

**NETTUR TECHNICAL TRAINING FOUNDATION**  
**DIPLOMA IN ELECTRONICS ENGINEERING & EMBEDDED SYSTEM – CP04**  
**II SEMESTER REGULAR & SUPPLEMENTARY EXAMINATION-JUNE 2023**

**Subject: Electrical Engineering-II**  
**Subject Code: CP04204T**

**Total Time: 2 Hr.**  
**Total Marks: 50**

**PART B**

**1.0 ANSWER ANY EIGHT OF THE FOLLOWING**

**2\*8=16**

- 1.1 List down the different types of magnetic materials
- 1.2 List some of the equipment work based on the principle of electromagnetic induction.
- 1.3 How to identify the transformer is step up or step down?
- 1.4 Why transformer rating is in kva?
- 1.5 Write the EMF equation of D.C Generator & explain each terms
- 1.6 List the speed control method of DC motor.
- 1.7 Why AC generator is also called as an alternator?
- 1.8 Why the single-phase induction motor is not self-starting?
- 1.9 Write the main parts of a 3 phase induction motor.
- 1.10 Write any 4 applications of PMDC motor

**2.0 ANSWER ANY SIX OF THE FOLLOWING**

**3\*6=18**

- 2.1 With neat diagram explain the working principle of transformer
- 2.2 Write the relation between Magnetism and Electricity
- 2.3 List and explain the parts of DC generator
- 2.4 Write the classification of DC Motor.
- 2.5 Write a short note on different types of transformer losses
- 2.6 What is braking? Brief the mechanical braking and electrical braking.
- 2.7 Write the functions of slip rings & brushes of AC generator.
- 2.8 What is servo motor and write its working principle?

**3.0 ANSWER ANY FOUR OF THE FOLLOWING**

**4\*4=16**

- 3.1 Draw and explain about the three phase transformer configuration.
- 3.2 Explain the different types of induced EMF with an example.
- 3.3 Differentiate AC generator and DC generator.
- 3.4 Explain various starting methods of induction motors.
- 3.5 Explain about the auto transformer construction and its working with neat sketch
- 3.6 Draw and explain the classification of self-excited DC generator.

