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BFTFTC 382

**Choice Based Credit System VI Semester B.Sc. (Food Technology)
Degree Examination, September 2022
(2021-22 Batch Onwards)**

UTILIZATION OF FOOD INDUSTRY WASTES

Time : 3 Hours

Max. Marks : 80

PART – A

1. Answer in brief **any ten** of the following.

(10×2=20)

- a) Food industry waste
- b) Natural gas
- c) Blood protein
- d) Sources of pectin
- e) Non-usable cereals
- f) Prolamin
- g) RHA
- h) Texturised fish
- i) SCP
- j) Chitosan
- k) Solid state bioconversion
- l) List meat and poultry processing wastes.

P.T.O.



PART – B

Answer **any four** of the questions, choosing **one full** question from **each** Unit. **(4×15=60)**

Unit – 1

2. a) Explain briefly the status of food processing waste in India.
b) Write the characteristics of industrial wastes.
c) Describe briefly how vitamins are produced industrially using fruit processing waste. **(3+5+7=15)**

OR

3. a) Write a note on the necessity of food waste utilization in India.
b) Give an account on production of candied peel and fibre extraction from apple pomace.
c) Explain briefly about the requirement and purification of citric acid. **(3+5+7=15)**

Unit – 2

4. a) Explain the production process of fish meal.
b) Write a brief note on production fish glue from fish processing waste.
c) Give the basic requirements and steps in the process of single cell protein production from any microorganism or substrate. **(4+4+7=15)**

OR

5. a) Write the difference between FPC and fish meal.
b) Give an account on protein concentrate and shell product.
c) Write the methods of collection of slaughterhouse animal blood and mention the its food applications. **(4+4+7=15)**

Unit – 3

6. a) Write a note on protein from sorghum.
b) How do you extract wax from bran oil ?
c) Describe briefly the feed for livestock from wheat and corn bran and germ. **(4+4+7=15)**

OR



7. a) Write a note on starch and modified starch from non-usable cereals.
- b) Write the utilization of organs and glands of poultry processing waste as human food.
- c) List the by-products of rice milling process and explain briefly the how silica is obtained by rice husk. **(4+4+7=15)**

Unit – 4

8. a) Write the limitations of biogas production form food processing industrial waste.
- b) Write a note on production of plastics from coffee grounds.
- c) Give an account on utilization of tea waste as feed for livestock and poultry. **(3+5+7=15)**

OR

9. a) Write a note on fermentation products from whey.
 - b) How do you extract oil from coffee grounds ?
 - c) Explain the production process of lactose and protein from whey. **(3+5+7=15)**
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