

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI-86
(For candidates admitted during the academic year 2016–17 & thereafter)

SUBJECT CODE: 16VS/VM/WM36
B.Voc. DEGREE EXAMINATION, NOVEMBER 2017
SUSTAINABLE ENERGY MANAGEMENT
THIRD SEMESTER

COURSE : MAJOR CORE
PAPER : WASTE SEGREGATION AND MANAGEMENT
TIME : 6 HOURS **MAX.MARKS:100**

SECTION – A

ANSWER ALL QUESTIONS: **(30x1=30)**

I. Choose the correct answer:

1. Portable water is used for
a) gardening b) bathing c) drinking d) cleaning
2. Liquid discharge from industrial plants is called
a) water b) solid waste c) sludge d) effluent
3. Microbial biodegradation of sewage occurs during _____ treatment
a) primary b) secondary c) tertiary d) landfarming
4. The solid fraction of sewage is called
a) silage b) humus c) sludge d) compost
5. Earthworms are a good source of
a) carbohydrate b) protein c) fat d) vitamin

II. Fill in the blanks:

6. The most commonly used chemical disinfectant is _____.
7. The incubation period required for BOD is _____ days.
8. The colour code for biomedical and infectious healthcare waste is _____.
9. An example of microorganism actively involved in composting is _____.
10. Landfills can be used for the generation of _____ gas.

III State whether True or False:

11. Gamma rays emitted from radioisotopes serve as effective disinfectant.
12. The suspended solids from sewage are removed by secondary treatment.
13. The activated sludge recycled in aeration tank serves as inoculum.
14. EPA testing identifies hazardous waste.
15. Aerobic composting is most frequently used than anaerobic.

IV Answer in a sentence or two

16. BOD
17. Septic tank.
18. Transfer station.
19. Genotoxic waste.
20. Any two advantages of vermicomposting.

SECTION – B**ANSWER ANY SIX QUESTIONS:****(6x5=30)**

21. Mention the different types of Incinerators.
22. Define Per capita waste generation. Explain.
23. Explain the term 'recycling'.
24. Write a note on food waste.
25. Describe the term biodegradable waste.
26. Describe the various guidelines for selection of a landfill site.
27. What are the objectives of a Waste Audit?
28. Draw the Incineration power plant and name the units.
29. What are the disadvantages of hazardous waste?
30. Write short notes on vermiwash.

SECTION – C**ANSWER ANY TWO QUESTIONS:****(2x20=40)**

31. Describe the term "Segregation of solid waste". Explain the best practices followed in segregating the waste.
32. Explain the effects of radioactive waste on the environment.
33. Explain in detail about Landfill.
34. Discuss the technique of composting.
