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Question Booklet Alpha Code

A

Question Booklet Sl. No.

Total Number of Questions : 100

Time : 90 Minutes

Maximum Marks : 100

INSTRUCTIONS TO CANDIDATES

1. The Question Paper will be given in the form of a Question Booklet. There will be four versions of Question Booklets with Question Booklet Alpha Code viz. **A, B, C & D**.
2. The Question Booklet Alpha Code will be printed on the top left margin of the facing sheet of the Question Booklet.
3. The Question Booklet Alpha Code allotted to you will be noted in your seating position in the Examination Hall.
4. If you get a Question Booklet where the alpha code does not match to the allotted alpha code in the seating position, please draw the attention of the Invigilator **IMMEDIATELY**.
5. The Question Booklet Serial Number is printed on the top right margin of the facing sheet. If your Question Booklet is un-numbered, please get it replaced by new Question Booklet with same alpha code.
6. The Question Booklet will be sealed at the middle of the right margin. Candidate should not open the Question Booklet, until the indication is given to start answering.
7. Immediately after the commencement of the examination, the candidate should check that the Question Booklet supplied to him/her contains all the 100 questions in serial order. The Question Booklet does not have unprinted or torn or missing pages and if so he/she should bring it to the notice of the Invigilator and get it replaced by a complete booklet with same alpha code. This is most important.
8. A blank sheet of paper is attached to the Question Booklet. This may be used for rough work.
9. **Please read carefully all the instructions on the reverse of the Answer Sheet before marking your answers.**
10. Each question is provided with four choices **(A), (B), (C)** and **(D)** having one correct answer. Choose the correct answer and darken the bubble corresponding to the question number using Blue or Black Ball Point Pen in the OMR Answer Sheet.
11. **Each correct answer carries 1 mark and for each wrong answer 1/3 mark will be deducted. No negative mark for unattended questions.**
12. No candidate will be allowed to leave the examination hall till the end of the session and without handing over his/her Answer Sheet to the Invigilator. Candidates should ensure that the Invigilator has verified all the entries in the Register Number Coding Sheet and that the Invigilator has affixed his/her signature in the space provided.
13. Strict compliance of instructions is essential. Any malpractice or attempt to commit any kind of malpractice in the Examination will result in the disqualification of the candidate.

1. The hypertonic solution used in osmotic dehydration of fruits and vegetables consists of

A) NaOH	B) Baking Powder
C) <u>Sugar</u>	D) Lactic acid
2. A process where pre-packed food is exposed to radiant energy to kill microbes, pests, prevent sprouting is

A) <u>Cold sterilization</u>	B) Hot sterilization
C) Ultra pasteurization	D) Batch pasteurization
3. Pulsed light technology is mainly used for

A) Condensation	B) <u>Sterilization</u>
C) Cooking	D) Boiling
4. In this advanced thermal processing method, the food material, which serves as an electrical resistor, is heated by passing electricity through it

A) Microwave heating	B) Radiation
C) <u>Ohmic heating</u>	D) Irradiation
5. Maillard Reaction is the result from chemical interactions at high heat between

A) Sugar and Minerals	B) Sugar and Sugar
C) <u>Sugars and Amino acids</u>	D) Sugars and Vitamins
6. In _____ one end of the can may bulge and on forcing the bulged end back the other end will bulge.

A) <u>Springer</u>	B) Flipper
C) Gun puff	D) Soft swell
7. Which among these microorganisms can easily grow under anaerobic conditions, producing the deadly toxin specially in canned foods ?

A) <i>Coxiella Burnetti</i>	B) <i>E. Coli</i>
C) <i>B. Subtilis</i>	D) <u><i>C. Botulinum</i></u>
8. Which among the following is not an intrinsic factor which affects shelf life of a product ?

A) Initial microbial load	B) Water activity
C) Product formulation	D) <u>Storage condition</u>
9. A nonthermal processing method that uses physical pressure to preserve food, instead of heat, chemicals or irradiation.

