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October 2016

Time – Three hours
(Maximum Marks: 75)

[N.B: (1) Answer any fifteen questions in PART – A and division (A) or division (B) of each question in PART – B.

(2) Each question carries 1 (one) mark in PART – A and 12 (twelve) marks in PART – B.]

PART – A

1. Define precision.
2. Mention any two operating forces.
3. Give two examples for secondary instruments.
4. What will happen, if there is no control torque in instruments?
5. Where are shunts used?
6. What are the two types of MC instruments?
7. State the use of tong tester.
8. Name the instrument used for measuring high resistance.
9. State the unit of power and energy.
10. Name the two coils in a wattmeter.
11. List the four mechanisms in AC energy meter.
12. What is RSS meter?
13. What is maximum demand indicator?
14. Write the use of synchroscope.
15. Name any two types of frequency meters.
16. Name the two types of power factor meters.
17. Name the bridge used for the measurement of capacitance.
18. What is the expansion for CRO?
19. What is the use of Maxwell's bridge?
20. What is the main use of digital storage oscilloscope?

PART - B

21. (A) Explain with neat sketches, the various methods of damping.
(Or)
(B) Explain with neat sketches, the various types of supports in indicating instruments.
22. (A) Explain with a neat sketch, the working of an attraction type moving iron meter.
(Or)
(B) Explain with a neat sketch, the construction and working of permanent magnet moving coil instrument. Derive torque equation.
23. (A) Describe with a neat sketch, the constructional details of single phase induction type energy meter.
(Or)
(B) With a neat sketch, explain the construction and working of electro dynamometer wattmeter.
24. (A) Explain with a neat sketch, the construction and working of a three phase dynamometer power factor meter.
(Or)
(B) With a neat diagram, explain the construction and working of Merz price maximum demand indicator.
25. (A) Explain with neat diagram, the working of cathode ray tube.
(Or)
(B) Draw the block diagram of dual trace CRO and explain.
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