



C09-EE-603

3764

BOARD DIPLOMA EXAMINATION, (C-09)

MARCH/APRIL—2021

DEEE - SIXTH SEMESTER EXAMINATION

AC MACHINES - II

Time : 3 hours]

[Total Marks : 80

PART—A

4×5=20

Instructions : (1) Answer *any five* questions.

(2) Each question carries **four** marks.

(3) Answers should be brief and straight to the point and shall not exceed five simple sentences.

1. State the phenomenon of hunting in synchronous motors.
2. Draw the phasor diagram of synchronous motor with over excitation and constant load.
3. List the applications of synchronous motor.
4. Draw the torque – slip characteristics of three phase induction motor.
5. List the various methods of starting of three phase induction motors.
6. List the applications of three phase squirrel cage induction motor.
7. List the types of single phase induction motors.
8. Why is the single phase induction motor not a self-starting motor?
9. List the applications of single phase split phase induction motors.
10. List the applications of stepper motor.

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[Contd...

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PART—B

15×4=60

- Instructions :** (1) Answer *any four* questions.
(2) Each question carries **fifteen** marks.
(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.

11. Explain the performance of synchronous motor on load with phasor diagrams.
12. Explain anyone method of starting of synchronous motor.
13. Explain the advantages of three phase induction motors.
14. Explain the no load test conducted on three phase induction motor.
15. Explain the working of DOL starter of three phase induction motor.
16. Explain the three phase induction motor speed control by injecting voltage in rotor circuit.
17. Explain the working of single phase capacitor start induction motor.
18. State the construction and working of Universal motor.

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