A) <u>HPP</u>	B) HTST
C) LTST	D) UHT

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10. Why is it that soft fruits cannot be preserved using freezing ?
- A) Hydrogen bonding increases on freezing thus damaging cellular structure
 - B) Water in fruit tissues reduces its volume on freezing thus damaging the cellular structure
 - C) Water in cells gels on freezing due to the presence of pectin
 - D) Water in fruit tissues expands its volume on freezing thus damaging the cellular structure
11. Sequence of rice milling process
- A) Cleaning-dehusking-separation-polishing-grading
 - B) Cleaning-grading-polishing-separation-dehusking
 - C) Cleaning-separation-grading-polishing-dehusking
 - D) Cleaning-polishing-separation-grading-dehusking
12. Addition of potassium iodide to salt is an example of
- A) Nutritive supplement
 - B) Colourant
 - C) Flavor addition
 - D) Anticaking
13. Three stages of freeze drying food in order are
- A) freezing, sublimation, secondary drying
 - B) sublimation, freezing, secondary drying
 - C) secondary drying, freezing, sublimation
 - D) secondary drying, sublimation, freezing
14. Which among the following is a still beverage ?
- A) Flavoured water
 - B) Wine
 - C) Beer
 - D) Gin
15. Process of breaking down intermolecular bonds of starch molecules in the presence of water and heat is called
- A) Retrogradation
 - B) Gelatinization
 - C) Vaporization
 - D) Dextrinization
16. IR radiation releases energy in electromagnetic wave form in the spectrum from
- A) 0.75 μm to 1,000 μm
 - B) 0.10 μm to 0.75 μm
 - C) 1000 μm to 2000 μm
 - D) 2000 μm to 5000 μm

17. Rosemary is an aromatic herb that has been known from ancient times as a _____ of the mint family.
 A) Memory herb B) Auspicious herb
 C) Spicy herb D) Smiley herb
18. The activity of SO_2 increases
 A) With decreasing pH B) With increasing pH
 C) With a constant increase in the pH D) pH has no influence
19. Which among the following is the indicator organism considered for fixing the pasteurization time and temperature ?
 A) *Coxiella Brunetti* B) *E. Coli*
 C) *B. Subtilis* D) *C. Botulinum*
20. In a carbonated drink the degree of solubility of carbon dioxide gas increases
 A) At low temperature and high pressure
 B) At high temperature and high pressure
 C) At low temperature and low pressure
 D) None of the above
21. Milk pricing system which discourages adulteration with water
 i. Payment according to weight
 ii. Payment according to use of milk
 iii. Payment according to fat content of milk
 A) Only i B) Only i and ii
 C) Only iii D) Only ii
22. Considering the legal standards the maximum obtainable overrun in butter is
 A) 15% B) 25%
 C) 35% D) 50%
23. Which of the following casein submicelle are hydrophobic ?
 i. alpha-s1-casein
 ii. beta-casein
 iii. alpha-s2-casein
 iv. kappa-casein
 A) Only i B) Only i and ii
 C) Only i, ii and iii D) All of the above i, ii, iii and iv

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24. Homogenization efficiency can be assessed by
- i. Creaming rate
 - ii. NIZO method
 - iii. Size distribution method
- A) Only i
B) Only i and ii
C) Only i and iii
D) All of the above i, ii and iii
25. Fluffy defect in ice cream is caused due to
- i. Excessive overrun
 - ii. Low solids content
 - iii. Excessive stabilizer content
- A) Only i
B) Only i and ii
C) Only i and iii
D) All of the above i, ii and iii
26. Which coagulant gives higher moisture content in channa ?
- A) Calcium lactate B) Citric acid
C) Lactic acid D) Acetic acid
27. In aseptic packaging which of the following can be used for package sterilization ?
- i. Superheated steam
 - ii. Hydrogen peroxide
 - iii. Peracetic acid
 - iv. Pulsed light
- A) Only i
B) Only i and ii
C) Only i, ii and iii
D) All of the above i, ii, iii and iv
28. The velocity of fat globule is directly proportional to
- i. Centrifugal acceleration
 - ii. Viscosity of milk
 - iii. Radius of fat globule
 - iv. Separator sludge
- A) Only i B) Only i and ii
C) Only i and iii D) Only i and iv

