

<b>Seat No.</b>	
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**P.G. Entrance Examination, June - 2022**  
**M.Sc. FOOD SCIENCE AND TECHNOLOGY**  
**Sub. Code: 58724**

**Day and Date : Sunday, 12 - 06 - 2022**

**Total Marks : 100**

**Time : 01.00 p.m. to 02.30 p.m.**

- Instructions :**
- 1) All questions are compulsory.
  - 2) Each question carries 1 mark.
  - 3) Answers should be marked in the given OMR answer 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.

- 1) Oxidative rancidity is promoted by \_\_\_\_\_.  
(A) Heat  
(B) Catalysis.  
(C) Enzymes  
(D) All the above
- 2) \_\_\_\_\_ is Micro mineral  
(A) Calcium  
(B) Magnesium  
(C) Iodine  
(D) Phosphorous
- 3) Yellow colour in Turmeric is caused due to the presence of  
(A) Boron  
(B) Curcumin  
(C) Iron  
(D) Comoplastid

- 4) Smell is related with \_\_\_\_\_ Phenomenon
- (A) olfaction
  - (B) astringency
  - (C) texture
  - (D) consistency
- 5) Excess intake of the \_\_\_\_\_ do not creates toxicity
- (A) water soluble vitamins
  - (B) fat soluble vitamins
  - (C) both (A) & (b)
  - (D) all of the above
- 6) \_\_\_\_\_ affect the behavior of protein in food system during storage processing preparation and consumption
- (A) functional properties
  - (B) nonfunctional
  - (C) dynamic properties
  - (D) all of the above
- 7) \_\_\_\_\_ proteins are derived from protein denaturation and coagulation
- (A) Simple
  - (B) Derived
  - (C) Conjugated
  - (D) None of the above
- 8) Lactose is composed of glucose & \_\_\_\_\_.
- (A) sucrose
  - (B) fructose
  - (C) galactose
  - (D) starch

- 9) \_\_\_\_\_ is the simplest form of carbohydrates and cannot be hydrolysed further
- (A) Polysaccharide
  - (B) Disaccharide
  - (C) Oligosaccharide
  - (D) Monosaccharide
- 10) \_\_\_\_\_ water is water that is attached to the surface of molecules like polysaccharides and proteins.
- (A) Absorbed
  - (B) Adsorbed
  - (C) Freezed
  - (D) Vapourized
- 11) \_\_\_\_\_ is Macro mineral
- (A) Iodine
  - (B) Manganese
  - (C) Cobalt
  - (D) Calcium
- 12) \_\_\_\_\_ is synthesized in our body
- (A) Ergocalciferol
  - (B) Cholecalciferol
  - (C) Vitamin E
  - (D) Vitamin C
- 13) Cryogenic liquids used in the \_\_\_\_\_ method of food preservation.
- (A) Sterilization
  - (B) Canning
  - (C) Freezing
  - (D) Drying

- 14)** The solubility of protein is related to the \_\_\_\_\_.  
(A) pH  
(B) TSS  
(C) Brix  
(D) None of the above
- 15)** \_\_\_\_\_ acts as building block of the body.  
(A) Protein  
(B) Carbohydrates  
(C) Vitamins  
(D) Fat
- 16)** \_\_\_\_\_ structure of proteins involves only peptide bonds  
(A) Secondary  
(B) Primary  
(C) Tertiary  
(D) Quaternary
- 17)** \_\_\_\_\_ is example of transport protein.  
(A) Muscles  
(B) Collagen  
(C) Haemoglobin  
(D) All of the above
- 18)** \_\_\_\_\_ do not exhibit mutarotation.  
(A) Glucose  
(B) Fructose  
(C) Sucrose  
(D) All of the above

- 19)** \_\_\_\_\_ is difficult to remove during drying
- (A) Chemically bound water
  - (B) Free water
  - (C) Both (A) & (B)
  - (D) None of the above
- 20)** \_\_\_\_\_ is the amount of accessible water present in food material.
- (A) Moisture content
  - (B) Water activity
  - (C) Chemically bound water
  - (D) All of the above
- 21)** The pH meter measures \_\_\_\_\_.
- (A) acid concentration
  - (B) light refraction
  - (C) viscosity
  - (D) color of reflected light
- 22)** Gluten formation is desired in \_\_\_\_\_.
- (A) Biscuit making
  - (B) Cake making
  - (C) Bread making
  - (D) None of these
- 23)** \_\_\_\_\_ procedure used for removing bacteria from milk.
- (A) Filtration
  - (B) Bactofugation
  - (C) Homogenization
  - (D) Pasteurization

