22100407

QP CODE: 22100407

Reg No : .....

Name : .....

B.VOC DEGREE EXAMINATIONS, JANUARY 2022

Fifth Semester

B.Voc Renewable Energy Technology and Management

RETTS503 - ENERGY CONSERVATION TECHNIQUES

2019 Admission Onwards

5557FE31

Time: 3 Hours Max. Marks : 80

Part A

*Answer any **ten** questions.*

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

1. Write the importance of energy conservation.
2. Define energy conservation act.
3. What will happen if energy is not conserved?
4. List any two functions of SPCB.
5. Point out any two causes of low pf.
6. What is a star network?
7. For what purpose furnace is used?
8. For what purpose compressors are used?
9. List out any two advantages of VSD.
10. Write down the definition of a boiler.
11. Differentiate conventional and non conventional energy sources.
12. What is bioclimatic design?

(10×2=20)

Part B

*Answer any **six** questions.*

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

13. Suggest methods for waste minimization.

14. Match the following Wastes and resources

15. Comment on harmful effects of pollution on environment.

16. With a neat diagram explain power triangle.

17. Write a note on HVAC systems with a diagram.

18. What is condensate recovery and what are its advantages?

19. Explain condensate recovery with a neat diagram.

20. List the advantages of using LED's over conventional filament lamps emphasising the disadvantages of filament lamps.

21. How proper insulation and energy conservation in water heating systems are related?

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. Explain Waste minimization technology with help of a flow chart.

23. Prepare notes on
    (a)VSD and VFD
    (b)Eddy current drives
    (c)Slip power recovery system.

24. List out and explain various energy conservation opportunities in HVAC system.

25. Discuss in detail on energy conservation opportunities in cooking.

(2×15=30)