

Test Booklet
Series

A

**TEST BOOKLET FOR THE POST OF
ASSISTANT PROFESSOR
(FOOD TECHNOLOGY)**

Test Booklet No.

Name of Applicant Answer Sheet No.

Application No. : Signature of Applicant :

Date of Examination: Signature of the Invigilator(s)
1.

Time of Examination : 2.

Duration : 2.30 Hours]

[Maximum Marks : 100

IMPORTANT INSTRUCTIONS

- (i) The question paper is in the form of Test-Booklet containing **100 (Hundred)** questions. All questions are compulsory. Each question carries four answers marked (A), (B), (C) and (D), out of which only one is correct.
- (ii) On receipt of the Test-Booklet (Question Paper), the candidate should immediately check it and ensure that it contains all the pages, i.e., **100** questions (50 in Part-A + 50 in Part-B). Discrepancy, if any, should be reported by the candidate to the invigilator immediately after receiving the Test-Booklet.
- (iii) A separate Answer-Sheet is provided with the Test-Booklet/Question Paper. On this sheet there are **100** rows (50 in Part-A + 50 in Part-B) containing four circles each. One row pertains to one question.
- (iv) The candidate should write his/her Application number at the places provided on the cover page of the Test-Booklet/Question Paper and on the Answer-Sheet and **NOWHERE ELSE**.
- (v) No second Test-Booklet/Question Paper and Answer-Sheet will be given to a candidate. The candidates are advised to be careful in handling it and writing the answer on the Answer-Sheet.
- (vi) For every correct answer of the question **One (1) mark will be awarded**. For every unattempted question, Zero (0) mark shall be awarded. **There is no Negative Marking**.
- (vii) Marking shall be done only on the basis of answers responded on the Answer-Sheet.
- (viii) To mark the answer on the Answer-Sheet, candidate should **darken** the appropriate circle in the row of each question with Blue or Black pen.
- (ix) For each question only **one** circle should be **darkened** as a mark of the answer adopted by the candidate. If more than one circle for the question are found darkened or with one black circle any other circle carries any mark, the question will be treated as cancelled.
- (x) The candidates should not remove any paper from the Test-Booklet/Question Paper. Attempting to remove any paper shall be liable to be punished for use of unfair means.
- (xi) Rough work may be done on the blank space provided in the Test-Booklet/Question Paper only.
- (xii) *Mobile phones (even in Switch-off mode) and such other communication/programmable devices are not allowed inside the examination hall.*
- (xiii) No candidate shall be permitted to leave the examination hall before the expiry of the time.

DO NOT OPEN THIS QUESTION BOOKLET UNTIL ASKED TO DO SO.

PART-A

1. In constructivist frame a learner is viewed as
 - (A) Problem solver and scientific investigator
 - (B) Researcher and builder of new knowledge
 - (C) Proposer of new approaches through scientific analysis
 - (D) Resolver of problems and their solutions
2. Which of the following is not a key feature of "Behaviourist View"?
 - (A) Testing learners to determine whether or not they have achieved the learning outcomes
 - (B) Learning should be an active and meaningful process
 - (C) Providing reinforcement to positively impact performance (e.g. tangible rewards, informative feedback).
 - (D) An emphasis on producing observable and measurable outcomes in students
3. MOOC stands for
 - (A) Media online open course
 - (B) Media open online course
 - (C) Massive open online course
 - (D) Massive online open course
4. Skinner's Operant Conditioning Mechanisms – Negative Reinforcement: Responses that allow escape from painful or undesirable situations are ----- to be repeated
 - (A) surely
 - (B) not surely
 - (C) likely
 - (D) not likely
5. Identify a skill which is not related to instructional designer-
 - (A) Creativity and flexibility
 - (B) Communication and people skills
 - (C) Psychomotor and affective domain skills
 - (D) People and time management skills
6. As per Key Concepts of Cognitive Theory, Three-Stage Information Processing Model does not include the following.
 - (A) Memory Register
 - (B) Sensory Register
 - (C) Short Term Memory
 - (D) Long Term Memory & Storage
7. Self-actualization means
 - (A) Self-motivated
 - (B) When all your needs are met and you've become the best you can.
 - (C) When you know your strengths and weaknesses.
 - (D) When you are aware about the actual meaning of learning.

