M.Tech Even Semester Examination, May, 2025

Agricultural Engineering

(2nd Semester)

Course No: 3AG-153A

[Elective-III (Technology of Meat, Poultry and Fish Processing)]

Full Marks: 70
Pass Marks: 28
Time: 3 hours

Note:

1. Attempt any five questions taking one from each unit.
2. Begin each answer in a new page
3. Answer parts of a question at a place
4. Assume reasonable data wherever required
5. The figure in the right margin indicates full marks for the question
6. All the mathematical symbols and abbreviations have their usual meanings.

UNIT-I

1. (i) What is food processing? Describe the benefits of fish processing. [10]

   (ii) Briefly explain vaccum packaging. [4]

2. (i) Write the short notes (any two)

   (i) Retort pouch processing

   (ii) Microwave processing

   (iii) MAP [12]

   (ii) What do you mean by Pasteurization? [2]

UNIT-II

3. (i) What is bio-preservation? Write the application of enzymes. [4]

(ii) What is food irradiation? Explain the advantage and disadvantage of food irradiation. [10]

4. (i) What are the hazards for the poultry processing industry? [8]

(ii) Write the short notes (any two)

(a) Homogenization

(b) Blanching

(c) Baking [6]

UNIT-III

5. (i) What are the classifications of foods based on perishability? [4]

(ii) Write the short notes (any two)

(a) Starter culture

(b) Fermentation

(c) Enrobing [10]

6. (i) List the different equipment used in poultry processing plant. Explain each in brief. [10]

(ii) What is the main objective for poultry production? [4]

UNIT-IV

7. (i) Enlist different cooking methods. Explain each in brief. [9]

(ii) What are the types of poultry? [5]

8. (i) Briefly explain the hurdle technology with example. [10]

(ii) Write the reasons behind longer shelf life of fermented products. [4]

UNIT-V

9. (i) Write short notes on (any two).

(i) High pressure processing

(ii) Ohmic heating

(iii) Cold plasma [10]

(ii) Write the advantages of enrobing meat or meat products. [4]

10. (i) Enlist the requirements of packaging label [4]

(ii) Classify the meat products according to type of processing. [10]

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