

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

Subject: Solar Technology Total Time: 2 Hr.

Subject Code: CP23304T Total Marks: 50 Marks

PART B

1.0 ANSWER ANY EIGHT OF THE FOLLOWING

2*8=16

- 1.1 Mention the condition under which MPPT is most effective
- 1.2 What are the specifications of an inverter?
- 1.3 Why black-painted utensils should not be scrubbed?
- 1.4 Why does cold water remain in bottom tank?
- 1.5 What is the basic difference between cabinet type dryer and convective type dryer?
- 1.6 What happens to the electrolyte in the battery when the cell is put on discharge?
- 1.7 What is the role of the blower in the dryer?
- 1.8 What kind of water should be added to the battery?
- 1.9 What is the different configuration of PV System?
- 1.10 What is string?

2.0ANSWER ANY SIX OF THE FOLLOWING

3*6=18

- 2.1 Brief the role of bypass diode in solar series PV module
- 2.2 Write the four steps for mounting the solar module
- 2.3 Mention "three terminologies" of solar inverter.
- 2.4 List and explain three potential reasons of using a solar cooker.
- 2.5 Which places we need to check wiring installation in solar PV panel?
- 2.6 What are the factors that varies the solar radiation to reach to the earth's surface?
- 2.7 Write three parameters that we need to check before installation of solar panel
- 2.8 Mention three activities as required for maintenance of solar panel

3.0 ANSWER ANY FOUR OF THE FOLLOWING

4*4=16

- 3.1 Write the battery cleaning procedures
- 3.2 Briefly explain the process of maintenance of batteries
- 3.3 Write three main factors which effect the output of a PV module
- 3.4 Describe the working principle of solar dryer
- 3.5 Give differences between solar PV and solar thermal energy
- 3.6 Explain briefly, working of domestic solar water heater