	1.	Which of the following i	0 0			
		(1) Lactose	22. 5	Maltose		
		(3) Cellobiose	(4)	All of the above		
	2.	What is the usual particl	le size of the comme	rcially milled wh	eat flour ?	
		(1) Less than 250 micros				
		(2) More than 200 micro		nicrons		
		(3) Not larger than 200				
		(4) Less than 350 micros	ns			
	3.	Which of the following a	antistaling agent is u	sed in bread mal	king as a softener?	
		(1) Polysorbate 60		Sodium stearoy	(F)	
		(3) Diaecetyl tartaric ac	id (4)	All of the above		
	4.	Which of the following i	is not true about dan	naged starch ?		
		(1) It absorbs more wat	er			
		(2) It loses crystalline st	tructure	70		
		(3) It loses the property				
		(4) High level of damag	ged starch increases	stiffness of the do	ough	
	5.	Safe moisture content fo	or the storage of pade	dy is :		
		(1) 12% (2)	14% (3)	13%	(4) 16%	
	6.	Steeping during wet mil	lling of corn increase	es the moisture co	ontent unto :	
		(1) 40-45%		25-30%	oriterit apto.	
		(3) 30-40%	N .	20-30%		
	7.	Who first stated that m vegetables during storage		responsible for t	the spoilage of frui	its and
		(1) Spallanzani	(2)	Louis Pasteur		
		(3) Mulder	(4)	Nicolas Appert		
	8.	A food product contai calorie food.	ning less than	calories per s	serving is known	as low
		(1) 20 (2)	50 (3)	60	(4) 40	
	ni .:	IN DATE OF THE				\$25,000,000 - 0.0000A
IVI.	nıl	./Ph.D./URS-EE-Nov20	J18/(Food Technolog	gy)(SET-Y)/(A)		P. T. O.

9.	Which of the following will be present in large amounts in overripe fruit?								
	(1) Protopectin	(2) Pectinic acid							
	(3) Pectin	(4) Pectic acid							
10.	The frequency of microwaves is in the	e range of :							
	(1) 100 - 4000 MHz	(2) 300-3000 MHz							
	(3) 500-5000 MHz	(4) 250 - 2500 MHz							
11.	Which of the following is a sugar alco	shol produced from glucose?							
	(1) Mannitol	(2) Sorbitol							
	(3) Xylitol	(4) Glycerol							
12.	Scalding in poultry processing is don	e to:							
	(1) Facilitate defeathering	(2) Facilitate bleeding							
	(3) Facilitate evisceration	(4) Control bacterial growth							
13.	Normally used pressure in high press	sure processing of foods is							
	(1) 600 MPa	(2) 1200 MPa							
	(3) 200 MPa	(4) 1500 MPa							
14.	A dose of is effective in contr	olling the sprouting in potatoes and onions.							
	(1) 0.2 to 0.5 KGy	(2) 0.1 to 1.0 KGy							
	(3) 0.02 to 0.05 KGy	(4) 1.0 to 2.0 KGy							
15.	Blanching is primarily done to :								
	(1) Reduction of microbial load								
	(2) Inactivate natural food enzymes								
	(3) Removal extraneous matters and	l fruit peels							
	(4) Stabilize the color and flavor of t	the products							
16.	Cold storage temperature for the foo	ods ranges from :							
	(1) -2°C to 16°C	(2) 4°C to 16°C							
	(3) 4°C to 7°C	(4) −2°C to 7°C							
/ DL	il /Ph D /IIPS-FF-Nov -2018//Food Te	chnology)(SET-V)/(A)							

17.	Cow milk contains	.% MF and	. %	MSNF:			
	(1) 5.0-6.0, 9.0 (2) 3	3.5-4.0, 8.5	3) (3.0-3.5, 9.0	(4)	4.5, 8.5	
18.	Egg yolk contains about	% of protei	M C	ontent.			
	(1) 25 (2) 1	.7 (3	3)	20	(4)	12	
19.	Which of the following ha						
	(1) Sorghum (2) I	Bajra (S	3)	Maize	(4)	Oat	
20.	Radurization is:	18					
	(1) Use of low radiation	0.75 - 2.5 kGy					
	(2) Use of 2.5 - 10 kGy ra	diation dose					
	(3) Use of high radiation	dose 10- 25 kGy	,				
	(4) Pasteurization witho	ut radiation					
21.	Which of these IS/ISO 90	000 standard is m	near	nt for certification	on ?		
	(1) IS/ISO 9001: 2008	. ((2)	IS/ISO 9000 : 2	005		
	(3) IS/ISO 9004: 2009		(4)	IS/ISO 19011:	2011	Ĺ	
22.					vher	n the side of the can is	5
	struck or the temperature (1) Flats			Flipper			
	(3) Soft swell			Springer			
	(b) boit swell		(1)	opringer			
23.	Spray dried cultures of <i>F</i> manufacturing of	5.50			add	ed to milk used for the	9
	(1) Chedder cheese		(2)	Cottage cheese	?		
	(3) Swiss cheese		(4)	All of the above	re		
24.	Musty or earthy flavour	in meat is due to):				
	(1) Actinomycetes		(2)	Micrococcus			
	(3) Serratia		(4)	Chromobacter	ium		
25.	Purplish red colour of m	neat is due to :					
	(1) Myoglobin (Fe ²⁺)		(2)	Nitric oxide m	ıyglo	obin (Fe ²⁺)	
	(3) Metmyoglobin (Fe ³⁺)	(4)	Oxymyglobin	(Fe²	+)	
		#20 (50) (50)					

