



Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956)
Re-accredited with 'A+' Grade by NAAC. Recognised by UGC Under Section 12B
Coimbatore - 641 043, Tamil Nadu, India

Master's Degree Examination – June / July 2021
II Semester

Class : I PG **Time : 3 Hours**
Major : Interior Design and Resource Management **Max. Marks : 100**

20MIRC08 Renewable Energy

Part A

10 x 1 = 10

Choose the Correct Answer

1. Which among the following exemplifies renewable energy source?
a. wind b. tides c. geothermal heat d. all the above
2. Expand IREDA.
a. International Renewable Energy Agency
b. International Radioactive Energy Agency
c. Indian Renewable Energy Development Agency Limited
d. International Renewable and Solar Energy Agency
3. Among the following _____ is used to produce biogas.
a. Fly ash b. cow dung c. Industrial Affluents d. Kitchen waste
4. Which among the following is the most common use of trapped solar energy?
a. Refrigerator b. Water heater c. Mixie d. Wet grinder
5. Geothermal energy is thermal energy present
a. on the surface of the earth b. in the interior of the earth
c. on the surface of the ocean d. none of the above
6. Photovoltaic cell converts solar energy into
a. heat energy b. electric energy
c. mechanical energy d. chemical energy
7. The simplest and cheap and abundant source of energy is
a. firewood b. wood gas c. wood charcoal d. wood pellets
8. Biomass can be converted to _____
a. methane gas b. ethanol c. biodiesel d. all the above
9. In which of the following region winds are stronger and constant?
a. deserts b. offshore c. low altitude sites d. all the above
10. Direct solar energy is used for
a. water heating b. distillation c. drying d. all the above

Part – B

5X6=30

Answer all the questions.

Each answer should not exceed 400 words or two pages

- 11.a. Define Energy. Give classification of energy sources.
(or)
- 11.b. Brief about Energy needs in India.
- 12.a. Explain about devices used for measurement of solar radiation.
(or)
- 12.b. What is Solar Green House?
- 13.a. Write about different types of wind turbine.
(or)
- 13.b. What are the advantages and disadvantages of wind energy?
- 14.a. Elaborate on relevance and application of biogas in India.
(or)
- 14.b. Give a brief note on utilization of Industrial and Municipal wastes for producing bio energy.
- 15.a. Discuss the objectives and functioning of National Institute of Wind Energy.
(or)
- 15.b. Explain about the viable energy sources for future.

Part – C

5X12=60

Answer all the questions.

Each answer should not exceed 800 words or four pages.

- 16.a. Explain in detail about Energy efficiency.
(or)
- 16.b. Write about non – renewable energy in detail.
- 17.a. Elaborate on PV systems and its applications.
(or)
- 17.b. Enumerate on Solar pump and Solar cookers
- 18.a. Explain about principles of Wind energy conversion.
(or)
- 18.b. Discuss about Geothermal energy – Benefits and challenges.
- 19.a. Describe the advantages and disadvantages of Biomass.
(or)
- 19.b. What are biofuels? Explain its importance.
- 20.a. Write about the role of IRENA in promoting renewable energy.
(or)
- 20.b. Suggest some practices to be followed in every household for harnessing energy.