29. Which of the following is/are oil-in-water emulsion ?
i. Table cream with 25% fat
ii. Plastic cream with 85% fat
iii. Table butter
iv. Margarine
A) Only i B) Only i and ii
C) Only i and iii D) Only iii and iv
30. In aseptic packaging the layer that provides rigidity is
A) Paper B) Aluminum foil
C) Polyethylene D) Polypropylene
31. Which method of ghee production produces least amount of ghee residue ?
A) Pre-stratification method B) Direct cream method
C) Creamery butter method D) Desi method
32. Factors that can lower the heat stability of milk
i. Developed acidity
ii. High total solids
iii. Homogenization
iv. Addition of chemical stabilizer
A) Only i B) Only i and ii
C) Only i, ii and iii D) All of the above i, ii, iii and iv
33. Lumpy defect in milk powder may be caused due to
i. Insufficient drying
ii. Absorption of moisture
iii. Drippage from pressure nozzle
A) Only i B) Only i and ii
C) Only i and iii D) All of the above i, ii and iii
34. Accelerated ripening in cheese can be done by
i. Increasing ripening temperature
ii. Addition of exogenous enzyme
iii. Addition of whey protein
iv. Ultra filtration
A) Only i B) Only i and ii
C) Only i, ii and iii D) All of the above i, ii, iii and iv

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35. Reagent for detection of added urea in milk
A) Para-phenylenediamine
C) Barfoed's reagent
B) p-Dimethylaminobenzaldehyde
D) Diphenylamine
36. Casein can be manufactured from
i. Skim milk
ii. Ghee residue
iii. Buttermilk
iv. Ultra filtrated whey
A) Only i
C) Only i and iii
B) Only i and iv
D) All of the above i, ii, iii and iv
37. In UHT heat exchanger the type of deposits formed is/are
i. Type – A
ii. Type – B
A) Only i
C) Both i and ii
B) Only ii
D) None of the above
38. Greasy defect in butter may be caused due to
i. Overworking
ii. Underworking
iii. High meting fats
iv. Overchurning
A) Only i
C) Only i and iii
B) Only ii
D) All of the above
39. Which of the following is a baked traditional Indian dairy product ?
i. Shrikhand wadi
ii. Chhana podo
iii. Chhana murki
iv. Khurchan
A) Only i
C) Only ii and iii
B) Only ii
D) Only i and iv
40. Major Dahi flavor compound is
A) Acetaldehyde
C) Diacetyl
B) Ethyl ester
D) Lactones

41. Which of the following statements is/are correct about the tests used in an abattoir ?
- I. Malachite green test is used for detecting imperfect bleeding of carcass.
 - II. Remington and Fowrie's test is used for detecting jaundice in carcasses.
 - III. Malachite green test is used for detecting both jaundice and imperfect bleeding in carcasses.
 - IV. Remington and Fowrie's test is used for detecting imperfect bleeding in carcasses.
- A) I and III only
 - B) I and II only
 - C) II only
 - D) None of the above
42. Which of the following statements are correct about the abattoir ?
- I. The lairage area for cattle abattoirs should have adequate space and facilities to hold at least three days slaughter.
 - II. The V-race is a path that connects the lairage and slaughtering section of an abattoir.
 - III. The light intensity at the point of inspection in an abattoir should be a minimum of 540 lux.
 - IV. The ageing room temperature is normally maintained between 10 – 15°C.
- A) I and III only
 - B) I, III and IV only
 - C) II and IV only
 - D) All of the above
43. Which of the following statements is/are correct about the emulsifying properties of eggs ?
- I. Egg yolks contain emulsifiers like lecithin that help to stabilise oil-water mixtures.
 - II. Emulsifying properties are essential in products like mayonnaise and salad dressings.
 - III. Egg whites are equally effective as yolks in emulsifying mixtures.
 - IV. The emulsifying action contributes to smooth textures in food products.
- A) I only
 - B) I, II and IV only
 - C) II and III only
 - D) All of the above

