

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI - 600 086
(For candidates admitted from the academic year 2016-17 & thereafter)

SUBJECT CODE: 16VF/VM/WM66

B.Voc. DEGREE EXAMINATION, APRIL 2019
FOOD PROCESSING AND QUALITY CONTROL
SIXTH SEMESTER

COURSE : MAJOR CORE
PAPER : WASTE MANAGEMENT IN FOOD INDUSTRY
TIME : 5 HOURS **MAX. MARKS: 100**
(Theory: 50 marks + Practical: 50 marks)

SECTION - A

Answer all the questions: (20X1 = 20)

I. Choose the correct answer:

1. The by-product of marine processing is
a) FPC's b) Collagen c) EFA d) all the above
2. The 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 preferred technique used for solid waste disposal is
a) Dumping. b) Land fills c) Aerated lagoons d) Composting.
5. ISO 140001 is _____ series of standards.
a) Food safety b) Quality control
c) Environmental management system d) Process control.

II. Fill in the blanks:

6. The most commonly used chemical disinfectant is _____.
7. The incubation period required for BOD is _____ days.
8. The role of by product utilization is to _____
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. The COD parameter indicates the amount of organic matter present in the wastes.
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.

Answer in a sentence or two:

16. BOD
17. Types of waste
18. Flocculation
19. Give one example of by-product obtained from Pulses and Cereals.
20. Any two advantages of vermicomposting

SECTION - B

Answer any SIX questions:

(6 x 3 = 18)

21. Define EPA and enumerate its role.
22. Classify wastes in food processing industries.
23. What is pre-treatment of waste?
24. Explain eutrophication.
25. What are the best practices for waste minimization?
26. How do we test for phosphorous in waste waters?
27. Briefly explain the utilization of by products from dairy industries.
28. What are the expected wastes from plantation crops? Give an outline of its utilization.
29. Discuss the magnitude of waste generation from food industries.
30. Give the importance and challenges of waste segregation at source.

SECTION - C

Answer any TWO questions:

(2 x 6 = 12)

31. Discuss the significance of effluent treatment.
32. Explain the process of waste utilization from marine industries.
33. Explain in detail about activated sludge process.
34. Discuss the technique of vermicomposting.
