

19. (a) Describe on the value added products from fruit industry.

Or

- (b) Explain any one treatment method for slaughterhouse wastewater.
20. (a) Write a note on the purpose of environmental management system.

Or

- (b) Write in detail on any one future methods of waste management.

PART C — ( $3 \times 10 = 30$ )

Answer any THREE questions.

21. Explain the indicators of waste management from dairy industry.
22. Describe biological oxygen demand and chemical oxygen demand.
23. Summarise the components of typical landfill with a neat diagram.
24. Write in detail on any biological product from dairy processing industry.
25. Detail on the stages of Environment Impact Assessment.

**S.No. 6557**

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(For candidates admitted from 2022–2023 onwards)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2023.

Food Service Management and Dietetics – Core Choice Course

**WASTE MANAGEMENT IN FOOD INDUSTRIES**

Time : Three hours

Maximum : 75 marks

PART A — (20 marks)

Answer ALL questions.

- I. (A) Multiple Choice Questions (5 × 1 = 5)
1. The waste from fruit and vegetable industry can be utilized for the production of
- (a) food colours (b) food flavours
- (c) food dyes (d) food additives
2. Lagoons are used \_\_\_\_\_ waste water treatment.
- (a) Anaerobic (b) Aerobic
- (c) MABR (d) MBAR

3. Dumping solid waste into sea is possible in \_\_\_\_\_ cities.  
 (a) metro (b) metropolis  
 (c) municipal (d) coastal
  4. This is an example for value added vegetable.  
 (a) puree (b) jam  
 (c) jellies (d) concentrate
  5. The process of converting dissolved ammonia in waste water to nitrates is  
 (a) nitrification (b) purification  
 (c) chlorination (d) denitrification
- (B) Fill in the Blanks (5 × 1 = 5)
6. Harmful particulate matter pollution in atmosphere is due to \_\_\_\_\_ waste.
  7. The water obtained after primary treatment of waste water is called \_\_\_\_\_.
  8. Gas emitted from food waste is \_\_\_\_\_.
  9. An example for value added product from fish is \_\_\_\_\_.
  10. Bioenzyme used in the treatment of waste water management is \_\_\_\_\_.

- II. Answer ALL questions (5 × 2 = 10)
11. What is the effect of agricultural solid waste on environment?
  12. Give the principle involved in ETP.
  13. What is compost?
  14. What is meant by value added product?
  15. Define life cycle assessment.

PART B — (5 × 5 = 25)

Answer ALL questions, choosing either (a) or (b).

16. (a) Write in detail on the environmental impacts due to meat industry.

Or

- (b) Detail on the waste management from aquaculture industry.

17. (a) Enumerate the differences between water treatment and recycling.

Or

- (b) Explain biological method of waste water treatment.

18. (a) Write a note on solid waste biogas production.

Or

- (b) Explain any two methods of solid waste disposal.