

## F - 1578

### B. VOC. (Second Semester) EXAMINATION, May-June, 2022 Renewable energy Technology & Management

#### Installation and Commissioning of Solar PV Power Plant (RETM-208)

Time : Three Hours]

[Maximum Marks:80

1. (A) Enlist the various tools and consumable required in installation of SPV power plant? 10  
(B) Discuss the various selection criteria for BOS components of SPV plants. 10
- OR**
- (A) What are various factors that affects the electricity generation by a solar PV module. 20
2. (A) What are the different types of installation discussed in context of Solar PV Plant 20

**OR**

- (B) What are the various troubleshooting methods of PV system components. 20

3. (A) How SCADA plays crucial role in SPV Plant Management? What is the main contents of SCADA inspection report? 20

**OR**

- (A) Why we use signage and warning? Explain with the help of any 5 examples of signage and warning used in solar PV Power Plant. 20

4. (A) Efficiency of crystalline solar cell at STC is 15%. What would be its efficiency when cell operating temperature is 60° C? Consider the standard decrease per °C rise in cell temperature from STC value for crystalline SI solar cell. 10

- (B) Write down the steps involved in commissioning & System Functional Testing of SPV Plants. 10

**OR**

- (A) What are the different challenges generally faced while installing Solar PV Plant. Also draft the checklist while performing Site Survey Analysis. 20