

**20U5111**

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Name: .....

Reg. No.....

**FIFTH SEMESTER B.Voc. DEGREE EXAMINATION, NOVEMBER 2022**

(Food Processing Technology – Skill Component Course)

(Regular/Supplementary/Improvement)

**CC18U SDC5 BU25 - BYPRODUCT UTILIZATION AND WASTE MANAGEMENT**

(2018 Admission onwards)

Time: Three Hours

Maximum: 80 Marks

**PART A**

Answer the following questions. Each question carries 1 mark.

1. Expand ETP.
2. List any four wastes generated in fruit and vegetable industry.
3. Give an example for flaked pulses
4. Which of the following protein used to the production of “Gelatine”?
5. Biological treatment is also known as .....
6. What is cream of tartar?
7. Define lard.
8. What is Ricotta Cheese?
9. What is pearl essence?
10. Why is management of Waste important?

**(10 × 1 = 10 Marks)**

**PART B**

Answer any *eight* from the following. Each question carries 2 marks.

11. Which are the major food industries that generate large amount of waste?
12. Briefly explain what is Food waste.
13. Differentiate between solid waste and liquid waste.
14. Differentiate between BOD and COD
15. What are the adverse effects of FOG in waste water?
16. What is primary treatment?
17. What is grit chamber?
18. What is secondary treatment and how does it differ from other treatment?
19. What is neera?
20. Which are the compounds obtained from apple pomace?
21. What is fishmeal?

**(8 × 2 = 16 Marks)**

### **PART C**

Answer any *six* from the following questions. Each question carries 4 marks.

22. Write a note on the magnitude of waste produced by food industries.
23. Differentiate between blood meal and bone meal
24. Briefly explain classification of food waste
25. Write a short note on toxic materials found in waste water.
26. Elaborate on viruses the found in waste water.
27. Write a short note on by-products of barley.
28. Write a short note on by-products from sugar beet.
29. What are the important by-products from egg?
30. What are the major applications of skimmed milk?
31. What is fish oil & its application?

**(6 × 4 = 24 Marks)**

### **PART D**

Answer any *two* from the following. Each question carries 15 marks.

32. Explain major types of by-products from meat industry
33. Explain the by-product utilization of plantation crops.
34. How various treatment stages in ETP differs according to the nature of treatment?  
Elaborate
35. Explain different waste characteristics found in industrial waste water.

**(2 × 15 = 30 Marks)**

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