

577

Register No.:

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. List out the types of DC generators.
2. What are the methods of commutation?
3. State Fleming's Left Hand rule.
4. What is meant by back emf? State its significance.
5. What is transformer? List its types.
6. What is step up and step down transformers?
7. Mention the four vector groups of 3 phase transformer.
8. Write the equations of load shared by two transformers having equal and unequal ratings.
9. List the merits of breakdown maintenance.
10. Mention any six causes of sparking in commutator.

[Turn over.....

PART - B

11. (a) State and explain Faraday's laws of electromagnetic induction, Fleming's Right Hand rule and Lenz's law.

(Or)

- (b) Explain the construction and principle of operation of DC generator with a neat sketch.

12. (a) Explain with a neat sketch, the construction and principle of working of DC motor.

(Or)

- (b) What is the necessity of starters in DC motors? Explain its types.

13. (a) Explain with a neat diagram the constructional details of core type transformer.

(Or)

- (b) Explain with a neat diagram the constructional details of shell type transformer.

14. (a) Explain the constructional details of 3 phase transformer.

(Or)

- (b) Explain about transformer accessories.

15. (a) Explain the importance of maintenance of D.C. machines.

(Or)

- (b) Explain need for maintenance of transformer oil. Also explain about the transformer oil tester.
