

Register No.:

758

April 2024

Time - Three hours
(Maximum Marks: 100)

- [N.B. 1. Answer all questions under Part-A. Each question carries 3 marks.
2. Answer all the questions either (A) or (B) in Part-B. Each question carries 14 marks.]

PART - A

1. Define Octane number.
2. List out the characteristics of coal.
3. What are the classifications of furnaces?
4. What is meant by recuperation?
5. What is biomass energy?
6. What is the working principle of wind energy conversion?
7. State any three causes for global climate change.
8. Write a short note on Indian energy scenario.
9. Define permanent hardness.
10. What is effluent?

[Turn over.....

PART – B

11. (a) Explain about production of CNG and LNG fuels.

(Or)

(b) Write a brief note on:
(i) Colloidal fuel.
(ii) Power alcohol.

12. (a) Discuss on radiation and convection recuperation with neat sketch.

(Or)

(b) Explain about the factors affecting fuel economy in the furnace.

13. (a) Discuss about the OTEC principles, utilization and setting of OTEC plants.

(Or)

(b) Explain about anaerobic and aerobic digestion.

14. (a) Explain the energy conservation Act, 2001 and its features.

(Or)

(b) Discuss about the energy for sustainable development.

15. (a) Explain about the drainage system for sudden outflow and flooding.

(Or)

(b) Discuss on effluent treatment of toxic and non-toxic chemicals.
