

20P119

(Pages: 2)

Name:

Reg. No.....

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2020

(CBCSS-PG)

(Regular/Supplementary/Improvement)

CC19P ESC1 C03 – ENERGY AND ENVIRONMENT

(Environmental Science)

(2019 Admission onwards)

Time: Three Hours

Maximum: 30 Weightage

I. Answer any **four** questions. Each question carries 2 weightage:

1. What is Sustainable energy management?
2. What are Fossil fuels? Give example.
3. State and explain the renewable and non renewable energy resources.
4. Comment on Magneto Hydrodynamic Power (MHD).
5. What are the advantage of bio gas energy?
6. Write note on any two.
 - a) Flat plate solar collectors
 - b) Photovoltaic cells
 - c) Solar trough collectors
7. What is radiation and radioactive material? Comment on radioactive contamination

(4 x 2 = 8 Weightage)

II. Write a short essay on any **four** of the following. Each question carries 3 weightage:

8. What are the different energy sources? Are they fulfilling the growing need of energy?
9. Brief notes on renewable energy resources. How they will bring sustainability in the use of energy
10. How does nuclear energy impact the environment?
11. Explain the energy crisis and its solutions.
12. What are the limitations of using non renewable sources of energy?
13. Explain briefly the difference between nuclear fission and nuclear fusion?
14. What are the different types of nuclear reactors?

(4 x 3 = 12 Weightage)

III. Write a long essay on any **two** of the following. Each question carries 5weightage:

15. How is the Geothermal energy used for the generation of electrical power? Discuss its advantage and disadvantages.

16. What do you mean by energy flow through an ecosystem? Explain how energy transformation through an ecosystem can be explained with two laws of thermodynamic.
17. Does nuclear power have a future or will new technologies of renewable energy be developed in the energy sector?
18. Comment on the power projects and its environmental issues mainly focus on India.

(2 x 5 = 10 Weightage)
