

- Q.18 Give the environmental benefits of by-product utilization.
- Q.19 Discuss about sensory evaluation techniques of by-product derived foods.
- Q.20 How molasses differs from bagasse?
- Q.21 What do you mean by bio-active compounds? Give some examples.
- Q.22 What is the importance of by product utilization in food industry?

SECTION-D

Note: Long answer questions. Attempt any two questions out of three Questions. (2x8=16)

- Q.23 Define functional properties. Explain functional properties of some by-product components.
- Q.24 Explain the various processing techniques used for extraction of protein from by-products.
- Q.25 Which type of challenges occurs in by-product utilization in the food industry.

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Roll No.

6th Sem.

Branch :Food Technology

Sub. : Food By-Products Utilization

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple type Questions. All Questions are compulsory. (6x1=6)

- Q.1 What is by product utilization?
- a) The process of converting waste into useful products.
 - b) The process of recycling raw materials.
 - c) The process of producing goods from primary resources.
 - d) The process of reusing finished goods.
- Q.2 Which processing technique is commonly used to convert food waste into animal feed?
- a) Drying
 - b) Fermentation
 - c) Extrusion
 - d) Ensiling
- Q.3 The by - product of fish, such as fish skin and bones, are rich in which nutrient?
- a) Omega 3 fatty acid
 - b) Vitamin B12
 - c) Collagen and Gelatin
 - d) Vitamin D

- Q.4 Which of the following by-product can be converted into valuable compounds through fermentation?
- a) Food waste b) Agricultural waste
c) Industrial waste d) All of the above
- Q.5 What is the term for the systematic approach to managing waste in food processing, which aims to minimize waste generation and maximize waste reuse and recycling?
- a) Waste hierarchy
b) Waste management plan
c) Integrated waste management
d) Sustainable waste management
- Q.6 What is the environmental benefits of using by product based bio fuels?
- a) Reduction in fossil fuel consumption
b) Decrease in air pollution
c) Increase in greenhouse gas emissions
d) None of the above

SECTION-B

Note: Objective/Completion type questions. All questions are compulsory. (6x1=6)

- Q.7 By-product utilization can help reduce energy consumption and green house gas emission by providing a _____ source of energy .

- Q.8 Apple pomace contain _____ bioactive compound which is power ful antioxidant.
- Q.9 The use of enzymes to break down complex organic matter in food by products into simpler compounds is an example of _____.
- Q.10 Food by products can be converted into valuable compounds such as _____.
- Q.11 The process of converting food by products into a nutrient rich powder or granules through heat treatment and mechanical processing is called _____.
- Q.12 _____ is the by product of the cheese making process that is high in protein and can be used to make protein powders and supplements.

SECTION-C

Note: Short answer type Questions. Attempt any eight questions out of ten Questions. (8x4=32)

- Q.13 Write a brief note on healthy benefits of by product derived ingredients.
- Q.14 What are the various sources of food by products?
- Q.15 Discuss about the health benefits of by products derived ingredients.
- Q.16 Give the examples of by-products and write down their functional properties.
- Q.17 Write a brief note on nutritive value of by product components.