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Question Paper Code : 23459

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2018.

Sixth Semester

Electronics and Communication Engineering

EC 2351 — MEASUREMENTS AND INSTRUMENTATION

(Regulations 2008)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. State the function of measurement system.
2. List the various Dynamic characteristics.
3. What is meant by Phosphor burning?
4. Name the constructional parts of induction type energy meter.
5. What is Function Generator?
6. What are the constructional parts of current transformer?
7. What is a multimeter?
8. What is meant by automatic Zeroing?
9. What is IEEE 488 bus?
10. What is OTDR?

PART B — (5 × 16 = 80 marks)

11. (a) Discuss in detail the various static and dynamic characteristics of a measuring system. (16)

Or

(b) What are the condition for bridge balance? Write neat circuit diagrams describe in detail about the Maxwell bridge measurement system. (16)

12. (a) Explain the working principle of Vector Voltmeter with neat sketches. (16)

Or

(b) Explain working principle of Q-meter with neat diagrams. (16)

13. (a) Describe the working of function generator with the block diagram. (16)

Or

(b) Explain the distortion analyzer with the help of suitable diagrams. (16)

14. (a) Draw and explain the circuit of a digital frequency meter. (16)

Or

(b) Describe a "digital multimeter" with a help of a block diagram explain its working. (16)

15. (a) Explain the generalized block schematic of a Digital Data Acquisition system. (16)

Or

(b) Discuss in detail about the IEEE 488 bus characteristics, advantages and disadvantages. (16)