# NETTUR TECHNICAL TRAINING FOUNDATION <br> DIPLOMA IN ELECTRICAL \& ELECTRONICS - CP23 <br> IV SEMESTER REGULAR \& SUPPLEMENTARY EXAMINATION-JULY 2023 

Subject: Power Engineering
Subject Code: CP23403T

Total Time: $\mathbf{2} \mathbf{~ H r}$.

Total Marks: 50

## PART B

### 1.0 ANSWER ANY EIGHT OF THE FOLLOWING

1.1 Name the different parameters to select site for thermal power plant
1.2 Discuss the term deaeration process in water treatment
1.3 State the function of penstock in hydro plant
1.4 Name the types of hydro turbine.
1.5 How are water turbines mounted?
1.6 Name the byproducts of chain reaction
1.7 Discuss the term coolant in nuclear reactor
1.8 Write the functions of Lubrication.
1.9 Name the types of tidal power plants.
1.10 What are the different equipment's used in substation?

### 2.0 ANSWER ANY SIX OF THE FOLLOWING

2.1 Draw the block diagram of thermal power plant.
2.2 Give the difference between storage and pondage
2.3 Draw the labeled diagram of nuclear reactor.
2.4 Name the different methods to increase the efficiency of diesel plant.
2.5 What are the components of a photovoltaic (PV) system?
2.6 Draw the block diagram of transmission system.
2.7 Briefly explain the term HVDC transmission system.
2.8 State the functions of a) Exhaust system b) Cooling system
3.0 ANSWER ANY FOUR OF THE FOLLOWING
$4 * 4=16$
3.1 Name the different methods for water treatment? Explain any two methods.
3.2 State the function of a)
a) control rod
b) moderator
3.3 Briefly explain the working of MHD plants.
3.4 State the term a) skin effect
b) corona loss
3.5 Briefly explain the working of gas turbine power plant with neat diagram.
3.6 Discuss the different ways of classifying the substation.

