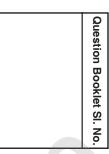
#### **Question Booklet Alpha Code**





Total Number of Questions: 100 Time: 75 Minutes

Maximum Marks: 100

#### **INSTRUCTIONS TO CANDIDATES**

- 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.
- 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
- 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.



**A** -2-

1.	Freeze drying takes place at  A) The triple point  C) Above the triple point	<ul><li>B) Below the triple point</li><li>D) At zero degree Celsius</li></ul>				
2.	Use of several methods like temperature ( water activity for preservation of food is known). Hurdle technology.  C) Stumbling technology.					
3.	Cause and effect diagram is also known as A) Quality circles C) Five force diagram	B) Fish bone diagram D) Kaizen diagram				
4.	The process in which a specially designed hermetic centrifuge is used to separate bacteria and especially the spores formed by specific bacteria strains, from milk known as  A) Sterilization  B) Pasteurisation  C) Aseptic packaging  D) Bactofugation					
5.	The most common bacterial cultures involved in acidic fermentation are  A) Lactobacillus, Leuconostoc, Lactococcus and Streptococcus  B) Lactococcus, Bifidobacterium, Lactobacillus and Leuconostoc  C) Lactococcus, Rhizopus, Lactococcus and Streptococcus  D) Lactobacillus, Leuconostoc, Lactococcus and Aspergillus					
6.	<ol> <li>Which of the following statements are true</li> <li>Foods high in sugar and other solutes of</li> <li>As drying progresses the concentration the drying rate to slow.</li> <li>Water that is most difficult to remove is hydrates.</li> <li>Drying at high pressure occurs at lower</li> <li>A) 1, 2, 3, 4</li> <li>B) 1, 2, 3</li> </ol>	Iry more slowly. of solutes in water increases causing that is chemically bound in the form of				
7.	Foods processed using high-pressure tech field pulse and thermosonication are known A) Minimally processed foods C) Aseptically processed foods					
8.	Food items should be subjected to micro free is and loss factor is A) Maximum, minimum  C) Minimum, minimum	quencies such that, the dielectric constant  B) Maximum, maximum  D) Minimum, maximum				

**A** -3-

9.	<ul><li>In which of the following ways does absorpt</li><li>A) Photoelectric effect</li><li>C) Pair production</li></ul>	btion of gamma radiation takes place?  B) Compton effect  D) All of the mentioned
10.	Which among the following claims is prohil A) Unsubstantiated claims C) Claims of quality	Dited ?  B) Claims of Veg./Non-veg.  D) None of the mentioned
11.	What is "carryover" principle?  A) Additives added in the raw materials ar  B) Antioxidant added to oil is present in al  C) All of the above  D) None of the above	
12.	<ul> <li>Difference of Green Tea from Black Tea is</li> <li>A) The oxidation process is omitted</li> <li>B) The tea leaves are steamed in a pan be enzymes</li> <li>C) The oxidation process is omitted and the before being rolled to prevent oxidation</li> <li>D) None of the mentioned</li> </ul>	efore rolling to prevent oxidation by ne tea leaves are steamed in a pan
13.	When a deviation from critical limits happe A) Documentation of corrective actions B) Stop the line and inform the supervisor C) Reassess the HACCP plan D) All of the above	
14.	<ul><li>Which type of packaging is appropriate for</li><li>A) Ethylene absorbers</li><li>B) Oxygen absorbers</li><li>C) Carbon-di-oxide absorbers</li><li>D) Nitrogen producing</li></ul>	fruits?
15.	Which of the following is true about death time  A) It tells us the time and temperature to sets  B) It tells us about the heat penetration of C) It tells us about the heat conductivity of	terilize canned food the container

**A** -4-

D) All of the mentioned

16.	Wł	nich method is most energy efficient for making ghee ?
	A)	Desi method
	B)	Creamery butter method
	C)	Direct cream method
	D)	Pre-stratification method
17.	Wł	nat will be the over run, if 400 litre of mix produces 740 litre of ice cream?
	A)	60%
	B)	85%
	C)	30%
	D)	100%
18.		nat is the major defect that occurs in UHT milk during storage?
	•	Darkening of colour
		Age gelation
	C)	Cooked flavour
	D)	Absence of beneficial bacteria
10	Di	ring cheddar cheese manufacture, rennet split the kappa-casein at the
19.		nction of
	-	Phenyl alanine-histidine
	-	Methionine-lysine
	•	Histidine-lysine
	,	
	(ט	Phenyl alanine-methionine
20.	UH	HT processed milk is aseptically packaged at
		5 °C
		10 °C
	,	20 °C
	•	40 °C
	-,	