26.	Cooking meat by calso known as:	lirec	t radiant heat su	ch a	s open fire of ga	s fla	me or electric oven is
	(1) Braising	(2)	Broiling	(3)	Roasting	(4)	Stewing
27.	Lean meat contains (1) 15-20% protein (3) 20-23% protein	l.	ut:		12-15% protein 8-12% protein		
28.	Which of the follow (1) Corn, asparage (3) Pears, figs	(F)	are medium acio	(2)	ods ? Meat, spaghetti Sauerkraut, pin		ple
29.	Jonathan and Ron commonly for cann (1) Banana	ning			ies of which of Grapes		following fruit used
30.	Which of the follow (1) Kaolin (3) Kieselguhr	ving	is used for the c	(2)	ication of juices b Filtragol All of the above		egrading the pectin?
31.	The pH range of m (1) 3.0-4.5	0.500	ty of juices is 3.5-4.5	(3)	3.5-4.0	(4)	4.0-4.5
32.	Legally, what is to (1) 68.0%		oluble solid conte 68.5%		of a fruit preserve		69.0%
33.	The pH of egg yoll (1) Slightly alkalir (3) Neutral			(2)	Slightly acidic Highly alkaline	9	
34.	Phaseolus mungo is (1) Urd dal		known as : Mung dal	(3)	Masur dal	(4)	Tur dal
35.	During <i>tempeh</i> pro (1) Molds (3) Both mold and			(2)		gent	s are :

36.	Which of the following t	ypes of wheat has	th:	e highest protein	content?	
	(1) Bread wheat	(2	2)	Macaroni wheat		
	(3) Club wheat	(4	1)	Durum wheat		
37.	Which of the following s (1) These are the concer (2) These are obtained f (3) These are obtained f (4) These are mainly use	ntrated liquid form from the fresh nati from the dried spic	n of ve ces	f the spices spice using solve using solvent ex	ent extraction	
38.	Pre-cooling of fruit and	vegetables is done	e at	a temperature :		
	(1) 5-10°C (2)	10-12°C (3	3)	15-17°C	(4) 15-20°C	
39.	The enzyme which is res	sponsible for brow	vnii	ng of fruit and v	egetables is :	
	(1) Lipooxidase	(2	2)	Polyphenoloxida	ase	
	(3) Amylase			Protease		
40.	Organic acids as preserv	atives are particu	lar	ly effective agair	nst:	
	(1) Putrefaction	-		Rancidity		
	(3) Autolysis	(4	4)	Lipolysis		
41.	Maize is poor in:					
	(1) Lysine and methion	ine (2	2)	Only lysine		
	(3) Tryptophan and me	thionine (4	4)	Lysine and tryp	tophan	
42.	The percentage of inge as:	sted protein/nitro	oge	en absorbed into	blood stream is l	known
	(1) Net protein utilisati	on (2)	Protein efficienc	cy ratio	
	(3) Digestibility coeffici	ient (4)	Biological value	of protein	
43.	Milk is a good source of	:				
	(1) Proteins, calcium ar	nd iron ((2)	Proteins, calciur	n and ascorbic acid	l
	(3) Proteins, lactose and	d retinol ((4)	Proteins, lactose	e and essential fatty	acids
44.	Which among the follow	ving is an essentia	al a	mino acid ?	¥	
				Tyrosine	(4) Aspartic acid	
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45.	Which of the following is not	essential fatty acid	1?	
	(1) Oleic acid	(2) Line	noleic acid	
	(3) Arachidonic acid	(4) Line	nolenic acid	
46.	People consuming polished i	ice as their staple fo	ood are prone to :	
	(1) Beriberi	(2) Pell	llagra	
	(3) Both (1) and (2)	(4) No	one of these	
47.	Food safety and standards as	thority of India wa	as established in :	
	(1) August 2006	(2) Sep	ot. 2008	
	(3) August 2011	(4) Sep	pt. 2010	
48.	The Indian standards on 'Fo (HACCP)-System and guide		rd analysis and critical control poir tion is :	nts
	(1) IS 18001: 2007	(2) IS 1	15000 : 1998	
	(3) IS 14001:1996	(4) IS 1	19011 : 2011	
49.	Which of the following state	ments is not true?		
	(1) Modified atmosphere ca inside the package	n also be created p	passively by the respiration of produ	ıct
	(2) In modified atmospher during storage	e package, compos	sition of the gas atmosphere chang	zes
	(3) Modified atmosphere st at ambient pressure	orage and controlle	ed atmosphere storage mostly oper-	ate
	(4) In vacuum packaging, a initial atmosphere is cor		the headspace of the package and	the
50.	Nisin, an antimicrobial pept	de is produced by	1	
	(1) Lactococcus lactis	(2) Str	reptococcus lactis	
	(3) Leuconostoc mesentero	ds (4) Bo	oth (1) and (3)	
51.	Which of the following is a r	on-nutritive natura	al sweetener ?	
	(1) Sucralose	(2) Th	naumatin	
	(3) Xylitol	(4) Iso	omalt	

