

Roll No.

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B. Voc. (Second Semester)
EXAMINATION, MAY-JUNE, 2022
(New course)
RENEWABLE ENERGY TECHNOLOGY AND
MANAGEMENT
(Design of Solar PV Power Plant-I)
(RETM-206)

Time : Three Hours]

[Maximum Marks : 80

नोट : सभी प्रश्नों के उत्तर दीजिए।

Note : Attempt all the questions.

1. Write briefly about ballasted footing mounts. Does it require ground penetration. **20**

OR

Give a brief description about Double role static structure with struts. Draw a neat diagram to explain the system.

20

P.T.O.

[2]

2. Workout for number of modules to be connected in series and parallel for designing of 7kW power plant using solar module having specification as $V_m = 38V$, $I_m = 8.2A$, $P_m = 850W$. Provided a charge controller having starting voltage of minimum 150V and maximum allowed current as 45 A. The operating voltage range for charge controller is 150-180V. **20**

OR

What do you mean by solar constant? Also describe Air Mass and what does AM0 signifies? **20**

3. (A) Explain the working of Lightning Arrester? How it is classified? **10**
(B) On grid or Grid tied inverter allows electricity only when the grid is available, which of the feature is responsible for this function. Explain Briefly. **10**

OR

Write short notes (any 02) **20**

- (i) Micro Grid
(ii) Grid code compliance
(iii) LVDH
4. (A) Write down the topologies for grid connected PV system. **10**
(B) Explain in brief about DC to AC conversion efficiency in case of a roof top power plant **10**

OR

Write down the steps to perform testing of Islanding Protection. **20**

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