

CBCS Scheme

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15NT44

Fourth Semester B.E. Degree Examination, June/July 2018 Electronic Instruments and Measurements

Time: 3 hrs.

Max. Marks: 80

Note: Answer any FIVE full questions, choosing one full question from each module.

Module-1

- 1 a. Write a short note on probability of errors and limiting errors. (06 Marks)
b. Explain about DC ammeter and multi range ammeters with the help of a neat circuit diagram. (10 Marks)

OR

- 2 a. Describe in detail about RF ammeter, its types of limitations. (10 Marks)
b. Write a note on multi range voltmeter, and explain how the range of a voltmeter can be extended to measure high voltages. (06 Marks)

Module-2

- 3 a. Explain in detail about RAMP technique. Mention its advantages and limitations. (10 Marks)
b. Discuss working principle of ADC and DAC. (06 Marks)

OR

- 4 a. Explain the principle and working of integrating type DVM. (08 Marks)
b. Explain the most commonly used principles of ADC. (08 Marks)

Module-3

- 5 a. State CRT features and also discuss block diagram of oscilloscope. (08 Marks)
b. Discuss about standard signal generator with the help of a diagram. (08 Marks)

OR

- 6 a. Explain the block diagram of oscilloscope. (08 Marks)
b. Explain about the horizontal deflecting system. (08 Marks)

Module-4

- 7 a. Explain about the field strength meter with the help of the block diagram. (10 Marks)
b. Discuss about Whetstone's bridge with a neat circuit diagram. (06 Marks)

OR

- 8 a. Discuss about meter. State its advantages. (08 Marks)
b. What is Megger? Explain types of megger and working of megger. (08 Marks)

Module-5

- 9 a. With the help of neat diagram, explain the working of LVDT. Mention its advantages and limitations. (10 Marks)
b. Write a note on electrical transducers. (06 Marks)

OR

- 10 a. Explain in detail about inductive transducer and its types. (10 Marks)
b. Write a note on capacity transducer. (06 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any scribble or identification applied to evaluator and/or equations written on 47-48 = 50 will be treated as malpractice.