Reg. No. : | | | | | | | | | | |

Question Paper Code: 39303

B.E. / B.Tech. DEGREE EXAMINATION, DEC 2020

Elective

Electrical and Electronics Engineering

01UEE903 - NON-CONVENTIONAL ENERGY RESOURCES

(Regulation 2013)

Duration: 1.15 hrs Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

(Answer any six of the following questions)

1. Extraction of mineral and metal form the earth is: CO1- R

   (a) Agriculture (b) Transportation (c) Mining (d) Sustainable development

2. The major cause for land degradation in our country is CO1- R

   (a) Soil erosion (b) Pollution of soil (c) Water-logging (d) None of the above

3. Which of the following solar cookers is the most efficient and has the shortest cooking time? CO2- R

   (a) Box cooker **(b)** Parabolic cooker

   (c) Panel cooker **(d)** Cardboard type cooker

4. Common energy source in Indian villages is: CO2- R

   (a) Electricity (b) Coal (c) Sun (d) Wood and animal dung

5. The installed capacity of wind energy in India is about CO3- R

   (a) 8000 MW (b) 1500 MW (c) 6000MW (d) 4000 MW

6. Tidal energy utilizes CO3- R

   (a) Kinetic energy of water (b) Potential energy of water

   (c) Both (a) and (b) (d) None of these

7. Energy sources that can be continually produced and have few negative side effects are known as: CO4- R

(a) Renewable Energy Sources (b) Nonrenewable Energy Sources

(c) No such sources exist (d) Man Made Energy Sources

8. Boiling water reactor and pressurised water reactors are: CO4- R

(a) Nuclear reactor (b) Solar reactor (c) OTEC (d) Biogas reactor

9. As wave travels, intensity CO5- R

(a) Increases (b) Remains same (c) Decreases (d) Varies

10. Which of the following is a disadvantage of most of the renewable energy sources? CO5-R

(a) Highly polluting (b) High waste disposal cost

(c) Unreliable supply (d) High running cost

PART – B (3 x 8= 24 Marks)

(Answer any three of the following questions)

11. Summarize different reserves of energy resources and their potential achievements in the world. (8)

12. With suitable diagram, explain the operation of various types of solar water heating systems. (8)

13. Explain the working principle of wind energy system with a block diagram. List the procedures to select a site for wind electric generator installation. (8)

14. With diagram explain working of two stage digestion process. (8)

15. With diagram explain single basin tidal power plant . (8)