- 24)** What is WVTR?
- (A) Water to vapour transient rate
  - (B) Water to vapour transfer rate
  - (C) Water vapour transfer rate
  - (D) Water to vapour total ratio
- 25)** Cross-contamination of food is a common factor in the cause of food borne diseases which can occur by \_\_\_\_.
- (A) Food to Food
  - (B) People to Food
  - (C) Environment to Food
  - (D) All of the above
- 26)** Asepsis means \_\_\_\_.
- (A) Keeping out micro-organisms
  - (B) Keeping out air
  - (C) Keeping out food
  - (D) Keeping out water
- 27)** \_\_\_\_ acid is produced in Sauerkraut which helps preserve it.
- (A) Tartaric
  - (B) Maleic
  - (C) Acetic
  - (D) Lactic
- 28)** In a typical bacterial growth curve, resting phase is also called as \_\_\_\_ phase.
- (A) Survival
  - (B) Log
  - (C) Stationary
  - (D) Death

- 29)** Yeasts best grow at the pH range of \_\_\_\_\_.  
(A) 2.0-2.5  
(B) 3.0-3.5  
(C) 4.0-4.5  
(D) 5.0-5.5
- 30)** Degradation of protein results in foul smell condition termed as \_\_\_\_\_.  
(A) Purification  
(B) Peptification  
(C) Putrefaction  
(D) Pectification
- 31)** \_\_\_\_\_ yeast is used in making beer.  
(A) Bottom  
(B) Top  
(C) Submerged  
(D) None of the above
- 32)** Coffee is a \_\_\_\_\_ and roasted product of Coffee beans.  
(A) Sterilized  
(B) Fermented  
(C) Pasteurized  
(D) Freezed
- 33)** Salt and Sugar preserves food because they \_\_\_\_\_.  
(A) Make the food acidic  
(B) Produce high osmotic pressure  
(C) Produce low osmotic pressure  
(D) Deplete nutrients

- 34)** \_\_\_\_\_ bacteria is thermophilic as well as thermotolerant.
- (A) Streptococcus
  - (B) Lactobacillus
  - (C) (A) and (B)
  - (D) None of the above
- 35)** Hypercalcemia means \_\_\_\_\_ level of blood calcium
- (A) Decrease
  - (B) Increase
  - (C) Constant
  - (D) None
- 36)** Viruses cannot be cultivated in \_\_\_\_\_.
- (A) Tissue culture
  - (B) Bird embryos
  - (C) Live Mammals
  - (D) Blood agar
- 37)** Which bacteria is responsible for gas gangrene
- (A) C. tetani
  - (B) C. botulinum
  - (C) C. perfringens
  - (D) S. typhi
- 38)** The pasteurization conditions of milk are worked out based on destruction of
- (A) Mycobacterium tuberculosis
  - (B) Clostridium botulinum
  - (C) Salmonella typhimurium
  - (D) Staphylococcus aureus



- 39)** Candied fruit covered or coated with a thin transparent coating of sugar and imparts to it a glossy appearance is called \_\_\_\_.
- (A) Glazed fruits
  - (B) Canned fruits
  - (C) Crystallized fruits
  - (D) Candied fruits
- 40)** \_\_\_\_ is a method of preservation in which food is packed in hermetically sealed containers.
- (A) Pasteurization
  - (B) Freezing
  - (C) Sterilization
  - (D) Canning
- 41)** A mature fruit of vegetable or its pieces impregnated with heavy sugar syrup till it becomes \_\_\_\_ and transparent is known as a preserve.
- (A) Smooth
  - (B) Soft
  - (C) Hard
  - (D) Tender
- 42)** Freeze drying is the preservation method which is also known as \_\_\_\_.
- (A) Lyophilisation
  - (B) Cryodesiccation
  - (C) Both (A) and (B)
  - (D) None of above

- 43)** \_\_\_\_\_ isotopes used in radiation processing of food
- (A) Co
  - (B) K
  - (C) Na
  - (D) He
- 44)** Which of the following is used as a refrigerant?
- (A) Hydrogen
  - (B) Carbon dioxide
  - (C) Helium
  - (D) Arsenic
- 45)** \_\_\_\_\_ processing is a non-thermal method of food preservation.
- (A) Sterilization
  - (B) Blanching
  - (C) Pulsed Electric Field
  - (D) Canning
- 46)** Pentose (Ribose) synthesis occurs from \_\_\_\_\_.
- (A) HMP pathway
  - (B) Glycogenesis
  - (C) Glycogenolysis
  - (D) Gluconeogenesis
- 47)** Steam peeling is used for \_\_\_\_\_.
- (A) Potato
  - (B) Onion
  - (C) Orange
  - (D) Beans