8. What is/are at the center of humanism psychology?
 (A) Motivation
 (B) Intelligence Quotient
 (C) Emotions
 (D) All of above
9. In Humanistic learning ----- are encouraged to take control over the education of the students.
 (A) Teachers
 (B) Students
 (C) Teachers & Students
 (D) Parents
10. "Cybernetic feedback loops involve a balance of actionable ----- feedback delivered in a timely manner;"
 (A) positive
 (B) negative
 (C) neutral
 (D) positive and negative
11. Conceptual knowledge consists of -----.
 (A) isolated bits of information, such as vocabulary definitions and knowledge about specific details
 (B) algorithms, heuristics or rules of thumb, techniques, and methods as well as knowledge about when to use these procedures.
 (C) systems of information, such as classifications and categories.
 (D) knowledge of thinking processes and information about how to manipulate these processes effectively.
12. In which part of brain, Skill memory is processed ?
 (A) prefrontal cortex.
 (B) hippocampus
 (C) Hypothalamus
 (D) cerebellum
13. Which of the following is not a phase of memory formation?
 (A) decoding
 (B) encoding
 (C) consolidation
 (D) retrieval
14. Which process can facilitate the formation of false memories and misconceptions ?
 (A) when a schema becomes too strong
 (B) when a schema becomes too weak
 (C) when a schema remains unchanged
 (D) None of these
15. Which of the following is not a valid data collection method?
 (A) Warrant Cards
 (B) Invoices
 (C) Consumer Panels
 (D) Use of Mechanical Devices
16. Respondents are shown a set of pictures and asked to describe what they think the pictures represent. This test is known as -----.
 (A) Rosenzweig Test
 (B) Rorschach Test
 (C) Holezman Inkblot Test
 (D) Thematic Apperception Test

17. The Significance level is ----- value of probability of rejecting H_0 when it is true and is usually determined in advance, while testing the hypothesis.
- (A) Nominal
(B) Minimum
(C) Maximum
(D) None of these
18. Which test we normally apply for Qualitative data?
- (A) t' test
(B) F' test
(C) χ^2 chi-square test
(D) Z' test
19. The error committed by rejecting an applicant who would have been successful on the job is called.
- (A) True negative error
(B) False negative error
(C) False positive error
(D) True positive error
20. Problem Based Learning (PBL) is related to
- (A) Taking challenges
(B) Working in co-operation with group
(C) Incredible learning
(D) Learning through known problems
21. Which of the following is an example of higher-order of cognitive learning outcome
- (A) Learning of facts and their sequences
(B) Learning roles and action sequences
(C) Learning of concepts and abstractions
(D) Learning of awareness and valuing
22. According to Bloom's taxonomy of educational objectives, lowest level of cognitive domain is
- (A) Analysis
(B) Evaluation
(C) Comprehension
(D) Knowledge
23. Decision making is a
- (A) Cognitive skill
(B) Psychomotor skill
(C) Affective domain skill
(D) Social skill
24. _____ is the degree to which a test measures what it is supposed to measure.
- (A) Validity
(B) Usability
(C) Reliability
(D) Objectivity
25. Which of the following is not the component of "Magic Triangle" of learning?
- (A) Learning Outcomes
(B) Learning Activities
(C) Learning Assessment
(D) Learning Aids