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44. Which of the following statements is/are correct about the quick freezing of meat ?
- I. Quick freezing result in the formation of large ice crystals in the meat.
 - II. It improves the tenderness of meat by breaking down muscle fibres.
 - III. The freezing process occurs at temperatures below -30°C in most quick freezing methods.
 - IV. Quick freezing helps to retain the sensory and nutritional qualities of meat products.
- A) I and II only B) III and IV only
C) III only D) All of the above
45. Which of the following statements are correct about the benefits of meat ageing ?
- I. Ageing improves the overall texture and flavour of meat.
 - II. It reduces the water-holding capacity of meat, making it less juicy.
 - III. The ageing in meat is mainly due to the action of the enzyme cathepsins.
 - IV. Ageing enhances the market value of meat by improving its sensory attributes.
- A) I and III only B) I, III and IV only
C) I and IV only D) All of the above
46. Which of the following statements is/are incorrect about the certification of organic meat in India ?
- I. The National Programme for Organic Production (NPOP) oversees organic certification.
 - II. Organic meat production prohibits the use of vaccines and antibiotics.
 - III. Farmers must undergo a conversion period to transition to organic practices.
 - IV. Certification allow the use of Genetically Modified Organisms (GMOs) in organic meat production.
- A) I and II only B) II and IV only
C) II only D) All of the above
47. Which of the following statements is/are correct about curing ingredients in meat processing ?
- I. Sodium nitrite is a basic curing agent used in meat products to develop cured meat flavour.
 - II. Sugar in curing serves as a flavour enhancer and counterbalances the saltiness.
 - III. Phosphates in curing mixtures improve meat tenderness and water-holding capacity.
 - IV. Curing agents are primarily used to improve the colour and flavour of the meat products and not mainly for preservation.
- A) I and II only B) I, II and III only
C) III only D) All of the above

48. Which of the following curing ingredients is/are responsible for the characteristic pink colour in cured meat ?
- Sodium chloride.
 - Sodium nitrite.
 - Ascorbic acid.
 - Potassium nitrate.
- A) II and IV only
- B) II only
- C) II, III and IV only
- D) All of the above
49. Which of the following statements correctly completes the sentences based on the use of irradiation in meat Preservation ?
- By irradiation it is very difficult to destroy the _____ and _____ in meat and the off odour that is developed during irradiation is described as _____.
- Bacteria, virus, metallic odour
 - Virus, enzymes, wet dog odour
 - Virus, enzymes, rotten egg odour
 - Bacteriophages, bacteria, wet dog odour
50. Which of the following statements correctly completes the sentence about the nutrient composition of eggs ?
- Egg is deficient in _____ and _____ mineral.
- Vitamin C and Iron
 - Vitamin A and Calcium
 - Vitamin D and Zinc
 - Vitamin B1 and Magnesium
51. In canning or retorting, the time required to destroy a given number of organisms at a specific temperature is known as
- Z-value
 - D-value
 - TDT-value
 - 12-D
52. In species identification of animal products by PCR-RFLP, the sequence of which mitochondrial gene is commonly employed ?
- Cyt-b
 - Cyt-b2
 - 12s Rrna
 - None of the above

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53. The true indicator of faecal contamination in meat

- I. *E. Coli*
- II. *Salmonella*
- III. *Streptococci*
- IV. *Campylobacter*

- A) I and II only
- B) I, II and IV only
- C) II and III only
- D) I only

54. Which of the following statements about poultry processing is/are correct ?

- I. Bleeding time in chicken is approximately 2-3 minutes.
- II. In soft scalding, the temperature used is around 50°C for 1.5-2 minutes.
- III. Hard scalding is generally followed for water birds and breeders.
- IV. Scalding temperature of mature birds is around 65°C (sub-scalding).