- 48)** EVOH stands for
- (A) Ethylated vinyl alcohol
  - (B) Ethylene vinyl alcohol
  - (C) Ethyl vinyl alcohol
  - (D) Ethylidene vinyl alcohol
- 49)** Biological value of \_\_\_\_\_ protein is maximum.
- (A) Meat
  - (B) Fish
  - (C) Egg
  - (D) Wheat
- 50)** \_\_\_\_\_ help in the transport of lipids in the body.
- (A) Lipoproteins
  - (B) Glycoproteins
  - (C) Nucleoproteins
  - (D) None
- 51)** The storage form of carbohydrate in animals is \_\_\_\_\_.
- (A) Glycogen
  - (B) Starch
  - (C) Both
  - (D) None
- 52)** The most predominant buffer system in case of humans is \_\_\_\_\_.
- (A) Carbonate buffer
  - (B) Phosphate buffer
  - (C) Protein
  - (D) Hemoglobin

- 53)** The pH of blood is \_\_\_\_\_.  
(A) 7.0  
(B) 7.4  
(C) 8.0  
(D) 6.0
- 54)** Anabolism means \_\_\_\_\_.  
(A) Synthesis  
(B) Decomposition  
(C) Metabolism  
(D) None
- 55)** Benefits of omega fats in the diet seem to include :  
(A) Lowering blood cholesterol levels  
(B) Producing anti-inflammatory compounds  
(C) Contributing to the normal development of the foetal brain  
(D) All of these
- 56)** PCR technique was invented by \_\_\_\_\_.  
(A) Cohn  
(B) Boyer  
(C) Sanger  
(D) Karry Mullis
- 57)** Lactic acid accumulates in blood during \_\_\_\_\_.  
(A) Aerobic glycolysis  
(B) Sleep  
(C) Anaerobic glycolysis  
(D) HMP pathway

- 58)** Making multiple copies of the desired DNA template is called \_\_\_\_\_.  
(A) cloning  
(B) transferring  
(C) r-DNA technology  
(D) genetic engineering
- 59)** Agarose extracted from seaweeds is used in \_\_\_\_\_.  
(A) Spectrophotometry  
(B) Tissue culture  
(C) PCR  
(D) Gel electrophoresis
- 60)** Stirred-tank bioreactors have been designed for \_\_\_\_\_.  
(A) Purification of product  
(B) Addition of preservatives to the product  
(C) Availability of oxygen throughout the process  
(D) Ensures anaerobic conditions in the culture vessels
- 61)** The process of separation and purification of expressed protein before marketing is called \_\_\_\_\_.  
(A) Upstream processing  
(B) Downstream processing  
(C) Bio processing  
(D) Postproduction processing
- 62)** A gene whose expression helps to identify transformed cell is known as \_\_\_\_\_.  
(A) Selectable marker  
(B) Vector  
(C) Plasmid  
(D) Structural gene

- 63)** The first human hormone produced by recombinant DNA technology is \_\_\_\_.
- (A) Insulin
  - (B) Thyroxin
  - (C) Estrogen
  - (D) Progesterone
- 64)** Coenzymes combine with \_\_\_\_.
- (A) Proenzymes
  - (B) Apoenzymes
  - (C) Holoenzymes
  - (D) Antienzymes
- 65)** Which of the following technique is used to separate the proteins?
- (A) Gel electrophoresis
  - (B) Soxhlet extraction
  - (C) Gerber's method
  - (D) Lane & amp; Eynon's method
- 66)** The first transgenic plant was \_\_\_\_.
- (A) Tobacco
  - (B) Pea
  - (C) Brinjal
  - (D) Cotton
- 67)** The enzyme required for synthesis of DNA from RNA
- (A) RNA polymerase
  - (B) DNA polymerase
  - (C) Reverse transcriptase
  - (D) Transpolymerase
- 68)** Diabetes that occurs in the pregnancy period is \_\_\_\_.
- (A) Juvenile Diabetes
  - (B) Insulin Dependent Diabetes
  - (C) Gestational Diabetes
  - (D) Non-Insulin Dependent Diabetes

- 69)** \_\_\_\_\_ have high acid content and low pH.
- (A) Vegetable
  - (B) Fish
  - (C) Fruit juice
  - (D) Meat
- 70)** Which of the following process involves conversion of sugar into alcohol.
- (A) Blanching
  - (B) Sterilization
  - (C) Fermentation
  - (D) Oxidation
- 71)** Prolonging shelf life by using irradiation is referred as \_\_\_\_\_.
- (A) Apertization
  - (B) Radurization
  - (C) Radicidation
  - (D) All of above
- 72)** HACCP stands for \_\_\_\_\_.
- (A) Hazard Analysis Critical Control Point
  - (B) Hazard Analytical Critical Common Point
  - (C) Hazardous Analysis Critical Control Point
  - (D) Hazard Analysis Control Critical Point
- 73)** The full Form of MAP is known as \_\_\_\_\_.
- (A) Modified Atmosphere Packet
  - (B) Modified Atomic Packaging
  - (C) Modified Atmosphere Packaging
  - (D) None of the above

