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ENT-77

Total No. of Pages : 18

M.Sc. Food Science and Technology
Entrance Examianation 2026
Sub. Code: 58726

Day and Date : Tuesday, 21-07-2026

Total Marks : 100

Time : 02.30 p.m. to 04.00 p.m.

Instructions

- 1) All questions are compulsory.
- 2) Each question carries 1 mark.
- 3) Answers should be marked in the given OMR sheet by darkening the appropriate option.
- 4) Follow the instructions given on OMR Sheet.
- 5) Rough work shall be done on the sheet provided at the end of question paper.

Q.1 Which of the following is the oldest method of food preservation?

- | | |
|------------|------------------|
| a) Canning | b) Refrigeration |
| c) Drying | d) Irradiation |

Q.2. Pasteurization is mainly used to destroy:

- | | |
|------------|-------------------------------|
| a) Enzymes | b) Pathogenic microorganisms. |
| c) Spores | d) Insects |

Q.3. The main objective of blanching vegetables before freezing is to:

- | | |
|------------------------|------------------------|
| a) Increase sweetness. | b) Improve colour only |
| c) Inactivate enzymes | d) Reduce moisture |

Q.4. Which preservation method uses high concentrations of sugar?

- | | |
|---------------|-----------------|
| a) Pickling | b) Fermentation |
| c) Jam making | d) Freezing |

Q.5. Water activity (a_w) is reduced primarily by:

- a) Heating
- b) Drying
- c) Washing
- d) Peeling

Q.6. Canning preserves food mainly by:

- a) Removing nutrients
- b) Heat sterilization and hermetic sealing
- c) Adding preservatives
- d) Fermentation

Q.7. IQF stands for:

- a) Instant Quality Freezing
- b) Internal Quick Food
- c) Individual Quick Freezing
- d) Industrial Quality Food

Q.8. Which food preservation method uses low temperature?

- a) Drying
- b) Smoking
- c) Freezing
- d) Pasteurization

Q.9. Pickling generally involves:

- a) High sugar
- b) Salt and/or vinegar
- c) Carbon dioxide
- d) Oxygen

Q.10. Which preservation method removes moisture by sublimation?

- a) Spray drying
- b) Drum drying
- c) Freeze drying
- d) Cabinet drying

Q.11. The most heat-resistant bacterial spores are produced by:

- a) Yeast
- b) Molds
- c) Clostridium species
- d) Lactobacillus

Q.12. Cold storage mainly slows down:

- a) Chemical composition b) Microbial growth
- c) Mineral content d) Protein content

Q.13. Vacuum packaging helps by:

- a) Increasing oxygen b) Reducing oxygen exposure
- c) Increasing moisture d) Increasing pH

Q.14. Smoking preserves food mainly through:

- a) Increasing moisture b) Antimicrobial compounds in smoke
- c) High sugar d) High starch

Q.15. The optimum moisture content for most dehydrated foods is:

- a) 60-70% b) 40-50%
- c) Below 10% d) Above 80%

Q.16. Which food is commonly preserved by fermentation?

- a) Butter b) Curd
- c) Sugar d) Salt

Q.17. The major preservative in jams is:

- a) Salt b) Vinegar
- c) Sugar d) Citric acid

Q.18. HACCP primarily focuses on:

- a) Marketing b) Packaging
- c) Food safety hazards d) Accounting

Q.19. Which of the following is a chemical preservative?

- a) Vitamin C
- b) Sodium benzoate
- c) Glucose
- d) Starch

Q.20. Deep freezing is generally carried out at:

- a) 0°C
- b) 5°C
- c) -18°C or below.
- d) 10°C

Q.21. Which preservation method uses beneficial microorganisms?

- a) Irradiation
- b) Fermentation
- c) Drying
- d) Canning

Q.22. Which gas is commonly used in Modified Atmosphere Packaging (MAP)?

- a) Hydrogen
- b) Methane
- c) Nitrogen
- d) Helium

Q.23. Food irradiation commonly uses:

- a) UV rays
- b) X-rays only
- c) Gamma rays
- d) Infrared rays

Q.24. The process of heating milk to 72°C for 15 seconds is called:

- a) UHT processing
- b) Sterilization
- c) HTST Pasteurization
- d) Boiling

Q.25. UHT treatment generally heats milk to about:

- a) 90°C
- b) 100°C
- c) 135-150°C
- d) 180°C

Q.26. Osmotic dehydration commonly uses:

- a) Air
- b) Steam
- c) Concentrated sugar or salt solution
- d) Nitrogen

Q.27. Which packaging material provides the best barrier to gases?

- a) Paper
- b) LDPE
- c) Aluminium foil
- d) Cotton

Q.28. Which enzyme causes browning in fruits?

- a) Amylase
- b) Lipase
- c) Polyphenol oxidase
- d) Catalase

Q.29. Sulphur dioxide is mainly used for preserving:

- a) Meat
- b) Fish
- c) Fruits
- d) Cereals

Q.30. The D-value represents:

- a) Drying time
- b) Time required to destroy 90% microorganisms
- c) Density
- d) Diffusion

Q.31. Which food preservation method uses beneficial acids produced naturally?