52.	One of the functions of sodium nitrite in meat products is to								
	(1) Inhibit mold growth								
	(2) Inhibit growth of Clostridium botulinum in vacuum packaged cured meats								
	(3) Minimize purge in vacuum packaged meats								
	(4) Reduce color fading in aerobically pa	acka	ged cured meats						
53.	Cason regression models can be used to	desc	eribe :						
00.	(1) Pasting properties of materials								
	(2) Convection heat transfer properties of	of m	aterials						
	(3) Mixing behavior of materials								
	(4) Rheological properties of materials								
54.	Which of the following chemicals not ad	ded	to bread to prevent mold growth?						
	(1) Sodium benzoate		Calcium propionate						
	(3) Potassium sorbate	(4)	Potassium benzoate						
55.	Which is the correct sequence of the give their tensile properties?	en p	plastic materials in the decreasing order of						
	(1) PVC, HDPE, LDPE, PET	(2)	PET, HDPE, LDPE, PVC						
	(3) PVC, LDPE, HDPE, PET	(4)	PET, LDPE, HDPE, PVC						
56.	Maltodextrins have dextrose value								
	(1) Less than 5	(2)	More than 20						
	(3) Less than 20	(4)	Less than 50						
57.	If the temperature of atmosphere increbulb temperature would.	ease	es at constant absolute humidity, the wet						
	(1) Increase	(2)	Decrease						
	(3) Remains constant	(4)	First decrease then increase						
58.	The breaking of starch molecules to presence of dry heat is called:	sma	aller and sweet tasting molecules in the						
	(1) Caramelization	(2)	Dextrinization						
	(3) Inversion	(4)	Saccharification						
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59.	Which of these processes is one of the oldest techniques used to preserve foods, one of the most utilized, and the most energy intensive?					
	(1)	Drying	(2)	Fermentation		
	(3)	Refrigeration and freezing	(4)	Pickiling		
60.	Tor	natoes are stored and shipped at tem	pera	ature between		
	(1)	70 to 90°F	(2)	50 to 65°F		
	(3)	15-20°F	(4)	0 to 30°F		
61.	The	e organisms which can grow both in	pres	ence and absence of oxygen?		
	(1)	Aerobes	(2)	Anaerobes		
	(3)	Faculative anaerobes	(4)	Strict aerobes		
62.	Mil	lk fat differs from other common fats	in h	aving a larger percentage of		
	(1)	Free fatty acids	(2)	Saturated fatty acids		
	(3)	Volatile fatty acids	(4)	Long chain fatty acids		
63.	Ch	olesterol is a chemical that actually be	elon	gs to the family.		
	(1)	Carbohydrate	(2)	Fat		
	(3)	Alcohol	(4)	Oil		
64.	At ind	what concentration chlorine sanitize ustry?	zing	solutions are usually used in the dairy		
	(1)	50-100 ppm	(2)	100-200 ppm		
	(3)	200-500 ppm	(4)	500-800 ppm		
65.	The	e time-temperature combinations use	d fo	r producing sterilized milk are :		
	(1)	145°C for 3 sec	(2)	121°C for 15 min		
	(3)	136°C for 6 sec	(4)	115°C for 3 min		
66.	Wł	nich of the following is considered to	be o	one of the hardest types of chesse?		
	(1)	Roquefort	(2)	Cheddar		
	(3)	Swiss	(4)	Parmesan		
67.	Kh	aman, a famous Gujarati fermented p	orod	uct is produced from :		
		Bengalgram (2) Blackgram		Greengram (4) Soybean		

68.	The fat content of margarine is generally	7:
	(1) More than 80%	(2) Less than 70%
	(3) More than 65%	(4) More than 90%
69.	Which of the following is considered flavoring compound?	as precursor of vanillin, a universally used
12	(1) Isoamyl acetate	(2) 6 pentyl 2 pyrone
	(3) Benzaldehyde	(4) Ferulic acid
70.	The sodium salt of glutamic acid, mor additive. MSG is produced by an efficient	osodium glutamate (MSG), is used as a food nt bioprocess using a strain of :
	(1) Corynebacterium	(2) Kluyveromyces
	(3) Leuconostoc	(4) Xanthomonas
71.	Which of the following compounds as piney flavor?	re responsible for the characteristics citrus or
	(1) Ketones	(2) Phenolics
	(3) Terpenoids	(4) Esters
72.	Which of the following technique is concentrate?	nmonly used for the preparation of fruit juice
	(1) Ultrafiltration	(2) Microfiltration
	(3) Nanofiltration	(4) Osmosis
73.	Which of the following statement is not	correct?
	(1) Z Value is measure of the resistance	power of the M.O.'s to the heat treatment
	(2) Hot fill is most effective with acid f	
	(3) The microbial inactivation during of(4) Only (2) and (3) are correct	hmic heating is mainly due to thermal effect
74.	Kick's law is generally used to determine	nate the energy requirements during:
	(1) Size reduction	(2) Microwave heating
	(3) Ohmic heating	(4) Mass transfer
75.	Which of the following is water soluble	?
	(1) Carotenes	(2) Betanin
	(3) Xanthophyll	(4) lycopene
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76.	Nature of Gliadin is:		
	(1) Viscous	(2)	Elastic
	(3) Extensive	(4)	Tough
77.	Which of these is not a random type of s	amp	oling?
	(1) Simple random sampling	(2)	Cluster sampling
*	(3) Composite sampling	(4)	Quota sampling
78.	Which term is used while studying fluid	l pro	operties?
	(1) Reynolds number	(2)	Grashof number
	(3) Prandtl number	(4)	Nuselt number
79.	Ongoing effort to maintain the integrity achieving an outcome is called:	of a	food process to maintain the reliability of
	(1) Quality control	(2)	Quality improvement
	(3) Quality assurance	(4)	None of the above
80.	Most extrusion processes for food proce	ssin	g maintain moisture below :
	(1) 40% (2) 30%	(3)	50% (4) 25%
81.	Tomato sauce is an example of :		
	(1) Casson plastic	(2)	Pseudoplastic
	(3) Newtonian fluid	(4)	Dilatant
82.	AGMARK was promulgated in :		
	(1) 1954 (2) 1934	(3)	1935 (4) 1937
83.	In recent years biscuits, cookies and cra	cker	es are packed in :
	(1) RCF coated with LDPE/PVE	(2)	PET/AI foil/LDPE
	(3) OPP either plane or coextruded	(4)	RCF coated with acrylic
84.	Glazing of fish is done to protect fish from	om :	
	(1) Oxidation and freezer burn	(2)	Microbial spoilage
	(3) Freezer burn	(4)	Chemical spoilage