- 74)** The water activity of fresh fruits and vegetables falls in the range of \_\_\_\_\_.  
(A) 0.97 to 0.99 (B) 0.85 to 0.90  
(C) 0.75 to 0.80 (D) 0.90 to 0.95
- 75)** Sugar and salt are used in food products to \_\_\_\_\_.  
(A) Increase shelf life  
(B) Improve taste  
(C) Inhibit growth of microorganism  
(D) All of above
- 76)** PVA stands for  
(A) Polyvinyl Alcohol (B) Post Vacation Activity  
(C) Potassium Valeric Acid (D) None of the above
- 77)** BMR is increased in \_\_\_\_\_.  
(A) Hypothyroidism (B) Hyperthyroidism  
(C) Both (D) None
- 78)** Conversion of non-carbohydrate substances into glucose is \_\_\_\_\_.  
(A) Gluconeogenesis  
(B) Glycogenesis  
(C) Glycolysis  
(D) Glycogenolysis
- 79)** The RDA for iron for women is  
(A) 10 mg/day  
(B) 15 mg/day  
(C) 20 mg/day  
(D) 25 mg/day



- 80)** \_\_\_\_\_ is a sparkling, sweetened fruit juice from which pulp and other insoluble substances have been completely removed
- (A) RTS (B) Squash  
(C) Cordial (D) All of above
- 81)** Ohmic heating referred as \_\_\_\_\_.  
(A) Electro heating (B) Radiation heating  
(C) Microwave heating (D) Cold heating
- 82)** The metabolic (endogenous) water is derived by the oxidation of  
(A) Carbohydrate (B) Protein  
(C) Fats (D) All of them
- 83)** \_\_\_\_\_ bacterium is used in the production of insulin by genetic engineering.  
(A) Saccharomyces (B) Rhizobium  
(C) Escherichia (D) Mycobacterium
- 84)** The first transgenic plant to be produced is \_\_\_\_\_.  
(A) Brinjal  
(B) Tobacco  
(C) Rice  
(D) Cotton
- 85)** Freeze dried food contains \_\_\_\_\_ percent of moisture.  
(A) 8-10 (B) 10-15  
(C) 15-20 (D) 1-5
- 86)** Limonene is present in \_\_\_\_\_.  
(A) Orange (B) Mandarin  
(C) Lime (D) Lemon

- 87)** Ready to serve beverage consist of \_\_\_\_\_ fruit juice and \_\_\_\_\_ total soluble solids.
- (A) 10%, 40 (B) 25%, 40  
(C) 10%, 10 (D) 25%, 65
- 88)** \_\_\_\_\_ peeling method used for garlic and onion.
- (A) Mechanical peeling (B) Lye peeling  
(C) Flame peeling (D) None of the above
- 89)** \_\_\_\_\_ brix is the end point of jam.
- (A) 68 degree (B) 60 degree  
(C) 50 degree (D) 55 degree
- 90)** Taste buds at the tip of the tongue are responsible for \_\_\_\_\_.
- (A) astringency (B) sweet taste  
(C) bitter taste (D) none of the above
- 91)** Meat, fruit, vegetables are \_\_\_\_\_?
- (A) Simple food (B) Complex food  
(C) Functional food (D) Nutritive food
- 92)** Which one of the following is thickening agent \_\_\_\_\_?
- (A) Agar (B) Amylase  
(C) Guar gum (D) All the above
- 93)** Which one of the following is a non-climacteric fruit?
- (A) Litchi (B) Mango  
(C) Apple (D) Banana
- 94)** Which of the following is a ripening hormone
- (A) GA-3 (B) Auxin  
(C) Cytokinin (D) Ethylene

- 95)** Chlorophyll 'a' and Chlorophyll 'b' occurs in a ratio of about \_\_\_\_\_.  
(A) 1:25 (B) 1:05  
(C) 1:50 (D) 1:10
- 96)** Ergot disease is caused by \_\_\_\_\_.  
(A) Puccinia (B) Rhizopus  
(C) Claviceps (D) Penicillium
- 97)** Certification Bodies are  
(A) First party auditing firms (B) Second party auditing firms  
(C) Third party auditing firms (D) All of the above
- 98)** FSSAI Regulation made mandatory step for every FBO during License or Registration.  
(A) Schedule IV Compliance (B) GLP  
(C) Premise Visit (D) Qualified person
- 99)** AGMARK standards cover quality guidelines for how many Commodities?  
(A) 210 (B) 226  
(C) 224 (D) 222
- 100)** Good agricultural practice as a collection of principles to apply at  
(A) On-farm production  
(B) Post-production processes  
(C) Production  
(D) On-farm production & Post-production processes



**Rough Work**