- A) I only
- B) I, II and III only
- C) I, II, III and IV
- D) II and IV only

55. Which of the following statements about *Staphylococcus aureus* food poisoning are correct ?

- I. *Staphylococcus aureus* causes food poisoning mostly by intoxication.
- II. Food poisoning by *Staphylococcus aureus* occurs due to ingestion of endotoxins.
- III. *Staphylococcus aureus* produce heat stable toxin.
- IV. Inhalation is a common mode of food poisoning by *staphylococcus aureus*.

- A) I and III only
- B) I, III and IV only
- C) II and III only
- D) All of the above

56. Which of the following statements correctly describes the grading of a chicken carcass with the wingette portion of the wing missing ?

- I. The missing wingette affects the appearance of the carcass.
- II. A chicken carcass with a missing wingette is graded as "A Grade".
- III. Missing parts such as the wingette typically result in downgrading to "B Grade".
- IV. The carcass may still graded for "C Grade" depending on additional defects.

- A) I and II only
- B) I, III and IV only
- C) II and IV only
- D) I, II, III and IV

57. Which of the following statements correctly describes the carcass judgment for poultry affected by the following diseases : Avian influenza, fowl pox, avian leukosis and infectious bursal disease ?
- I. Avian influenza typically results in hemorrhagic lesions in the trachea, lungs and digestive tract, leading to total condemnation of the carcass.
 - II. Fowl pox presents with nodular lesions on the skin, comb, wattles and emaciated but the carcass may be acceptable if internal organs are unaffected.
 - III. Avian leukosis causes tumors in the liver and other organs, leading to total condemnation of the carcass.
 - IV. Infectious bursal disease often causes damage to the bursa of Fabricius, resulting in weakened immunity and the carcass may be condemned due to secondary infections.
- A) I and II only
B) I, III and IV only
C) II and IV only
D) All of the above
58. Which of the following statements about meat and meat products packaging system are correct ?
- I. In Modified Atmosphere Packaging (MAP), nitrogen is primarily used as a filler gas.
 - II. Shrink film packaging eliminates pockets for purge accumulation.
 - III. To prevent irreversible browning in vacuum packaging, the oxygen level must be below 500 ppm.
 - IV. Vacuum packaging offers excellent protection against freezer burn.
- A) I and II only
B) II and IV only
C) I, II and IV only
D) All of the above
59. Which of the following statements about gaseous stunning in pigs are correct ?
- I. Carbon dioxide stunning results in relaxed carcasses, facilitating easier dehairing and dressing.
 - II. CO₂ stunning reduces the incidence of PSE (pale, soft, exudative meat) and muscle splashes.
 - III. Inert gas stunning has a fast induction of unconsciousness but slow recovery, requiring shorter exposure times to be effective.
 - IV. CO₂ stunning is associated with lower labour requirements and minimal operator risks due to the absence of clonic convulsions.
- A) I only
B) I, II and IV only
C) II and III only
D) All of the above

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60. Which of the following practices best ensures the welfare and meat quality of pigs during preslaughter care ?
- I. Providing pigs with a molasses-water mix before transport help to prevent glycogen loss.
 - II. Showering pigs with cold water in lairage help to reduce body temperature and calm them.
 - III. Mixing of pigs of different social group just before transportation help to minimise fighting and stress.
 - IV. Avoiding rough handling and isolating animals from their social group help to reduce stress.
- A) I, II and III only
B) II, III and IV only
C) I and II only
D) All of the above
61. Ribose is a _____ sugar.
- A) 5C B) 4C
C) 3C D) 6C
62. The enzyme elastase is produced in
- A) Intestine B) Pancreas
C) Stomach D) Liver
63. _____ formation is needed for fat absorption.
- A) Chylomicrons B) HDL
C) VLDL D) Micelles
64. Calbindin formation is induced by
- A) Calcium B) Vitamin D
C) Protein D) Calcium phosphorous complex
65. Selenium competes with _____ in biochemical pathways.
- A) Chromium B) Sulphur
C) Protein D) Zinc
66. Curdlan is a type of
- A) Pectin B) Lignin
C) Gum D) Beta-glucan

