



UMT

University of Management and Technology



Date: _____

Admission Test
MS Food Technology

Name: _____

Reference ID: _____

Marks Obtain: _____

Signature of Examiner: _____

Instructions:

- Read each question carefully and choose the most appropriate option.
- Encircle the correct option (a, b, c, or d) on the answer sheet clearly.
- Each question carries equal marks. No negative marking.
- Do not use correction fluid on the answer sheet.
- Use a blue or black ballpoint pen only.
- Unanswered questions will receive zero marks.
- Mobile phones are strictly prohibited inside the examination hall.

1. The outermost layer of a cereal grain is called:
a. Endosperm b. Germ c. Bran d. Aleurone
2. Which one of the following is a non-essential amino acid?
a. Lysine b. Glutamic acid c. Methionine d. None of These
3. Cereal and legumes are the examples of _____.
a. Stable Foods b. Perishable foods c. Semi-Perishable foods d. All of These
4. Extrusion is commonly used to produce:
a. Cheese b. Breakfast cereals c. Butter d. Yogurt
5. What would be the perimeter of a square with side length 6 cm?
a. 12 cm b. 24 cm c. 36 cm d. 48 cm
6. Choose the synonym of "Abundant".
a. Scarce b. Plentiful c. Empty d. Rare
7. Autolysis is caused by _____.
a. Microorganisms b. Rodents c. Enzymes d. All of These
8. The average of 10, 15 and 20 is:
a. 12 b. 15 c. 18 d. 20

9. The impact of enzymatic browning in fruits — what is its main effect?

- a. Improves flavor
- b. Causes quality deterioration
- c. Increases shelf life
- d. Enhances texture

10. The predominant acid present in the grape juice is _____.

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

11. Microbial count increased from 100 CFU/mL to 600 CFU/mL. By what factor did it increase?

- a. 6
- b. 4
- c. 3
- d. 2

12. What is the main ingredient in most beverages?

- a. Protein
- b. Fat
- c. Water
- d. Fiber

13. Choose the synonym of "Scarcity".

- a. Deficiency
- b. Abundance
- c. Shortage
- d. Lack

14. "Contaminate" is closest in meaning to:

- a. Purify
- b. Clean
- c. Pollute
- d. Filter

15. Rennet enzyme is used in the preparation of _____.

- a. Cheese
- b. Pickle
- c. Margarine
- d. Butter

16. Choose the antonym of "Scarcity".

- a. Deficiency
- b. Abundance
- c. Short
- d. Lack

17. Fast microbial testing focuses on:

- a. Plating methods
- b. DNA-based tests
- c. Microscopy
- d. Long incubation

18. Lye solution is used for fruits' _____.

- a. Pitting
- b. Peeling
- c. Coring
- d. Trimming

19. The vitamin associated with blood clotting is _____.

- a. Vitamin B
- b. Vitamin D
- c. Vitamin E
- d. Vitamin K

20. Sugars when heated intensely turn brown due to _____.

- a. Oxidation
- b. Maillard reaction
- c. Caramelization
- d. All of These

21. Vitamin essential for the function of coenzymes is _____.

- a. Riboflavin
- b. Thiamin
- c. Niacin
- d. Lysine

22. Oil content is more in _____.

- a. Maize
- b. Wheat
- c. Rice
- d. Barley

23. Milk is an example of _____ emulsion.

- a. Emulsion of water in fat
- b. Colloidal of fat in water
- c. Colloidal of water in fat
- d. Emulsion of fat in water

24. The principle behind freeze drying is _____.

- a. Homogenization
- b. Sublimation
- c. Evaporation
- d. Dehydration

25. Heating of milk is carried out by _____.
- a. Drum driers b. Vacuum driers c. Plate heat exchangers d. Tunnel driers
26. Electrophoresis technique is used for the qualitative test of _____.
- a. Peptides b. Proteins c. Propionates d. Pectin
27. Pizza topping chicken has 620,000 bacterial counts. Its standard form is:
- a. 6.2×10^5 b. 6200×1000 c. 6.2 Mcfu d. None
28. Evaluate the impact of unsaturated fats in fish. How do these fats affect the fish's quality?
- a. Increase rancidity b. Improve digestibility c. Extend shelf life d. Enhance texture
29. A laboratory technician prepares 500 mL of a 5% salt solution. How much salt is required?
- a. 25 g b. 20 g c. 15 g d. 10 g
30. What is the key advantage of using ionizing radiations for food preservation?
- a. Increase in food temperature b. Inactivates sprouting enzymes c. Imparts a distinct color d. Enhances the nutritional content
31. Which meat pigment is responsible for the red color of fresh meat?
- a. Hemoglobin b. Myoglobin c. Melanin d. Collagen
32. Which compounds react during the Maillard reaction?
- a. Sugar and amino acids b. Fat and water c. Protein and minerals d. Starch and vitamins
33. An essential fatty acid is _____.
- a. Linoleic acid b. Malic acid c. Stearic acid d. None of These
34. The opposite of "Transparent" is:
- a. Clear b. Opaque c. Visible d. Pure
35. Role of SO_2 in preservation:
- a. Improves flavor b. Prevents spoilage c. Changes texture d. Adds nutrition
36. Excess gas during baking causes:
- a. Dense texture b. Cell collapse c. Crust cracks d. Raw center
37. In Ice cream and whipped topping, food foam is produced with _____.
- a. Carbohydrates b. Proteins c. Lipids d. Enzymes
38. Monosodium glutamate (MSG) is used as _____.
- a. Color b. Flavor c. Flavor enhancer d. All of These
39. The removal of undesired part from fruits & vegetables is called _____.
- a. Pitting b. Coring c. Sorting d. Trimming
40. $2^2 \times (4^2)^2$