**A** -5-

- 21. The usual method of stunning cattle is by using
  - A) Captive bolt pistol
  - B) Electrical stunning
  - C) CO<sub>2</sub> anaesthesia
  - D) None of the above
- 22. Which Vitamin is not available in egg?
  - A) Vitamin A
  - B) Vitamin B
  - C) Vitamin C
  - D) Vitamin D
- 23. A meat borne bacterial infection
  - A) Taeniasis
  - B) Toxoplasmosis
  - C) Sarcocystis
  - D) Salmonellosis
- 24. A cured meat product
  - A) Sausage
  - B) Bacon
  - C) Keema
  - D) Cutlet
- 25. The method of preservation of egg using sodium silicate
  - A) Thermal processing
  - B) Water glass method
  - C) Lime sealing
  - D) Oil coating

Λ

20.	A) All kinds of documents     Public documents	B) Private documents     D) Government documents
27.	<ul> <li>'Consumer' under the Food Safety and State</li> <li>A) Person who consumes food</li> <li>B) Person and family who consume food</li> <li>C) Person who purchases and receives the</li> <li>D) Person and families who purchases are</li> </ul>	ne food
28.	The head office of the Food Safety and St A) Mumbai B) Delhi	andards Authority of India is at C) Calcutta D) Kochi
29.	The enactment of Information Technology which provision under Indian Evidence Ac A) S. 65A B) S. 64A	
30.	Who is responsible for the inspection of food for food analysis under Food Safety and SA) Commissioner of Food Safety  B) Food Analyst  C) Food Safety Officer  D) Live Stock Inspector	
31.	<ul> <li>Which of the following is correct?</li> <li>A) The accused can file written statement defence.</li> <li>B) S. 250 Cr.P.C. empowers the magistra case instituted otherwise than on a pol</li> <li>C) In a summary trial under S. 235 Cr.P.C that can be imposed is two years.</li> <li>D) The bail bond executed for the appearance of the program of t</li></ul>	te to discharge an accused in a warrant ice report.  C. the maximum period of imprisonment
32.	S. 437 Cr.P.C. shall be five years.  The magistrate can take cognizance of off A) Receiving information through telephon B) A police report  C) Information received from a police office D) All the above	ne or e-mail

-7-

33.				person on bail and	
34.		confer on any magistration power to try summar erm not exceeding  B) 3 months			
35.	A) Any person conviction criminal jurisdiction	which could not succe	a High Court in its ex	traordinary original	
36.	<ul> <li>6. Any person who manufactures for sale or distribute any article of substandard food for consumption is liable to the extend of</li> <li>A) 2.5 lakhs rupees and 6 months imprisonment</li> <li>B) 2.5 lakhs rupees only</li> <li>C) 5 lakhs of rupees and 6 months imprisonment</li> <li>D) 5 lakhs rupees</li> </ul>				
37.	The Food Safety App A) 5 members C) 1 member	pellate Tribunal shall o	consists of  B) 3 members  D) Any of the above	<b>;</b>	
38.	The defences which Standards Act is unc A) S. 78	may be allowed in later B) S. 79	orosecution under the	e Food Safety and D) S. 80	
39.	<ul> <li>Where in a case the sample container received by the Food Analyst is found to be in broken condition, he shall</li> <li>A) Inform the designated officer within seven days</li> <li>B) Inform the designated officer within reasonable period of time</li> <li>C) Inform the commissioner within seven days</li> <li>D) Inform the commissioner within reasonable period of time</li> </ul>				
40.	The secondary evide A) S. 66	ence is defined under B) S. 44	which provision of Ind C) S. 36	lian Evidence Act? D) S. 63	
4		-8-	}-		