85.	The centrifugal pump	35				
	(1) Inertia (2) Energy	(3)	Density	(4)	Viscosity
86.	is the process us	sed primarily for o	oils v	sed in salad dre	ssinį	<u>5</u> .
9	(1) Winterization		(2)	Deodorization		
2	(3) Bleaching		(4)	Degumming		
87.	The germ constitutes	in com.				
	(1) 11% (2	2) 12%	(3)	8%	(4)	10%
88.	The organism involve	d in the productio	on of	dhokla, idli or d	losa	is:
	(1) Aspergillus oryza	e	(2)	Leuconostoc m	esen	teroids
	(3) Latobacillus lactis	į.	(4)	Monascus purp	ure	us
89.	Protein content in soy	a protein concent	rate	is:		
	(1) 72%	2) 80%	(3)	42%	(4)	52%
90.	At what concentration	n salt acts as a pre	serv	ative ?		
		2) 10-12%		8-10%	(4)	3-5%
91.	First patent constitute	es percent s	epar	ation from 72% e	extra	ction.
		2) 80		70		90
92.	For highly acidic food	ls cans used are o	f:			
	0 ,	2) I type		mC type	(4)	m type
QZ	In case of CAP an	d MAP which o	of th	ese gases are	intro	oduced, monitored or
50.	adjusted?	a min man	,, ,,	ese guser are		,
	(1) Oxygen and carb	on dioxide	(2)	Oxygen and n	itrog	gen
	(3) Nitrogen and car	bon dioxide	(4)	Oxygen, nitrog	gen a	and carbon dioxide
94.	The chemicals used f	or the aseptic pac	kagi	ng of foods are :		
	(1) Sulfur, peracetic	acid and ethylene	oxi	de		
	(2) Hydrogen perox	ide, per acetic acio	d, etl	nylene oxide		
	(3) Hydrogen perox	ide, per acetic aci	d, su	lfur		
	(4) Hydrogen perox	ide, sulfur and etl	nylei	ne oxide		
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95.	Chymosin enzymes has been successfully cloned in:						
	(1) Mold	(2) Yeast	(3)	Bacteria	(4)	All of the above	
96.	Which of the fol	lowing vitamins	are domina	antly present	in cerea	ls?	
		oflavin, niacin		(3) 5			
	(2) Vitamin A, t	hiamine, niacin					
	(3) Vitamin B 12	2, thiamine, niac	in				
*	(4) Vitamin A,	vitamin B 12 and	vitamin C				
97.	Wheat gliadin a	nd glutenin, whi	ch forms gl	uten, respect	ivelv bel	ong to:	
	(1) Globulins ar		O	ć 1	,	O , 100 H	
	(2) Prolamins a	nd globulins					
	(3) Prolamins a	nd glutelins					
	(4) Albumins ar	nd globulins					
98.	Which of the fol	lowing type of fl	our has the	least bran co	ontent in	it?	
	(1) Short patent			Long paten			
	(3) Second clear			Fancy pater			
99.	Pumpernickel fl	our is a dark coa	rse meal pr	oduced from	L		
	(1) Rye		50000	Oat			
	(3) Corn		(4)	Sorghum			
100.	Which of the fol	lowing statemen	ıt is not true	e ?			
	(1) High ratio c	akes have weigh	t of sugar r	nore than flo	ur		
		and fat act as ten					
		d cake are leaver	0 0		ım		
		is an example of	T.	5.			

1.	Maize is poor in:		≯ 1
	(1) Lysine and methionine	(2)	Only lysine
	(3) Tryptophan and methionine	(4)	Lysine and tryptophan
2.	The percentage of ingested protein/ni as:	trog	en absorbed into blood stream is known
	(1) Net protein utilisation	(2)	Protein efficiency ratio
	(3) Digestibility coefficient	(4)	Biological value of protein
3.	Milk is a good source of:		
	(1) Proteins, calcium and iron	(2)	Proteins, calcium and ascorbic acid
	(3) Proteins, lactose and retinol	(4)	Proteins, lactose and essential fatty acids
4.	Which among the following is an essent	ial a	mino acid ?
	(1) Cysteine (2) Leucine		Tyrosine (4) Aspartic acid
5.	Which of the following is not essential f	atty	acid ?
	(1) Oleic acid	(2)	Linoleic acid
	(3) Arachidonic acid	(4)	Linolenic acid
6.	People consuming polished rice as their	stap	ole food are prone to :
	(1) Beriberi	(2)	Pellagra
	(3) Both (1) and (2)	(4)	None of these
7.	Food safety and standards authority of	Indi	a was established in :
	(1) August 2006	(2)	Sept. 2008
	(3) August 2011	(4)	Sept. 2010
8.	The Indian standards on 'Food hygien (HACCP)-System and guidelines for its	e- H app	lazard analysis and critical control points lication is:
	(1) IS 18001 : 2007	(2)	IS 15000 : 1998
	(3) IS 14001 : 1996	(4)	IS 19011 : 2011