a. 256

b. 324

c. 64

d. 32

41. How does cooling of milk after pasteurization contribute to its quality?

a. Improves flavor

b. Inhibits microbes

c. Enhances homogenization

d. Improves appearance

42. $22 \times (3^2)^2$

a. 324

b. 32

c. 28

d. 128

43. What is the value of $\frac{3}{4} + \frac{1}{2}$?

a. $\frac{4}{6}$ b. $\frac{5}{4}$ c. $\frac{7}{8}$

d. 1

44. Coffee aroma develops mainly during:

a. Washing

b. Roasting

c. Grinding

d. Packaging

45. The antonym of 'Precise' is:

a. Accurate

b. Correct

c. Exact

d. Incorrect

46. The radius of a circle is 7 cm. Its diameter would be:

a. 7 cm

b. 10 cm

c. 14 cm

d. 21 cm

47. Scalding is done in the processing of _____.

a. Fish

b. Poultry

c. Fruits

d. Meat

48. The main focus of edible coatings is:

a. Visual appeal

b. Uniform barrier

c. Low cost

d. Easy application

49. How might the presence of aflatoxins in animal feed affect dairy products?

a. It will reduce the shelf life of the dairy products

b. It can lead to the detection of aflatoxins in milk and cheese

c. It causes a significant increase in the dairy product's nutritional value

d. It will enhance the flavor of the dairy products

50. If 3 workers inspect 120 food packages in 2 hours, how many packages will 6 workers inspect in the same time?

a. 120

b. 180

c. 240

d. 360

51. Why is tempering performed before wheat milling?

a. Increase protein

b. Facilitate bran separation

c. Improve flavor

d. Reduce starch

52. Beer is prepared from _____.

a. Grass

b. Grape

c. Grains

d. Orange

53. Every day, the quality control team _____ the production records.

a. Checks

b. Checked

c. Checking

d. Has checked

54. By the time the meeting started, all participants _____ their seats.

a. Take

b. Took

c. Had taken

d. Have taken

55. What is the role of yeast in bread making?
- a. Increase fat minerals b. Produce carbon dioxide c. Reduce moisture d. Add
56. Osmotic pressure of the body fluids is maintained by _____.
a. Calcium b. Sodium c. Chlorine d. Magnesium
57. A milk sample has 450,000 bacterial counts. Its standard form is:
a. 4.5×10^5 b. 45×10^4 c. 0.45×10^6 d. All of the above
58. Fresh milk from a healthy cow is practically free from _____.
a. Whey b. Lactose c. Bacteria d. None of These
59. Which of the following is NOT a function of water in the human body?
- a. Regulation of body temperature and biochemical reactions b. Regulation of body mass c. Medium for chemical d. Participation in chemical reactions
60. Acid detergents are useful for removing _____.
a. Organic deposits b. Bacteria c. Algae d. Inorganic deposits
61. The impact of using time-temperature indicators on food shelf-life management is:
a. Shelf life increase of food b. Visual indication of spoilage c. Prevention of spoilage d. All of these
62. The HTST process for milk involves heating at _____.
a. 50-60 °C b. 72-75 °C c. 140-142 °C d. None of These
63. The main purpose of pasteurization in beverages is to:
a. Improve color b. Increase sweetness c. Destroy microorganisms d. Add nutrients
64. Effectiveness of blanching is determined by _____.
a. Catalase/peroxidase test b. Catalase/oxidase test c. Iodine value test d. Saponification
65. The yellow color of cow milk fat is due to _____.
a. Fatty acids b. Sterols c. Carotenoids d. Vitamins
66. Why is wheat preferred for bread making?
a. High fat content b. Gluten formation c. Low moisture d. High ash content
67. The mean of the numbers 12, 14, 16, 18, and 20 is:
a. 12 b. 16 c. 18 d. 20
68. How does pectin affect fruit and vegetable texture during cooking?
a. Forms gels, improves firmness b. Softens texture c. Thickens products d. Reduces moisture loss