41.	In which of the following separation techniques the separation is based on the net charge of the molecule ?				
	A) Affinity chromatography     Molecular exclusion chromatography		Ion exchange chromatography Isopyenic centrifugation		
42.	An example for triose is  A) Glucose  C) Xylulose	,	Ribulose Glyceraldehyde		
43.	The exoskeleton of insects (chitin) is comp A) N-Acetyl glucosamine C) N-Acetyl galactosamine	B)	d of N-Acetyl muramic acid Glucose-6-phosphate		
44.	Of the following, which amino acid is an im  A) Histidine  B) Glutamic acid		acid ? Proline D) Tyrosine		
45.	<ul> <li>The proteolytic enzyme trypsin, hydrolyses the peptide bonds in which</li> <li>A) Amino group is contributed either by lysine or arginine</li> <li>B) Carbonyl function is contributed either by lysine or arginine</li> <li>C) Carbonyl function is contributed either by phenylalanine or tyrosine</li> <li>D) Amino group is contributed either by phenylalanine or tyrosine</li> </ul>				
46.	Which of the following is not an antioxidant A) Vit. C B) Vit. E		Carotenes D) Vit. B <sub>6</sub>		
47.	Iodine number of fatty acids denotes its  A) Degree of unsaturation  C) Molecular weight	•	Chain length Solubility in water		
48.	Cold Sterilization means perseveration of for A) Sterilizing at - 179 °C C) Sterilizing at 0 °C	B)	by Radiation Lyophylization		
49.	In humans the basal metabolic rate account the daily calorie expenditure.  A) $60-75$ B) $40-55$		for about percentage of 25 - 40 D) 80 - 90		
50.	The Respiratory Quotient (RQ) is the ratio of A) O <sub>2</sub> consumed/CO <sub>2</sub> eliminated C) CO <sub>2</sub> eliminated/O <sub>2</sub> consumed	B)	${ m H_2O}$ consumed/ ${ m CO_2}$ eliminated ${ m CO_2}$ eliminated/ ${ m H_2O}$ consumed		

Α

51.	Biological Value of a protein is influenced by			
	A)	Amino acid composition		
	B)	Vitamin and mineral content		
	C)	Preparation (cooking)		
	D)	All the above		
52.	Th	e absorption maxima $\lambda_{\text{max}}$ of a compound is dependent on		
	A)	Structure of the compound		
	B)	pH of the solvent in which the compound exist		
	C)	The polarity of the solvent		
	D)	All the above		
53.	Th	e purpose of guard column in HPLC systems is to		
	A)	Protect the peristaltic pump		
	B)	Protect the main column		
	C)	Protect the injection port		
	D)	Protect the detector		
54.	All	free radicals have in their orbitals.		
	A)	Paired valence electron		
	B)	Unpaired valence electrons		
	C)	No valence electron		
	D)	None of the above		
55.	Of	the following which is not an artificial sweetener?		
	A)	Saccharin		
	B)	Sodium cyclamate		
	C)	Butylated hydroxyanisole		
	D)	Acesulfame		

A

56.		nich is mordant in G Crystal Violet	Grams staining ? B) Safranin	C)	Alcohol	D)	Iodine
57.	A)	e immersion oil use Decrease the num Decrease the refra	•	,	Increase the refra		re index
58.	A)	atoxins are Produced by certa Causes immunosu	•	•	Cancer causing a	ıger	nt
59.	_	tulinum toxins are Neurotoxic	B) Teratogen	C)	Carcinogenic	D)	Mutagen
60.	A)	SA (Mannitol Salt A E. Coli Bacillus sp.	gar) is generally used	B)	the detection of Staphylococcus a Aspergillus niger	aure	eus
61.		zyme used in fruit j Protease	uice clarification is B) Trypsin	C)	Cellulase	D)	Pectinase
62.	A) B) C)	tating Biological co Primary treatment Secondary treatment RBC isolation Solid waste manage	ent of waste water	d			
63.	A)	is is not a method of Encapsulation Nanomaterial imm	of enzyme immobiliza	B)	Adsorption PAGE		
64.	A) B) C)	Hazard Analysis a Hazard Analysis a	nd Critical Control Poi nd Critical Care Point nd Crucial Control Po nd Critical Control Po	int			
65.		nich GM crop is app Bt Corn Bt Cotton	proved in India ?	,	Bt Brinjal GM Tomato		

**A** -11-

66	Th	e trap which is used widely to kill rice field rats is
		Snap trap
	,	Remote triggered trap
	,	Pot trap
	,	·
	(ט	Automatic trap
67.	A	dull hollow sound when tapped is the maturity index of crop.
	A)	Papaya
	B)	Pineapple
	C)	Sapota
	D)	Watermelon
68.	Bh	eema is a high yielding variety of mushroom.
	A)	Paddy straw mushroom
	B)	Button mushroom
	C)	Oyster mushroom
	D)	White milky mushroom
00	•	
69.		chemical safely sprayed on bags of stored grains in godowns
	A)	Carbosulfan
	B)	Malathion
	C)	Dimethoate
	D)	Quinalphos
70	\ <b>\</b> /k	nich of the following is not an advantage of blanching?
70.		
	,	For precooling
		To preserve colour
	,	To preserve flavor
	D)	To inactivate enzymes