67. Physical Activity Ratio(PAR) refers to
 A) Ratio of physical activity to rest
B) Energy cost of an activity per unit time
 C) Ratio of energy for an activity to total energy
 D) Ratio of time for a physical activity to total time
68. RDA of iron for adult women is
 A) 18 mg
C) 29 mg
 B) 24 mg
 D) 27 mg
69. The hormone that inhibits calcium absorption
 A) PTH
C) Calcitonin
 B) Vitamin D
 D) Thyroxine
70. For dim light vision
A) Cis retinal is converted to trans retinal
 B) Trans retinal is converted to Cis retinal
 C) Trans retinol is converted to retinaldehyde
 D) Cisretinaldehyde is converted to trans retinol
71. HCl and Potassium ferrocyanide are used to detect _____ in tea.
 A) Azo dyes
 C) Caffeine
 B) Coal tar dyes
D) Chicory
72. The most common polar adsorbent used in Column chromatography
A) Silica gel
 C) Calcium sulphate
 B) Calcium carbonate
 D) Calcium hydroxide
73. Lower Retention factor in TL chromatography indicates
 A) Lower polarity of solute
 C) Higher volatile nature
B) Higher polarity of solute
 D) Lower volatile nature
74. In reversed phase chromatography, stationary phase is
 A) Ionic
C) Non polar
 B) Neutral
 D) Polar
75. Soap bubble flow meter is used in
A) Gas chromatography
 C) Textureanalyser
 B) Viscometer
 D) Farinograph

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76. Which is the solvent used in IR spectroscopy ?
A) Liquid carbon dioxide
B) Carbon tetra chloride
C) Liquid nitrogen
D) Chlorine water
77. Common reagents used for dissolution of sample in AAS
A) HCl and H₂SO₄
B) HCl and HNO₃
C) H₂SO₄ and HCl
D) H₂PO₄ and HCl
78. Fibre residue after chemical digestion is corrected for ash test with
A) Evaporation
B) Sublimation
C) Cryo freezing
D) Ignition
79. Minimum quantity of sample of spices required for pesticide residue analysis is
A) 0.25 kg
B) 0.50 kg
C) 0.10 kg
D) 0.05 Kg
80. The indicator used for detecting saponification value of fats
A) Methyl orange
B) Phenolphthalein
C) Litmus
D) Methyl red
81. Choose the correct statement on HACCP.
I. Acronym of HACCP is "Hazard Assessment and Critical Control Programme".
II. The Quality management system is framed by safe product design, HACCP and prerequisite GMP programmes.
III. HACCP system can be linear and the principles are applied as the whole.
IV. Critical limits for each CCP are defined by Codex Commission on Food Hygiene, 1997.
A) I, II and III are correct; IV is wrong
B) I and III are wrong; II and IV are correct
C) I and III are correct; II and IV are wrong
D) All the statements are correct
82. Identify the animal model method which can be successfully used to test the *Campylobacter jejuni* infection and to assess the virulence of *Aeromonas* spp.
A) Anton test
B) Sereny test
C) RITARD model test
D) Kitten model test

83. A fermented product produced by mixed culture of *Streptococcus thermophilus* and *Lactobacillus bulgaricus* at 1 : 1 ratio is
 A) Butter
 B) Sour cream
 C) Yoghurt
 D) Buttermilk
84. Find out the incorrect statement about the intrinsic and extrinsic parameters influencing the microbial growth of food.
 A) In general, fungi require higher aw value for growth than bacteria
 B) Presence of natural antimicrobial substances like essential oils in some spices, lactoferrin in milk and hydrocinnamic acid derivatives in some fruits and vegetables have shown varying degrees of antimicrobial activity
 C) An environment with high temperature with low relative humidity is preferred for proper storage of food products
 D) Yeast can grow at psychrotrophic and mesophilic temperature but generally not at thermophilic condition
85. Choose the correct answer on Clostridium.
 I. Food poisoning strains of *Cl. perfringens* belongs to type A and produce only traces of alpha toxin.
 II. Botulism is caused by the ingestion of highly toxic soluble exotoxin produced by *Cl. botulinum* while growing in foods.
 III. Proteolytic strains digest casein and produce H₂S, whereas the non-proteolytic ones ferment mannose.
 A) Only II is correct
 B) Only I is correct
 C) All the three are incorrect
 D) All the three are correct
86. Selective medium that can be used to culture and enumerate *Staphylococcus aureus* from food sample is
 A) Baird-Parker agar
 B) PALCAM agar
 C) PLET agar
 D) MacConkey agar
87. Below mentioned are the advantages of Single Cell Protein (SCP) as a source of food, except
 A) Large mass of protein can be produced due to the shorter generation time of microorganisms
 B) Readily available raw materials in large quantities can be used for SCP production
 C) Production can be performed as continuous culture and hence are independent of climate change
 D) The protein content is less