- a) Drying
- b) Smoking
- c) Fermentation
- d) Freezing

Q.32. The main preservative in pickles is:

- a) Starch
- b) Sugar
- c) Salt
- d) Protein

Q.33. Which drying method gives the highest quality product?

- a) Sun drying b) Cabinet drying
- c) Freeze drying d) Drum drying

Q.34. Water activity ranges from:

- a) 0-10 b) 0-1
- c) 1-100 d) 10-100

Q.35. Which food is commonly preserved by smoking?

- a) Bread b) Rice
- c) Fish d) Sugar

Q.36. The primary objective of food preservation is:

- a) Increase weight b) Increase moisture
- c) Extend shelf life d) Increase acidity

Q.37. Which microorganism is important in yoghurt production?

- a) E. coli b) Lactobacillus bulgaricus
- c) Salmonella d) Bacillus subtilis

Q.38. Which preservation method is based on lowering pH?

- a) Drying b) Pickling
- c) Freezing d) Refrigeration

Q.39. Which food additive acts as an antioxidant?

- a) Sodium chloride b) Ascorbic acid
- c) Starch d) Cellulose

Q.40. Which food processing operation reduces particle size?

- a) Blanching
- b) Sterilization
- c) Grinding
- d) Freezing

Q.41. The process of separating cream from milk uses

- a) Filtration
- b) Evaporation
- c) Centrifugation
- d) Fermentation

Q.42. The major objective of homogenization of milk is to:

- a) Increase protein
- b) Prevent cream separation
- c) Increase fat
- d) Reduce lactose

Q.43. Which method is best for preserving green leafy vegetables?

- a) Sun drying only
- b) Blanching followed by freezing
- c) Smoking
- d) Salting

Q.44. Which packaging method removes air before sealing?

- a) MAP
- b) Retort packaging
- c) Vacuum packaging
- d) Aseptic filling

Q.45. Which food preservation method uses ionizing radiation?

- a) Canning
- b) Drying
- c) Food irradiation
- d) Fermentation

Q.46. Which carbohydrate is known as milk sugar?

- a) Sucrose
- b) Maltose
- c) Lactose
- d) Fructose

Q.47. The major protein present in wheat flour is:

- a) Casein
- b) Albumin
- c) Gluten
- d) Zein

Q.48. Which vitamin is most susceptible to destruction by heat?

- a) Vitamin A
- b) Vitamin D
- c) Vitamin C
- d) Vitamin E

Q.49. Rancidity in fats is mainly caused by:

- a) Protein hydrolysis
- b) Starch gelatinization
- c) Oxidation of lipids.
- d) Caramelization

Q.50. The browning reaction between reducing sugars and amino acids is called:

- a) Caramelization
- b) Enzymatic browning
- c) Maillard reaction
- d) Oxidation

Q.51. Which sugar is a reducing sugar?

- a) Sucrose
- b) Glucose
- c) Raffinose
- d) Trehalose

Q.52. Starch consists mainly of:

- a) Cellulose and lignin
- b) Amylose and amylopectin
- c) Pectin and cellulose
- d) Fructose and glucose

Q.53. Which pigment gives carrots their orange colour?

- a) Chlorophyll
- b) Anthocyanin
- c) Carotene
- d) Lycopene

Q.54. Which food component acts as a natural emulsifier?

- a) Cellulose
- b) Lecithin
- c) Glucose
- d) Starch

Q.55. pH of pure water at 25°C is:

- a) 5
- b) 6
- c) 7
- d) 8

Q.56. Denaturation primarily affects the of proteins.

- a) Primary structure
- b) Secondary and tertiary structure
- c) Amino acid composition
- d) Molecular weight

Q.57. Gelatinization is associated with:

- a) Proteins
- b) Lipids
- c) Starch
- d) Minerals

Q.58. Which vitamin is fat-soluble?

- a) Vitamin C
- b) Vitamin B1
- c) Vitamin B12
- d) Vitamin A

Q.59. Chlorophyll is responsible for colour.

- a) Red
- b) Yellow
- c) Green
- d) Blue

Q.60. Which acid is naturally abundant in citrus fruits?

- a) Malic acid
- b) Lactic acid
- c) Citric acid
- d) Tartaric acid

Q.61. Water activity (a_w) of pure water is:

- [illegible]

Q.62. Which protein is the major milk protein?

- a) Gluten b) Albumin
c) Casein d) Myosin

Q.63. Caramelization occurs due to:

- a) Protein oxidation. b) Fat hydrolysis
- c) Heating of sugars d) Starch retrogradation

Q.64. Which mineral is essential for haemoglobin formation?

- a) Calcium b) Sodium
- c) Iron d) Potassium

Q.65. Which polysaccharide is indigestible by humans?

- a) Starch b) Glycogen
c) Cellulose d) Maltose

Q.66. Which microorganism is used in bread making?

- a) Rhizopus b) Aspergillus
c) Saccharomyces cerevisiae d) Penicillium

Q.67. Which microorganism forms heat-resistant spores?