26. Which of the following is not a step / phase of Design Thinking?
- (A) Ideate
 - (B) Prospect
 - (C) Prototype
 - (D) Test
27. ----- learning experience in which the content takes between 2-10 minutes for the learner to consume.
- (A) Quick Learning
 - (B) Easy Learning
 - (C) Microlearning
 - (D) Macrolearning
28. ----- are software that has pre-programmed elements designed for developing interactive multimedia and creating digital content.
- (A) Authoring Tools
 - (B) DevOps
 - (C) Mobile Apps
 - (D) Java Scripts
29. ----- is a software system or platform where e-learning courses can be deployed, tracked, reported on, and delivered to learners.
- (A) Learning Experience Platform (LEP)
 - (B) Enterprise Resource Planning (ERP)
 - (C) Massive Open Online Courses (MOOCs)
 - (D) Learning Management System (LMS)
30. Which one of the following is not a e-learning platform
- (A) SWAYAM
 - (B) ARPIT
 - (C) NPTEL
 - (D) ALTAVISTA
31. “Tacit Knowledge” is not -----.
- (A) Explicit Knowledge
 - (B) Implicit Knowledge
 - (C) Real Knowledge
 - (D) Recent Knowledge
32. Taxonomy and Content Management is ----- stage of Knowledge Management
- (A) First
 - (B) Second
 - (C) Third
 - (D) Fourth
33. Expository teaching strategy includes
- (A) Learners are challenged with tasks slightly more difficult than they can accomplish on their own and must rely on assistance from and collaboration with others to achieve these tasks
 - (B) Teacher presents students with many examples showing how the concept is used and make them 'notice'
 - (C) Teacher gives the student a new concept, explains it, and then has the students practice using the concept
 - (D) Direct Instructions by the Teacher to the students and teacher presenting clear and concise information in a purposeful way

34. Which mode is not a part of Experiential Learning?
- (A) Theory Class
 - (B) Tutorial Class
 - (C) Lab Class
 - (D) Industry Internship
35. Process where students mix multiple subjects or topics while they study in order to improve their learning is known as -----?
- (A) Interleaving
 - (B) Blocked practice
 - (C) Group Learning
 - (D) Consistent Learning
36. In Cooperative Learning Strategy, the three step interview process does not include the following role?
- (A) Interviewer,
 - (B) Interviewee
 - (C) Notetaker.
 - (D) Learner
37. The muddiest point technique of learning means
- (A) asking students to write notes on their most favourite element of a given homework assignment, lecture, or class discussion.
 - (B) asking students to write notes on the most easy element of a given homework assignment, lecture, or class discussion.
 - (C) asking students to write notes on the most unclear or most confusing element of a given homework assignment, lecture, or class discussion.
 - (D) None of the above
38. Combining verbal representations of information (words) with visual representations of information (pictures/diagrams) is known as
- (A) Twinning
 - (B) Dual Coding
 - (C) Infographics
 - (D) None of the above
39. Which one of these is not the essential building block of online learning?
- (A) motivation
 - (B) meaningful content
 - (C) memorable interactivity
 - (D) Engaging assignments
40. Which of the following are not the basic functions of evaluation which is required to be practiced for pupil and his learning processes ?
- (A) Diagnostic Functions
 - (B) Predictive functions
 - (C) Motivation Functions
 - (D) Supporting Functions
41. ----- is used to monitor the learning progress of students during the period of instruction.
- (A) Formative Evaluation
 - (B) Summative Evaluation
 - (C) Diagnostic Evaluation
 - (D) Norm-referenced Evaluation

42. Which of the following indicators are not the real indicators for measuring the quality education ?
- (A) Process Indicators
 - (B) Abstract Indicators
 - (C) Outcome Indicators
 - (D) Context Indicators
43. As per NAAC, which of the following is the most significant criteria in terms of weightages/ marks
- (A) Curricular Aspects
 - (B) Teaching-Learning and Evaluation
 - (C) Research, Innovations and Extension
 - (D) Infrastructure and Learning Resources
44. The ratio of Qualitative metrics and Quantitative metrics for assessment and evaluation under NAAC in general in terms of weightages/marks is -----.
- (A) 30 : 70
 - (B) 40 : 60
 - (C) 50 : 50
 - (D) None of the above
45. Thinking tools are
- (A) Test and quiz
 - (B) Mind maps and concepts
 - (C) Rubrics and practices
 - (D) Storytelling and case study
46. Quality circle _____ job involvement
- (A) Neglects
 - (B) Demotes
 - (C) Promotes
 - (D) Neutralizes
47. Which one of following is an indicative of the quality of teaching?
- (A) Period of maintaining peace in class room
 - (B) Standard of Questions asked by the students
 - (C) Standard of answers replied
 - (D) Pass percentage of the students
48. _____ is a picture of a process that shows the sequence of steps performed.
- (A) Cause and effect diagram
 - (B) Flowchart
 - (C) Pareto diagram
 - (D) Histogram
49. Pareto analysis separates the _____ from the _____.
- (A) discrete; continuous
 - (B) vital few; trivial many
 - (C) current data; historical data
 - (D) quantitative; qualitative
50. An outline-of the topics of a subject to the covered in specific time is called:
- (A) Programme
 - (B) Syllabus
 - (C) Curriculum
 - (D) Course