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88. Phosphatase test is used to find out the efficacy of
A) Chilling
C) Pasteurization
B) Sterilization
D) Starter activity
89. Identify the mismatched statement on food adulterants.
- | Food | Adulterant |
|-------------------------|---|
| A) Ghee, cheese, butter | – Mashed potatoes, vanaspati |
| B) Black pepper | – Papaya seeds |
| <u>C) Oil</u> | <u>– Unhygienic water, chalk powder, urea</u> |
| D) Pulses | – Dyes, chemicals and lead chromate |
90. Stabilizer used in ice cream is
A) Pectin
C) Sodium glutamate
B) Potassium sorbate
D) GMS
91. Identify the correct statement/statements on enumeration of total number of bacteria from food products
- I. In MBRT, the time taken to reduce the dye is directly proportional to the number of organisms present in the sample.
 - II. The MPN results are generally higher than SPC.
 - III. The DMC method is relatively simple, rapid and the results are generally higher than SPC.
 - IV. The MPN method is statistical in nature and requires the usage of large number of glass wares.
- A) Only I and II are correct
B) Only I is correct
C) Only II, III and IV are correct
D) Only III is correct
92. Pimaricin is an example of
A) Enzyme
C) Fungicide
B) Preservative
D) Antioxidant
93. Choose the wrongly matched statement.
- A) *B. cereus* toxi-infection = Emetic and diarrheic form
 - B) Cholera toxin = Increase adenylate cyclase activity and the cAMP thus leads to loss of cell nutrients and diarrhea
 - C) AGMARK = Quality certification mark for agricultural produce
 - D) Shigella infection in food = Diagnosed by Nagler's reaction and stormy clot fermentation

94. The time- temperature combination used for pasteurization is based on the thermal death time of
- A) *Brucella abortus*
 - B) *Mycobacterium tuberculosis*
 - C) *Coxiella burnetti*
 - D) *Mycobacterium paratuberculosis*
95. Identify the correct statement/statements on mycotoxins.
- A) Toxic substances produced by variety of molds and bacteria
 - B) They are the secondary metabolites formed during the end of death phase of growth
 - C) Aflatoxin M1 is most potent and APB1 is hydroxylated products of AFM1 and appears in milk, urine and faeces
 - D) The toxicity of the potent aflatoxin decreases in the following order
B1 > M1 > G1 > B2 > M2
96. Which is the spoilage indicators of meat ?
- A) Cadarerine and putrescine
 - B) Ornithine and lysine
 - C) Glucose and glucorronate
 - D) None of these
97. Below mentioned are the serological tests used to diagnose brucellosis, except
- A) Abortus bang ring test
 - B) Rose Bengal plate test
 - C) Standard tube agglutination test
 - D) Polymerase chain reaction
98. The following are enriched media except
- A) Blood agar
 - B) Serum agar
 - C) Chocolate agar
 - D) Selenite broth
99. Microscopic Agglutination Test is used for the diagnosis of which disease
- A) Brucellosis
 - B) Leptospirosis
 - C) Campylobacter infections
 - D) Pasteurellosis
100. The light source used in fluorescent microscope is
- A) Visible light
 - B) UV light
 - C) Beam of electrons
 - D) Infrared rays