NETTUR TECHNICAL TRAINING FOUNDATION

DIPLOMA IN ELECTRICAL AND ELECTRONICS-CP23

VI SEMESTER REGULAR & SUPPLEMENTARY EXAMINATION-MAY 2023

Subject: Estimation, Costing &Utilization of Energy **Total Time: 2 Hr.**

Subject Code: CP23603T **Total Marks: 50**

PART B

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

1.1 What is the functions of base load and peak load of a power station?

1.2 State the function of estimation.

1.3 Name the different equipment's used in substation

1.4 What are the various types of line support?

1.5 Discuss the methods to, manage energy management.

1.6 List the various methods for power factor improvement.

1.7 Draw the schematic diagram of compressor.How does it works?

1.8 Name the different types of gears are required for welding

1.9 Define the term utilization factor

1.10 Why the height of the roof pole should not exceed 3m?

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

2.1 State the function of load factor and diversity factor.

2.2 Write the comparison between indoor and outdoor substation.

2.3 State the function of centrifugal pump

2.4 Write the different ways of classifying the substation.

2.5 Discuss the causes of low power factor of the supply system

2.6 Write the criteria while selecting an air conditioning

2.7 State the laws of Illumination

2.8 Give the comparison between LED and Fluorescent bulb

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

3.1 What is the importance of the following terms in generation?

(i) Connected load (ii) Maximum demand (iii) Demand factor (iv) Average load

3.2 Write the merits and demerits of overhead line.

3.3 Briefly explain the working of welding transformer with neat and labelled diagram.

3.4 Briefly explain the principle of refrigeration.

3.5 Write the needs of cross arm for LT and HT lines.

3.6 State the difference between power cut and load shedding.