PART-B
FOOD TECHNOLOGY

51. Tomato puree should have minimum TSS of %.
- (A) 5
(B) 9
(C) 7
(D) 12
52. Sodium nitrite is
- (A) Anticaking agent
(B) Curing agent
(C) Antioxidant
(D) Colorant
53. Irradiation is also known as
- (A) Cold sterilization
(B) Hot sterilization
(C) Pascalization
(D) None of the above
54. Anti staling agent in bread
- (A) GMS
(B) MSG
(C) GSM
(D) SGM
55. Vinegar contains % of acetic acid.
- (A) 4
(B) 3
(C) 7
(D) 6
56. Puffed products are dried to a moisture content less than %.
- (A) 12
(B) 8
(C) 4
(D) 16
57. Rendering is the process of extraction of
- (A) Protein
(B) Fat
(C) Carbohydrates
(D) Vitamin
58. Which of the following oils have least shelf life
- (A) Safflower
(B) Peanut
(C) Rapeseed
(D) Corn

59. The thermal death time curve is always a
- (A) Straight line
 - (B) Sigmoid
 - (C) U shape
 - (D) None of the above
60. Stefan-Boltzmann law is applicable for heat transfer by
- (A) Conduction
 - (B) Convection
 - (C) Conduction and Convection
 - (D) Radiation
61. Calcium propionate is a _____
- (A) Enzyme supplement
 - (B) Oxidizing agent
 - (C) Mould Inhibitor
 - (D) Shortening
62. Which has govern the principle of thermal conductivity?
- (A) Fourier
 - (B) Newton
 - (C) Fick
 - (D) Kick
63. Halophilic bacteria love
- (A) Salt
 - (B) Sugar
 - (C) Cold
 - (D) Heat
64. Oil from cereal grains are rich in which vitamin
- (A) A
 - (B) B
 - (C) E
 - (D) D
65. The biological value of fish protein is
- (A) 74
 - (B) 66
 - (C) 96
 - (D) 80
66. Shallot is a _____ part of a plant.
- (A) Root
 - (B) Leaf
 - (C) Bulb
 - (D) None of the above

67. Which biological active compound in coffee have capacity to inhibit the formation of PAH (Polycyclic Aromatic Hydrocarbons)
- (A) Melanoidins
 - (B) Chlorogenic Acids
 - (C) Galactomannans
 - (D) None of these
68. Nisin is used as
- (A) Antimicrobial agent
 - (B) Stabilizer
 - (C) Sweetener
 - (D) Emulsifier
69. The best sources of vitamin K are
- (A) Meat products
 - (B) Dairy products
 - (C) Green leafy vegetables
 - (D) Cereals
70. The gas used for flushing the processed and packaged food is
- (A) Hydrogen
 - (B) Carbon dioxide
 - (C) Nitrogen
 - (D) Oxygen
71. Maltose is formed from
- (A) Glucose + Fructose
 - (B) Glucose + Galactose
 - (C) Glucose + Glucose
 - (D) Fructose + Galactose
72. As per Indian standards, moisture content in whole egg powder should be
- (A) Not less than 2.5%
 - (B) Not less than 3.5%
 - (C) Not less than 4.5%
 - (D) None of the above
73. In resolution of rigor mortis, _____ enzyme(s) does not take part
- (A) Lactate dehydrogenase
 - (B) Cathepsins
 - (C) Calpain
 - (D) Cytosolic proteases
74. Myofibrillar proteins % in post-rigor meat is
- (A) 50-55%
 - (B) 15-20%
 - (C) 5-10%
 - (D) 60-65%