9.	Which of the following statements is r	not true ?		
	(1) Modified atmosphere can also be inside the package	created passively by the respiration of product		
	(2) In modified atmosphere package during storage	(2) In modified atmosphere package, composition of the gas atmosphere changes during storage		
	(3) Modified atmosphere storage and at ambient pressure	(3) Modified atmosphere storage and controlled atmosphere storage mostly operate at ambient pressure		
	(4) In vacuum packaging, air is remoinitial atmosphere is controlled	oved from the headspace of the package and the		
10.	Nisin, an antimicrobial peptide is pro	duced by :		
	(1) Lactococcus lactis	(2) Streptococcus lactis		
	(3) Leuconostoc mesenteroids	(4) Both (1) and (3)		
11.	Which of the following compounds piney flavor?	are responsible for the characteristics citrus or		
	(1) Ketones	(2) Phenolics		
	(3) Terpenoids	(4) Esters		
12.	Which of the following technique is concentrate?	commonly used for the preparation of fruit juice		
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	(3) The microbial inactivation during(4) Only (2) and (3) are correct	g ohmic heating is mainly due to thermal effect		
14.	Kick's law is generally used to determ	ninate the energy requirements during:		
	(1) Size reduction	(2) Microwave heating		
	(3) Ohmic heating	(4) Mass transfer		
15.	Which of the following is water solub	ble?		
	(1) Carotenes (2) Betanin	(3) Xanthophyll (4) lycopene		
M.Phil./Ph.D./URS-EE-Nov2018/(Food Technology)(SET-Y)/(B)				

16.	Nature of Gliadin is:				(i)
	(1) Viscous (2) Elastic	(3)	Extensive	(4)	Tough
17.	Which of these is not a random ty	pe of samp	oling?		
	(1) Simple random sampling	300 M	Cluster sam	pling	
	(3) Composite sampling	(4)	Quota samp	ling	
18.	Which term is used while studying	ng fluid pro	perties?		
	(1) Reynolds number		Grashof nun	nber	
	(3) Prandtl number	(4)	Nuselt numl	oer	
19.	Ongoing effort to maintain the in achieving an outcome is called:	tegrity of a	food process	s to mai	ntain the reliability of
	(1) Quality control	(2)	Quality imp	roveme	nt
	(3) Quality assurance		None of the		× ×
20.	Most extrusion processes for food	l processine	r maintain m	oistura	halayı .
	(1) 40% (2) 30%				
	(2) 3070	(3)	50%	(4)	25%
21.	First patent constitutes per	cent separa	tion from 72%	% extra	ction.
	(1) 100 (2) 80	(3)	70	(4)	90
22.	For highly acidic foods cans used	are of:			
	(1) mR type (2) I type	(3)	mC type	(4)	m type
23.	In case of CAP and MAP whadjusted?	ich of the	se gases are	e introd	duced, monitored or
	(1) Oxygen and carbon dioxide	(2)	Oxygen and	nitroge	en
	(3) Nitrogen and carbon dioxide	(4)	Oxygen, nitr	ogen aı	nd carbon dioxide
24.	The chemicals used for the asepti	c packagin	g of foods are	:	
	(1) Sulfur, peracetic acid and eth	2013 AV-510 A			
	(2) Hydrogen peroxide, per aceti	c acid, ethy	lene oxide		
	(3) Hydrogen peroxide, per aceti	10.5			
	(4) Hydrogen peroxide, sulfur ar				
	one our control control of the contr				

25.	Chy	mosin enzymes has been successful	ly cl	oned in:
	(1)	Mold	(2)	Yeast
	(3)	Bacteria	(4)	All of the above
26.	Whi	ich of the following vitamins are dor	nina	antly present in cereals?
	(1)	Thiamin, riboflavin, niacin		
	(2)	Vitamin A, thiamine, niacin		
	(3)	Vitamin B 12, thiamine, niacin		
	(4)	Vitamin A, vitamin B 12 and vitami	n C	
27.	Wh	eat gliadin and glutenin, which forn	ns gl	uten, respectively belong to:
	(1)	Globulins and prolamins		
	(2)	Prolamins and globulins		
	(3)	Prolamins and glutelins		
	(4)	Albumins and globulins		
28.	Wh	ich of the following type of flour ha	s the	e least bran content in it?
	(1)	Short patent	(2)	Long patent
	(3)	Second clear	(4)	Fancy patent
29.	Pui	mpernickel flour is a dark coarse me	al pi	roduced from
	(1)	Rye	(2)	Oat
	(3)	Corn	(4)	Sorghum
30.	Wh	nich of the following statement is no	t tru	e ?
	(1)	High ratio cakes have weight of su	gar 1	more than flour
	(2)	Both sugar and fat act as tenderizing	ng ag	gents in cake
	(3)	Unshortened cake are leavened ma	inly	by air or steam
	(4)	Angel cake is an example of shorte	ned	cake
31.	W	nich of the following is a reducing su	ıgar	?
	(1)	Lactose	(2) Maltose
	(3)	Cellobiose	(4) All of the above

