questions. All questions are compulsory (10x1=10)

- Q.1 Group of wires used to carry data is called_____.
- Q.2 DVD is a type of_____.
- Q.3 The unit Ramp signal is given by_____.
- Q.4 Hertz is unit of_____.
- Q.5 Energy meter is an_____ instrument.
- Q.6 Unit of voltage is_____.
- Q.7 Damping is necessary for preventing _____ of pointer.

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Q.8 The differences between _____ and measured value is called error.

Q.9 _____ is done to protect from electric shock.

Q.10 _____ is a device which scans picture, text etc.

SECTION-B

Note: Very short answer type questions. Attempt any ten questions out of twelve questions. 10x2=20

Q.11 Define the term measurement.

Q.12 Describe the meaning of time constant.

Q.13 Define accuracy.

Q.14 Explain the first order system.

Q.15 Define noise.

Q.16 Describe the term grounding.

Q.17 Name any two application of instruments.

Q.18 Interpret the term transducer.

Q.19 Define resolution.

Q.20 Describe the factors on which resistance depends.

Q.21 Define the term shielding.

Q.22 Interpret the term indicating instruments.

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. 8x5=40

Q.23 Explain the needs of instrumentation.

Q.24 Explain ramp signal with its function.

Q.25 Name different static characteristic of instruments.

Q.26 Explain the second order system.

Q.27 Explain the calibration of instruments.

Q.28 Explain the different sources of errors.

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