- a) Yeast b) Mold
- c) Clostridium botulinum d) Lactobacillus

Q.68. Which microorganism causes alcoholic fermentation?

- a) Lactobacillus
- b) Yeast
- c) Mold
- d) Bacillus

Q.69. The optimum temperature for mesophilic bacteria is:

- a) 0-5°C
- b) 10-15°C
- c) 30-37°C
- d) 60-70°C

Q.70. Which microorganism is used in vinegar production?

- a) Yeast
- b) Acetobacter aceti
- c) Bacillus
- d) Rhizopus

Q.71. Molds reproduce mainly by:

- a) Binary fission
- b) Budding
- c) Spores
- d) Conjugation

Q.72. Which of the following is a psychrophilic microorganism?

- a) Thermus aquaticus
- b) Cold-loving bacteria
- c) Mesophilic yeast
- d) Lactobacillus

Q.73. Coliform bacteria are indicators of:

- a) Air pollution
- b) Water hardness.
- c) Fecal contamination
- d) Soil fertility

Q.74. Which microorganism is beneficial in curd production?

- a) Salmonella
- b) E. coli
- c) Lactobacillus
- d) Clostridium

Q.75. Sterilization aims to destroy:

- a) Only bacteria
- b) Only fungi
- c) All microorganisms including spores.
- d) Only viruses

Q.76. Which nutrient is the primary source of energy?

- a) Protein
- b) Vitamins
- c) Carbohydrates
- d) Minerals

Q.77. The energy value of fats is:

- a) 2 kcal/g
- b) 4 kcal/g
- c) 7 kcal/g
- d) 9 kcal/g

Q.78. Protein deficiency in children causes:

- a) Obesity
- b) Kwashiorkor
- c) Diabetes
- d) Hypertension

Q.79. Which mineral is essential for healthy bones and teeth?

- a) Iron
- b) Sodium
- c) Calcium
- d) Potassium

Q.80. The richest source of dietary fibre is:

- a) Butter
- b) Eggs
- c) Whole grains
- d) Fish

Q.81. Iron deficiency results in:

- a) Diabetes
- b) Anaemia
- c) Goitre
- d) Obesity

Q.82. BMI stands for:

- a) Body Mass Index
- b) Body Measure Index
- c) Body Muscle Indicator
- d) Basic Metabolic Intake

Q.83. Which vitamin acts as a major antioxidant?

- a) Vitamin B₁₂
- b) Vitamin E
- c) Vitamin K
- d) Vitamin B₂

Q.84. The balanced diet should contain:

- a) Only carbohydrates
- b) Only proteins
- c) Only fats
- d) All essential nutrients in appropriate proportions

Q.85. The primary objective of quality control in the food industry is to:

- a) Increase production cost
- b) Improve advertising
- c) Ensure safe and consistent quality of food
- d) Reduce packaging

Q.86. HACCP stands for:

- a) Hazard Analysis and Consumer Control Programme
- b) Hazard Analysis and Critical Control Points
- c) Health Analysis and Critical Check Process
- d) Hazard Assessment and Consumer Protection

Q.87. Which organization is responsible for food safety regulation in India?

- a) AGMARK
- b) BIS
- c) APEDA
- d) FSSAI

Q.88. GMP stands for:

- a) Good Manufacturing Plan
- b) General Manufacturing Practices
- c) Good Manufacturing Practices
- d) General Management Programme

Q.89. Which of the following is a chemical hazard?

- a) Hair
- b) Metal pieces
- c) Pesticide residue
- d) Insect wings

Q.90. BIS stands for:

- a) Bureau of Industrial Safety
- b) Bureau of Indian Standards
- c) Board of Indian Safety
- d) Bureau of International Standards

Q.91. AGMARK certification is mainly related to:

- a) Pharmaceuticals
- b) Electrical appliances
- c) Agricultural products
- d) Cosmetics

Q.92. Calibration of instruments is done to ensure:

- a) Attractive appearance
- b) Higher production
- c) Accuracy of measurements
- d) Lower electricity consumption

Q.93. Shelf-life testing evaluates:

- a) Employee performance
- b) Market demand
- c) Product stability during storage
- d) Production cost

Q.94. Which nutrient is required in the largest quantity by plants?

- a) Zinc
- b) Iron
- c) Nitrogen
- d) Copper

Q.95. Which nutrient promotes root development?

- a) Nitrogen
- b) Phosphorus
- c) Potassium
- d) Sulphur

Q.96. Which crop is a cereal?

- a) Gram
- b) Soybean
- c) Rice
- d) Groundnut

Q.97. Organic farming avoids the use of:

- a) Farmyard manure
- b) Compost
- c) Biofertilizers
- d) Synthetic fertilizers and pesticides

Q.98. Vermicomposting uses:

- a) Bacteria
- b) Fungi
- c) Earthworms
- d) Algae

Q.99. Crop rotation mainly helps to:

- a) Increase weeds
- b) Reduce rainfall
- c) Maintain soil fertility and break pest cycles
- d) Increase soil erosion

Q.100. Which of the following is an oilseed crop?

- a) Wheat
- b) Rice
- c) Groundnut
- d) Bajra



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