75. _____ is the isoelectric point of meat (myofibrillar) proteins where they precipitate
- (A) pH 5.1
 - (B) pH 5.6
 - (C) pH 6.2
 - (D) pH 6.5
76. Unit for Acceptable daily intake of an additive is
- (A) mg/kg/d
 - (B) mg/d
 - (C) mg/kg
 - (D) No units
77. Normal sausage casing has diameter of _____
- (A) 28-32 mm
 - (B) 18-22 mm
 - (C) 40-44 mm
 - (D) 76-80 mm
78. _____ increases water holding capacity of meat in cured meat products
- (A) Sodium ascorbate
 - (B) Sodium tri-polyphosphate
 - (C) Sodium nitrite
 - (D) Sugar
79. Following is the example of direct additives except
- (A) Caramel
 - (B) Nickel
 - (C) BHT
 - (D) Sodium nitrite
80. In the INS system, INS nos. between 950 to 969 have been allocated to following class of additives
- (A) Non-nutritive sweeteners
 - (B) Packaging gases & Synthetic glazes
 - (C) Nutritive sweeteners
 - (D) All of the above
81. A physical quantity which can be measure quantitatively is defined by a?
- (A) Constant
 - (B) Ratio
 - (C) Dimension
 - (D) Unitless

82. What is the reason for malty off flavor in milk products?
- (A) Faulty fermented
 - (B) Autoxidation
 - (C) Degradation
 - (D) Photooxidation
83. Which one is most accurate for water in food representation?
- (A) Water activity
 - (B) MC (db)
 - (C) MC (wb)
 - (D) MC (vb)
84. Quality of the flour is affected by_____
- (A) Wheat variety
 - (B) Milling process
 - (C) Bleaching
 - (D) All of these
85. Calcium propionate is a _____
- (A) Enzyme supplement
 - (B) Oxidizing agent
 - (C) Mould Inhibitor
 - (D) Shortening
86. Which is acting as food preservative?
- (A) Sugar
 - (B) Jam
 - (C) Vinegar
 - (D) Acid
87. What is the working principle of Lyophilization?
- (A) Deposition
 - (B) Condensation
 - (C) Sublimation
 - (D) Evaporation
88. Any Sample taken by the Food safety officer (FSO) should be divided into _____ Parts.
- (A) 2
 - (B) 3
 - (C) 4
 - (D) Depends on discretion of FSO

89. Which among following laws/acts is not repealed after commencement of FSSAI, 2006
- (A) MMPO
- (B) FPO
- (C) PFA
- (D) AGMARK
90. Which of the following is the race of wheat _____
- (A) Japonica
- (B) Oryza
- (C) Durum
- (D) Indica
91. Alcohol test for raw milk is used to find out its stability during
- (A) Transit of Milk
- (B) Freezing of Milk
- (C) Heating of Milk
- (D) None of these
92. In food sample drying which is most efficient drying method?
- (A) Osmotic dehydration
- (B) Oven drying
- (C) Vacuum drying
- (D) Freeze drying
93. In hydrostatic sterilization, what is temperature (°C) in steam section?
- (A) 105
- (B) 129
- (C) 98
- (D) 110
94. Bot cook is related to
- (A) Blanching
- (B) Osmotic dehydration
- (C) Spoilage probability in canning
- (D) Chilling
95. Ozone can be produced at point of application using
- (A) Corona discharge method
- (B) UV radiation method
- (C) Both (A) and (B)
- (D) None of these

96. Exsanguination is the-
- (A) Loss of homeostasis
 - (B) Loss of oxygen
 - (C) Loss of blood
 - (D) All of the above
97. UV waves having germicidal properties for disinfection
- (A) UV-A (315-400 nm)
 - (B) UV-B (280-315 nm)
 - (C) UV-C (100-280 nm)
 - (D) None of the above
98. Unique flavour associated with cocoa products is primarily derived from the
- (A) 1,3,5-trithiane
 - (B) 5-methyl-2-phenyl-2-hexenal
 - (C) 3-methylbutanal
 - (D) 3-thiazoline
99. Emulsifiers are surface-active molecules that adsorb to the surface of freshly formed droplets of an oil-water interface during homogenization, forming a _____ that prevents the droplets from coming close enough together to aggregate.
- (A) Thermodynamically stable form
 - (B) Protective membrane
 - (C) Disruptive membrane
 - (D) None of the above
100. The brown pigment formed due to enzymatic action
- (A) Melanin
 - (B) Melanoidin
 - (C) caramel
 - (D) All of the above

ROUGH WORK