32.	What is the usual particle size of the commercially milled wheat flour? (1) Less than 250 microns (2) More than 200 micron but less than 300 microns (3) Not larger than 200 microns (4) Less than 350 microns					
33.	Which of the follow (1) Polysorbate 60 (3) Diaecetyl tarta		(2)	sed in bread ma Sodium stearoy All of the above	yl Lactylate	?
34.	Which of the following is not true about damaged starch? (1) It absorbs more water (2) It loses crystalline structure (3) It loses the property of birefringence (4) High level of damaged starch increases stiffness of the dough					
35.	Safe moisture conte	ent for the storage	of padd	ly is :		
	(1) 12%	(2) 14%	(3)	13%	(4) 16%	
36.	Steeping during w	et milling of corn	increase	s the moisture (content upto :	
	(1) 40-45%			25-30%		
	(3) 30-40%		(4)	20-30%		
37.	Who first stated the vegetables during s	nat micro-organis storage?	ms are r	responsible for	the spoilage of fr	uits and
	(1) Spallanzani		(2)	Louis Pasteur		
	(3) Mulder		(4)	Nicolas Appert		
38.	A food product cocalorie food.	ontaining less tha	an	. calories per	serving is known	as low
	(1) 20	(2) 50	(3)	60	(4) 40	
39.	Which of the follow	ving will be prese	nt in larg	ge amounts in o	verripe fruit ?	
	(1) Protopectin	- Controlled		Pectinic acid	1	
	(3) Pectin			Pectic acid		
M.Phi	M.Phil./Ph.D./URS-EE-Nov2018/(Food Technology)(SET-Y)/(B) P. T. O.					

40.	The frequency of microwaves is in the ra	ange of:
	(1) 100 - 4000 MHz	(2) 300-3000 MHz
	(3) 500-5000 MHz	(4) 250 - 2500 MHz
41.	Which of the following is a non-nutritiv	e natural sweetener ?
	(1) Sucralose	(2) Thaumatin
	(3) Xylitol	(4) Isomalt
42.	One of the functions of sodium nitrite in (1) Inhibit mold growth (2) Inhibit growth of <i>Clostridium botulin</i> (3) Minimize purge in vacuum package (4) Reduce color fading in aerobically p	num in vacuum packaged cured meats
43.	Cason regression models can be used to (1) Pasting properties of materials (2) Convection heat transfer properties (3) Mixing behavior of materials (4) Rheological properties of materials	
44.	Which of the following chemicals not ac	dded to bread to prevent mold growth?
	(1) Sodium benzoate	(2) Calcium propionate
*	(3) Potassium sorbate	(4) Potassium benzoate
45.	Which is the correct sequence of the given their tensile properties?	ven plastic materials in the decreasing order of
	(1) PVC, HDPE, LDPE, PET	(2) PET, HDPE, LDPE, PVC
	(3) PVC, LDPE, HDPE, PET	(4) PET, LDPE, HDPE, PVC
46.	Maltodextrins have dextrose value	
	(1) Less than 5	(2) More than 20
	(3) Less than 20	(4) Less than 50

P. T. O.

(1) Increase (2) Decrease (3) Remains constant (4) First decrease then increase 48. The breaking of starch molecules to smaller and sweet tasting molecules in the presence of dry heat is called: (1) Caramelization (2) Dextrinization (3) Inversion (4) Saccharification 49. Which of these processes is one of the oldest techniques used to preserve foods, one of the most utilized, and the most energy intensive? (1) Drying (2) Fermentation (3) Refrigeration and freezing (4) Pickiling 50. Tomatoes are stored and shipped at temperature between (1) 70 to 90°F (2) 50 to 65°F (3) 15-20°F (4) 0 to 30°F 51. The organisms which can grow both in presence and absence of oxygen? (1) Aerobes (2) Anaerobes (3) Faculative anaerobes (4) Strict aerobes 52. Milk fat differs from other common fats in having a larger percentage of (1) Free fatty acids (2) Saturated fatty acids (3) Volatile fatty acids (4) Long chain fatty acids (5) Cholesterol is a chemical that actually belongs to the	47.	If the temperature of atmosphere increases at constant absolute humidity, the wet bulb temperature would.		
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(1) 50-100 ppm (2) 100-200 ppm (3) 200-500 ppm (4) 500-800 ppm		(3) Alcohol	(4) Oil	
(3) 200-500 ppm (4) 500-800 ppm	54.	At what concentration chlorine sanitizindustry?	ring solutions are usually used in the dairy	
(3) 200-500 ppm (4) 500-800 ppm		(1) 50-100 ppm	(2) 100-200 ppm	
M.Phil./Ph.D./URS-EE-Nov2018/(Food Technology)(SFT-V)/(B)		(3) 200-500 ppm	20.00	
r. 1. U	M.Phil	./Ph.D./URS-EE-Nov2018/(Food Techn	ology)(SET-Y)/(B) P. T. O	