Α

71.	Who among the following was the Anglo-Indi Assembly?  A) Morris Johns	an representative in the B) Frank Anthony	e Indian Constituent
	C) Sardar Vallabha Bhai Patel	D) K. M. Munshi	
72.	Which Article of the Indian Constitution dea A) Art. – 14 B) Art. – 19	als with Right to Life? C) Art. – 20	D) Art. – 21
73.	Who among the following is returning office A) Secretary General of Lok Sabha C) Chief Justice of India	er for the election of P B) Chief Election Co D) Prime Minister of	ommissioner
74.	What is the subject matter of Article 40 of I A) Uniform Civil Code C) Right to Education	ndian Constitution ? B) Prohibition D) Panchayati Raj	
75.	By which Amendment Secularism incorporate A) 24 <sup>th</sup> B) 74 <sup>th</sup>	ed in the Preamble of In C) 42 <sup>nd</sup>	dian Constitution ? D) 44 <sup>th</sup>
76.	Which Article of Indian Constitution deals v A) Article 243 C) Article 233	with Grama Sabha?  B) Article 248  D) None of the above	re
77.	Which among the following are in the centre li 1. Markets and fairs 2. Insurance 3. Taxes on Profession 4. Banking		
	A) 1 and 2 B) 1 and 3	C) 2 and 4	D) 3 and 4
78.	In which year Balwant Rai Mehta Committe A) 1947 B) 1957	ee was appointed ? C) 1967	D) 1987
79.	Identify the subject matter of the second ch A) Citizenship C) Fundamental Rights	napter of the Indian Co B) Union and State D) Executive	onstitution.
80.	Which among the following Act is related to 1. Nirbhaya Act, 2013 2. Protection of Civil Rights Act in 1976 3. Armed Forces (Special Powers) Act, 1944. Citizenship Amendment Act, 2019		
	A) 1 and 2 B) 2 only	C) 3 only	D) 3 and 4
Α	-13	3-	

81.	<ul><li>Which among the following pairs of months</li><li>A) April – November</li></ul>			B) January – October		
82.	C) July – October  2. The difference between 75% of a number			D) June – August and 20% of the same number is 378.4.		
	What is 40% of that r A) 275.2	B) 274	C)	267.2	D) 266	
83.	s. Neha walked 9 m in the East, then she turned to her left and moved 3 m. The How far is she and in which direction from A) 13 m, South – West  C) 15 m, North – East			en she turned to her left and walked 9 m.		
84.	<ul><li>If eye = ice, lips = rose and brows = black,</li><li>A) Sindoor</li><li>C) Jasmine</li></ul>			what is coded as 'forehead'?  B) Flower  D) Frontier		
85.	A committee of 3 mer probability that the co				omen. What is the	
	A) $\frac{1}{10}$	B) 9/20	C)	9/10	D) $\frac{1}{20}$	
86.	Vaunt : Flaunt : : Disp A) Similar C) Contrast	parate : ?	•	Homogeneous Alike		
87.	What will be the next A) AKPO	term in the following B) ABYZ		CXW, FEVU, HGT JIRQ	S, ? D) LMRS	
88.	In how many different A) 64	ways can the letters of B) 40320			_	
89.	Find out the wrong te 2, 3, 4, 4, 6, 8, 9, 12, A) 9		C)	16	D) 8	
90.	In a certain code if C A) 28	= 3 and SCHOOL = 1 B) 12	12, tł C)		D) 8	

91.	My brother	the answer to the que	stion.	
	A) is know	B) know	C) knowing	D) knows
92.	I think I will buy thes  A) They were fitting  C) They are fitting	e shirts me ı	really well.  B) They fit  D) They have fit	
93.	Where the A) did you keep C) kept you	book ?	B) did you kept D) none of these	
94.	-	rday evening I B) was waiting		D) waiting
95.		two weeks. She is still B) had been	in hospital. C) is	D) has been
96.	How did you come ? A) in	B) on	C) through	D) by
97.	Choose the correct s A) I am not agree w B) He is doing a cou C) Children makes a D) He speak English	urse in linguistics a lot of noise	wing.	
98.	Which of the following  A) active  C) hard working	ng is the opposite of dil	igent ? B) smart D) lazy	
99.	What is the one work A) Agnostic C) Theist	d substitute for one wh	no is not sure about G  B) Atheist  D) None of these	od's existence?
00.	What does the idiom A) to die B) to hit someone w C) to cry D) none of these	kick the bucket mean	?	

**A** -15-

Space for Rough Work



**A** -16-