QP CODE: 23104492

Reg No : .....

Name : .....

B.VOC DEGREE REGULAR EXAMINATIONS, JANUARY 2023

Fifth Semester

B.Voc Renewable Energy Technology and Management

RETTS503 - ENERGY CONSERVATION TECHNIQUES

2020 Admission Only

3D7067A7

Time: 3 Hours Max. Marks : 80

Part A

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. List any two typical cause of waste generation .
2. List any 2 functions of CPCB.
3. Define sustainable development.
4. Write any two methods to minimize waste in a glass industry.
5. List any two disadvantages of using synchronous condersers for pf improvement.
6. What is a variable speed drive?
7. Differentiate AC and DC furnace.
8. Write any 2 energy saving opportunity in blowers.
9. How energy saving in lighting can be done naturally?
10. List the major parts of a steam distribution system.
11. What are refractories?
12. What are the advantages of a solar water heater?

(10×2=20)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Differentiate energy conservation and energy management.

14. Compare waste minimization and energy conservation.

15. Prepare a detailed note on preventive measures to be taken to reduce the effect of waste on environment.

16. Explain in detail on harmonics.

17. Write the equation for converting delta to star and star to delta.

18. Which are the energy conservation oppoertunities at the Refrigeration A/C Plant Area.

19. Prepare a note on cogeneration with neat diagram.

20. Suggest 5 methods to save energy in lighting system.

21. With a neat sketch explain any one method of solar cooking.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. Elabourate on energy conservation act and its features.

23. Explain various power factor improvement techniques.

24. Discuss in detail on furnaces and energy conservation in furnaces.

25. Detail on energy efficient building with appropriate digram.

(2×15=30)