55.	The time-temperature combinations used	
	(1) 145°C for 3 sec	(2) 121°C for 15 min
	(3) 136°C for 6 sec	(4) 115°C for 3 min
56.	Which of the following is considered to b	be one of the hardest types of chesse?
	(1) Roquefort (2) Cheddar	(3) Swiss (4) Parmesan
57.	Khaman, a famous Gujarati fermented pr	roduct is produced from:
	(1) Bengalgram (2) Blackgram	(3) Greengram (4) Soybean
58.	The fat content of margarine is generally	<i>7</i> :
	(1) More than 80%	(2) Less than 70%
	(3) More than 65%	(4) More than 90%
59.	Which of the following is considered flavoring compound?	as precursor of vanillin, a universally used
	(1) Isoamyl acetate	(2) 6 pentyl 2 pyrone
	(3) Benzaldehyde	(4) Ferulic acid
60.	The sodium salt of glutamic acid, mone additive. MSG is produced by an efficier	osodium glutamate (MSG), is used as a food nt bioprocess using a strain of:
	(1) Corynebacterium	(2) Kluyveromyces
	(3) Leuconostoc	(4) Xanthomonas
61.	Which of these IS/ISO 9000 standard is a	meant for certification ?
	(1) IS/ISO 9001 : 2008	(2) IS/ISO 9000 : 2005
	(3) IS/ISO 9004 : 2009	(4) IS/ISO 19011:2011
62.	A has flat ends, one of which wistruck or the temperature of contents is it	ill become convex when the side of the can is increased.
	(1) Flats	(2) Flipper
	(3) Soft swell	(4) Springer
63.	Spray dried cultures of <i>Propionibacterium</i> manufacturing of to improve the	n freudenreichii are added to milk used for the e flavor.
	(1) Chedder cheese	(2) Cottage cheese
	(3) Swiss cheese	(4) All of the above
r DL:	il /Ph D /IIDS EE Nov. 2018//Food Tosha	-1)(CET 3/)//D)

64.	Musty or earthy flavour	in meat is due to:		
	(1) Actinomycetes	(2)	(2) Micrococcus	
	(3) Serratia	(4)	(4) Chromobacterium	
65.	Purplish red colour of m	neat is due to :		
	(1) Myoglobin (Fe ²⁺)	(2)	(2) Nitric oxide myglobin (Fe ²⁺)	
	(3) Metmyoglobin (Fe ³⁺	(4)	(4) Oxymyglobin (Fe ²⁺)	
66.	Cooking meat by direct also known as:	radiant heat such	n as open fire of gas flame or electric oven i	is
	(1) Braising (2)	Broiling (3)	(3) Roasting (4) Stewing	
67.	Lean meat contains about	ut:		
	(1) 15-20% protein	(2)	(2) 12-15% protein	
	(3) 20-23% protein	(4)	(4) 8-12% protein	
68.	Which of the following	are medium acid fo	foods?	
	(1) Corn, asparagus	(2)	(2) Meat, spaghetti	
	(3) Pears, figs	(4)	(4) Sauerkraut, pineapple	
6 9.	Jonathan and Rome be commonly for canning?	eauty are the varie	rieties of which of the following fruit use	d
	(1) Banana (2)	Pineapple (3	(3) Grapes (4) Apple	
70.	Which of the following	is used for the clari	rification of juices by degrading the pectin?	i
	(1) Kaolin		(2) Filtragol	
	(3) Kieselguhr	(4	(4) All of the above	
71.	Which of the following	is a sugar alcohol p	produced from glucose?	
	(1) Mannitol	(2	(2) Sorbitol	
	(3) Xylitol	(4	(4) Glycerol	
72.	Scalding in poultry prod	cessing is done to:	:	
	(1) Facilitate defeatheri	ing (2	(2) Facilitate bleeding	
	(3) Facilitate evisceration	10.55 Mg 10.	(4) Control bacterial growth	
	24 49	χ.	Table 1	

73.	Normally used pre	ssure in high pressu	re pi	ocessing of food	s is	ererere e
	(1) 600 MPa			200 MPa		1500 MPa
74.	A dose of is	s effective in controll	ing	the sprouting in	nota	toes and onions
3	(1) 0.2 to 0.5 KGy	· ·		0.1 to 1.0 KGy	Pota	noes and omons.
	(3) 0.02 to 0.05 KG	y		1.0 to 2.0 KGy		
75.	Blanching is prime		12 6)		
73.	Blanching is primar	1/6/2		20		
	(1) Reduction of m					
	(2) Inactivate natu	1.27				
		neous matters and fr				
	(4) Stabilize the co	lor and flavor of the	pro	ducts		
76.	Cold storage tempe	erature for the foods	rang	ges from :		
	(1) −2°C to 16°C		Services:	4°C to 16°C		
	(3) 4°C to 7°C			−2°C to 7°C		
77.	Cow milk contains	% MF and	0	/ MCNIE .		
a 200		(2) 3.5-4.0, 8.5			(4)	4.5, 8.5
2226					(±)	4.5, 6.5
78.		bout% of pro	tein	content.		
	(1) 25	(2) 17	(3)	20	(4)	12
79.	Which of the follow	ving has highest fat c	onte	ent?		
	(1) Sorghum	(2) Bajra		Maize	(4)	Oat
80.	Dodumination is					
00.	Radurization is:	ation 0.75 2.51.C-				
		ation 0.75 - 2.5 kGy Gy radiation dose				
		iation dose 10- 25 kC	257			
	(4) Pasteurization		зу			
81.	Tomato sauce is an	example of :				
	(1) Casson plastic	•		Pseudoplastic		
	(3) Newtonian flui	d	(4)	Dilatant		
M.Phil./Ph.D./URS-EE-Nov2018/(Food Technology)(SET-Y)/(B)						

