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Register No.:

April 2018

*Time - Three hours
(Maximum Marks: 75)*

*[N.B: (1) Q.No. 8 in PART - A and Q.No. 16 in PART - B are compulsory.
Answer any FOUR questions from the remaining in each PART - A
and PART - B*

(2) Answer division (a) or division (b) of each question in PART - C.

*(3) Each question carries 2 marks in PART - A, 3 marks in Part - B and
10 marks in PART - C.]*

PART - A

1. What is absolute instrument? Give any one example.
2. Define instrument efficiency and true value.
3. Mention the types of instrument transformers.
4. Mention the use of megger. Name the coils used in megger.
5. Differentiate active power and reactive power in AC circuits.
6. Expand RSS meter. What is its use?
7. Mention the types of phase sequence indicator.
8. Mention any two applications of CRO.

PART - B

9. Discuss about the types of secondary instruments.
10. Discuss about any three types of supports.
11. Write about any three characteristics of CT.
12. What is multimeter? Draw the DC ammeter circuit connection in multimeter.
13. Discuss about any three errors in energy meter.
14. Draw the block diagram of digital energy meter.
15. What is maximum demand indicator? Mention the advantage and disadvantage of Merz price max. demand indicator.
16. Explain about the operation of Schering bridge.

PART - C

17. (a) Explain about different operating forces in instruments.
(Or)
(b) Explain about two methods of control system in instruments.
18. (a) Explain about the working and torque equation of any one moving iron instrument.
(Or)
(b) Explain about potential transformer in detail.
19. (a) Explain about the operation of electro dynamometer type wattmeter in detail. Also mention its advantages.
(Or)
(b) Explain about the operation of 3ϕ energy meter.
20. (a) What is the use and types of synchroscope? Explain any one type in detail.
(Or)
(b) What is frequency meter? Explain in detail about Weston frequency meter.
21. (a) Explain in detail about cathode ray tube.
(Or)
(b) Explain about dual trace CRO with suitable sketch.
