

November 2022

Time - Three hours
(Maximum Marks: 100)

- [N.B. 1. Answer all questions under Part-A each question carries 3 marks.
2. Answer all the questions either (A) or (B) in Part-B each question carries 14 marks.]

PART - A

1. Compare spring control and gravity control.
2. What is meant by air friction damping?
3. State the advantages and disadvantages of PMMC instruments.
4. State the advantages and disadvantages of moving iron instruments.
5. Write notes on power measurements in AC circuits.
6. Give the advantages of Induction type energy meter.
7. Write about Maxwell's bridges.
8. Write about the circuit of Schering bridge.
9. List out the types of transducers.
10. What is piezo-resistive effect? Which transducer works under this principle?

[Turn over.....

PART - B

11. (a) What is measurement? Explain the functions of measurement systems.

(Or)

(b) Describe the applications of measurement systems.

12. (a) Draw and explain the construction and working of dynamometer type instruments.

(Or)

(b) Draw and explain the construction and working of shaded pole instruments.

13. (a) Describe the watt meters in power measurement.

(Or)

(b) Describe Electrodynamic type wattmeter.

14. (a) Explain Anderson bridge with the circuit diagram.

(Or)

(b) Explain Schering bridge method to find unknown capacitance with circuit.

15. (a) Describe with the neat diagram about the construction and working principle of Capacitive Transducer.

(Or)

(b) Describe with the neat diagram about the construction and working principle of Inductive Transducer.