69. Choose the word closest in meaning to "Abundant".
- a. Scarce b. Plentiful c. Rare d. Limited
70. Amount of unsaturated fatty acids in oils is determined with _____.
a. Iodine test b. Saponification value c. Peroxide value d. Purification
71. Based on the excerpt: "Although the intervention reduced microbial counts, it did not eliminate them completely," what can be concluded?
- a. The intervention was partially effective b. Microbial counts increased after treatment
c. All microorganisms were destroyed d. No microorganisms were present
72. Choose the synonym of "Meticulous".
- a. Careful b. Negligent c. Reckless d. Casual
73. Which microorganism is commonly associated with poultry contamination?
- a. Lactobacillus b. Salmonella c. Rhizopus d. Saccharomyces
74. Choose the synonym of "Candid".
- a. Honest b. Deceptive c. Secretive d. Dishonest
75. Which defect in ice cream is commonly caused by fluctuating storage temperatures?
- a. Lactose crystallization b. Ice crystal growth c. Fat separation d. Flavor loss
76. Poultry meat market is occupied by _____.
a. Ducks b. Layers c. Broilers d. Pigeons
77. The technician _____ the equipment before starting the test.
- a. Sterilizes b. Sterilized c. Sterilizing d. Has sterilized
78. Why is 'hot beef' preferred for sausage production?
- a. Superior color retention b. Increased fat content c. Enhanced water-holding capacity
d. Greater flavor intensity
79. Second most common source of accidents in food industries is _____.
a. Roof failure b. Floor failure c. Faulty electrical wiring d. Machinery
80. The median of the data set 4, 6, 8, 10, 12 is:
a. 4 b. 6 c. 8 d. 10
81. FDA regulation of SO₂ is mainly due to:
a. Shelf life b. Allergic reactions c. Global standards d. Flavor control
82. Which preservative is commonly used in fruit beverages?
a. Sodium benzoate b. Sodium chloride c. Glucose d. Gelatin
83. Choose the synonym of "Significant".
a. Minor b. Important c. Ordinary d. Simple
84. Sucrose is the product of _____.

a. Glucose + Glucose

b. Glucose + Maltose

c. Glucose + Fructose

d.

Glucose + Galactose

85. A car travels 240 km in 6 hours. What would be its speed?

a. 40 km/h

b. 50 km/h

c. 60 km/h

d. 70 km/h

86. A quality control lab analyzes 40 samples, and 5 fail. What is the percentage of failed samples?

a. 8.5%

b. 10%

c. 12.5%

d. None

87. Choose the synonym of "Infect".

a. Spread Disease

b. Purify

c. Remove d. Clean

88. Starch gelatinization occurs when:

a. Flour is milled

b. Starch is heated in water

c. Dough is kneaded

d. Grain is harvested

89. The most appropriate type of emulsifier for a water-in-oil emulsion is:

a. High water solubility emulsifier

b. High oil solubility emulsifier

c. High solubility in both

water and oil d. Nonpolar emulsifier

90. Key factor in hermetic sealing:

a. Material thickness

b. Airtight seal

c. Seal color

d. Container design

91. The mean of the numbers 10, 15, 20, 25, and 30 is:

a. 18

b. 20

c. 22

d. 25

92. Tea is prepared by:

a. Distillation

b. Extraction

c. Fermentation only

d. Drying

93. Milling primarily aims to:

a. Increase moisture

b. Separate grain components

c. Increase protein d.

Improve color only

94. They _____ their homework before dinner.

a. Has completed

b. Completed

c. Have been completing

d. Completing

95. A number increased by 12 equals 30. The number is:

a. 12

b. 16

c. 18

d. 20

96. Calcium salts added to fruits/vegetables:

a. Improve color

b. Increase firmness

c. Reduce cooking time

d. Add sweetness

97. The median of the data set 7, 9, 11, 13, 15 is:

a. 7

b. 9

c. 11

d. 15

98. Which foods are the best source of energy in the body?

a. Cereals and cereal products b. Legumes and pulses c. Roots and tubers d. Fats and edible oils

99. Vitamin associated with the synthesis of nucleic acid and formation of RBC _____.

a. Biotin b. Folic acid c. Thiamin d. Niacin

100. O₂ dips mainly help to:

a. Increase nutrition b. Stabilize color c. Improve texture d. Add sweetness

Q#	Ans	Q#	Ans	Q#	Ans	Q#	Ans	Q#	Ans
1	C	21	B	41	B	61	D	81	B
2	B	22	A	42	A	62	B	82	A
3	A	23	D	43	B	63	C	83	B
4	B	24	B	44	B	64	A	84	C
5	B	25	C	45	D	65	C	85	A
6	B	26	B	46	C	66	B	86	C
7	C	27	A	47	B	67	B	87	A
8	B	28	A	48	B	68	A	88	B
9	B	29	A	49	B	69	B	89	B
10	C	30	B	50	C	70	A	90	B
11	A	31	B	51	B	71	A	91	B
12	C	32	A	52	C	72	A	92	B
13	A	33	A	53	A	73	B	93	B

14	C	34	B	54	C	74	A	94	B
15	A	35	B	55	B	75	B	95	C
16	B	36	B	56	B	76	C	96	B
17	B	37	B	57	D	77	B	97	C
18	B	38	C	58	C	78	C	98	D
19	D	39	D	59	B	79	B	99	B
20	C	40	A	60	D	80	C	100	B