Roll No. .....

# OLE-24427

# B. Tech. 7th Semester (EEE) Examination – April, 2021

# RENEWABLE ENERGY RESOURCES AND TECHNOLOGY

### Paper: HUM-459-F

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

- Note: Attempt *five* questions in all. Question No. 1 is compulsory. Attempt *four* more question from the sections A, B, C & D by selecting at least one question from each Section.
  - **1.** (i) What are application of non conventional and renewal energy sources ?  $5 \times 4 = 20$ 
    - (ii) Write down points of site selection for Nuclear Power Plant.

- (iii) Write down the classification of Bio Gas Plants material used in Bio Gas Plants.
- (iv) What are the Aspects of Risk & Hazard Health & risk assessment visit to site ?

### SECTION – A

**2.** Discuss Energy Sources and their availability. Explain the Prospects of renewable energy sources in India. **20** 

# OR

 Explain Green House Gas Effects and Global Environmental awareness in detail.
20

#### SECTION – B

 Explain Basic Principle of Solar Energy. Discuss physical Principal of the conversion of solar radiation into heat.
20

#### OR

 Explain Basic Principle of wind energy conversion to electric energy. What is Inter connected SYSTEM & discuss applications?

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# SECTION - C

Explain the classification of Bio Gas Plants material used in Bio Gas Plants.
20

## OR

Explain Ocean thermal electric conversion and discuss
Prospects of ocean energy in India.
20

# SECTION - D

8. Explain Basic Principle MHD SYSTEM. Derive Power OUTPUT of MHD Generation.20

# OR

9. What is Thermonic power generation ? Explain Management of Fuel in fuel cells.20