B.Sc. FOOD SCIENCE & TECHNOLOGY
FOURTH SEMESTER
FOOD PACKAGING TECHNOLOGY
BFST-403
[USE OMR SHEET FOR OBJECTIVE PART]

SET B

Duration: 3 hrs.
Full Marks: 70

(*Objective*)

Time: 30 mins.
Marks: 20

Choose the correct answer from the following:
1 ×20=20

1. Packaging is an essential part of ....foods.
   a. Processing and distribution
   b. Heating and cooling
   c. Manufacturing and marketing
   d. All of them

2. Most important UV absorber is:
   a. Inorganic compound
   b. Organic compound
   c. Natural compound
   d. None of the above

3. In MAP, oxygen is replaced by:
   a. Nitrogen
   b. Comparatively inert gas
   c. Carbon di oxide
   d. All of the above

4. For high density polyethylene thickness of polyethylene layer is ....μm.
   a. 1000-5000
   b. 350-1000
   c. 3000-5000
   d. All of these

5. Filling of sterile containers with commercially sterile product is known as:
   a. Passive packaging
   b. Active packaging
   c. Intelligent packaging
   d. Aseptic packaging

6. ....is required for packaging of cheese spread.
   a. Metal cans
   b. Glass bottles
   c. HDPE
   d. All of these

7. The egg packs and the trays used for apples and other fresh produce are example of:
   a. Laminated paperboard
   b. Moulded pulp containers
   c. Crafted paperboard
   d. Oldest form of paperboard pack

8. ....is an inorganic UV absorber.
   a. Zirconium dioxide
   b. Oxanilides
   c. Zirconium oxide
   d. Cyanoacrylates

9. The full form of MAP is........................
   a. Modified active packaging
   b. Modified air packaging
   c. Modified absorber packaging
   d. Modified atmosphere packaging

10. The PET bottle is patented in which year?
    a. 1975
    b. 1970
    c. 1973
    d. 1972

11. PVC stands for:
    a. Poly Vinyl Chlorine
    b. Poly Vinyl Chloride
    c. Poly Vinyl Chloroform
    d. Polyester Vinyl Chloride

12. What is WVTR?
    a. Water to Vapour transient rate
    b. Water to vapour transfer rate
    c. Water Vapour transmission rate
    d. Water to vapour total ratio

13. Paper is mainly consists of:
    a. Cellulose
    b. Hemicellulose
    c. Lignin
    d. All of the above

14. Requirements of a suitable fresh fish package:
    a. Reduce dehydration
    b. Reduce fat oxidation
    c. Prevent odour permeation
    d. All of the above

15. Which of the following paper is strongest?
    a. Parchment paper
    b. Glassine paper
    c. Hard wood paper
    d. Kraft paper

16. Innermost layer of tetrapack is:
    a. Polyethylene
    b. Aluminium
    c. Cardboard
    d. None of the options

17. Cellulose –polyethylene- cellulose laminate is used in ....food products.
    a. Ice creams
    b. Baked goods
    c. Cooked meats
    d. All of these

18. Process is used in aseptic packaging:
    a. Autoclaving
    b. Sterilization
    c. Disinfection
    d. Heating

19. ....is an organic UV absorber.
    a. Zirconium dioxide
    b. Cyanoacrylates
    c. Zirconium oxide
    d. None of the above

20. Which among the following is an Antioxidant?
    a. Nisin
    b. Citric acid
    c. Laccase
    d. None of the above

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(Descriptive)

Time : 2 hr. 30 mins.   Marks : 50

[Answer question no.1 & any four (4) from the rest]

1. Define packaging. Write in detail about the need for packaging of foods.   3+7=10

2. Give a detailed account on the following: 5+5=10
   a) Paper and paper board
   b) Semi-rigid packaging material

3. Explain the operation of form-fill-seal machine with the help of diagrams.   10

4. Define bar codes. Explain about labelling of food products after packaging.   2+8=10

5. What is permeability? Discuss the characteristics of the following   2+8=10
   packaging materials with respect to their permeability.
   a) Linear low-density polyethylene
   b) Polystyrene
   c) Co-extruded Oriented Polypropylene
   d) Ethylene Vinyl Acetate

6. Explain the factors affecting the shelf life of packaged food.   10

7. Write down the significance and important tests for plastic and metal containers.   10

8. Discuss about the packaging of meat and poultry products.   10

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