

NETTUR TECHNICAL TRAINING FOUNDATION
DIPLOMA IN ELECTRICAL & ELECTRONICS ENGINEERING – CP23
V SEMESTER REGULAR & SUPPLEMENTARY EXAMINATION-JAN 2023

Subject: Power Engineering-II
Subject Code: CP23502T

Total Time: 2 Hr.
Total Marks: 50 Marks

PART B

1.0 ANSWER ANY EIGHT OF THE FOLLOWING **2*8=16**

- 1.1 Write the formula for critical disruptive voltage and explain each term
- 1.2 What do you understand by ferranti effect?
- 1.3 List the factors which affects corona
- 1.4 Name the important components of an overhead transmission line.
- 1.5 What are the steps of foundation for poles and towers?
- 1.6 What is a strain insulator and where it is used?
- 1.7 Mention the need of a substation in the power system?
- 1.8 What are the different types of D.C distributors?
- 1.9 Name the various types of symmetrical faults.
- 1.10 What does a smart grid do?

2.0 ANSWER ANY SIX OF THE FOLLOWING **3*6=18**

- 2.1 Explain the skin effect with neat diagram.
- 2.2 What are the needs of cross arm for LT and HT lines?
- 2.3 What are the different classification of substation?
- 2.4 Write any four advantages of per unit system.
- 2.5 What are the necessary requirement of cables?
- 2.6 Write any six difference between DC and AC distribution.
- 2.7 Write the comparison between Solid and stranded conductor.
- 2.8 Explain the various methods of earthing used for high voltage lines

3.0 ANSWER ANY FOUR OF THE FOLLOWING **4*4=16**

- 3.1 Explain the different types of conductor.
- 3.2 ACSR conductors are preferred for transmission and distribution lines. Give reason
- 3.3 What is the purpose of an overhead transmission line? How are these lines classified?
- 3.4 What is a sag in overhead lines? What are the various types of factors affecting sag?
- 3.5 Write the merits and demerits of underground and overhead system
- 3.6 What are the different types of unsymmetrical faults that can occur on a 3 phase system?