82.	AGMARK was pr	omulgated in :					
	(1) 1954	(2) 1934	(3)	1935	(4)	1937	
83.	In recent years bis	cuits, cookies and cr	acker	s are packed in			
	(1) RCF coated w			PET/AI foil/L		r r	
	(3) OPP either pla	ne or coextruded	(4)	RCF coated w	ith ac	crylic	
84.	Glazing of fish is o	lone to protect fish f		\$,	
	(1) Oxidation and	(a) (a)		Microbial spoi	lage		
	(3) Freezer burn			Chemical spoi	Ŭ		
85.	The centrifucal pu	mn dan sud			855	8	
00.	(1) Image:	mp depend upon th			dev	elop pressure.	
	(1) Inertia	(2) Energy	(3)	Density	(4)	Viscosity	
86.	is the proces	s used primarily for	oils ı	used in salad dr	essin	g.	
	(1) Winterization		(2)			O	
	(3) Bleaching		(4)	Degumming			
87.	The germ constitu	tes in com.				\$ 1 o	
	(1) 11%	(2) 12%	(3)	8%	(4)	10%	
88.	The organism invo	lved in the producti	on of	dhokla, idli or	dosa	is:	
	(1) Aspergillus or	yzae		Leuconostoc m			
	(3) Latobacillus la	ctis					
89.	Protein content in	soya protein concent	rato i	ic ·			
	(1) 72%	(2) 80%		42%	(4)	52%	
90.	At what concentra	tion salt acts as a pre	COTU	ntimo 2	()	87.070.2.C	
	(1) 15-20%	(2) 10-12%		8-10%	(4)	2 E0/	
91.	3 5		(0)	0 10 / 0	(4)	3-5%	
91.	The pH range of m (1) 3.0-4.5	was Same Same	/- >	-			
	(1) 5.0-4.5	(2) 3.5-4.5	(3)	3.5-4.0	(4)	4.0-4.5	
92.	Legally, what is to	tal soluble solid cont	ent o	f a fruit preserv	e ?		
	(1) 68.0%	(2) 68.5%		67.5%		69.0%	
M.Phil./Ph.D./URS-EE-Nov2018/(Food Technology)(SET-Y)/(B) P. T. O.							

93.	The pH of egg yolk in a freshly laid egg is:			
	(1) Slightly alkaline	(2) Slightly acidic		
	(3) Neutral	(4) Highly alkaline		
94.	Phaseolus mungo is also known as:	*		
	(1) Urd dal (2) Mung dal	(3) Masur dal (4) Tur dal		
95.	During tempeh production from soyabe	an, the fermenting agents are:		
	(1) Molds	(2) Bacteria		
	(3) Both mold and bacteria	(4) None of above		
96.	Which of the following types of wheat	has the highest protein content?		
	(1) Bread wheat	(2) Macaroni wheat		
	(3) Club wheat	(4) Durum wheat		
97.	Which of the following statement is not	true about the spice oleoresins?		
	(1) These are the concentrated liquid for			
	(2) These are obtained from the fresh r	ative spice using solvent extraction		
	(3) These are obtained from the dried s			
	(4) These are mainly used as flavoring			
98.	Pre-cooling of fruit and vegetables is do	one at a temperature :		
	(1) 5-10°C (2) 10-12°C	(3) 15-17°C (4) 15-20°C		
99.	The enzyme which is responsible for br	owning of fruit and vegetables is:		
	(1) Lipooxidase	(2) Polyphenoloxidase		
	(3) Amylase	(4) Protease		
100.	Organic acids as preservatives are part	cularly effective against:		
	(1) Putrefaction	(2) Rancidity		
	(3) Autolysis	(4) Lipolysis		

1.	Which of these IS/ISO 9000 standard is	meant for certification?		
	(1) IS/ISO 9001:2008	(2) IS/ISO 9000 : 2005		
Φ.	(3) IS/ISO 9004 : 2009	(4) IS/ISO 19011: 2011		
2.	A has flat ends, one of which w struck or the temperature of contents is (1) Flats	vill become convex when the side of the can is increased. (2) Flipper		
	(3) Soft swell	(4) Springer		
3.	Spray dried cultures of <i>Propionibacterium</i> manufacturing of to improve the (1) Chedder cheese	m freudenreichii are added to milk used for the e flavor.		
	74.75 R2 95-97 (CD-43040000) \$4.00 (CD-3304000000) \$4.00 (CD-3304000000) \$4.00 (CD-33040000000) \$4.00 (CD-330400000000) \$4.00 (CD-33040000000000000000000000000000000000	(2) Cottage cheese		
	(3) Swiss cheese	(4) All of the above		
4.	Musty or earthy flavour in meat is due t	to:		
	(1) Actinomycetes	(2) Micrococcus		
	(3) Serratia	(4) Chromobacterium		
5.	Purplish red colour of meat is due to:			
	(1) Myoglobin (Fe ²⁺)	(2) Nitric oxide myglobin (Fe ²⁺)		
	(3) Metmyoglobin (Fe ³⁺)	(4) Oxymyglobin (Fe ²⁺)		
6.	Cooking meat by direct radiant heat su also known as:	uch as open fire of gas flame or electric oven is		
	(1) Braising (2) Broiling	(3) Roasting (4) Stewing		
7.	Lean meat contains about:			
	(1) 15-20% protein	(2) 12-15% protein		
	(3) 20-23% protein	(4) 8-12% protein		
8.	Which of the following are medium acid	d foods?		
	(1) Corn, asparagus	(2) Meat, spaghetti		
	(3) Pears, figs	(4) Sauerkraut, pineapple		
9.	Jonathan and Rome beauty are the vaccommonly for canning?	varieties of which of the following fruit used		
	(1) Banana (2) Pineapple	(3) Grapes (4) Apple		
M.Phil./Ph.D./URS-EE-Nov2018/(Food Technology)(SET-Y)/(C) P. T. O				

10.	Which of the following is used for the cl	arification of juices by degrading the pectin?
	(1) Kaolin	(2) Filtragol
	(3) Kieselguhr	(4) All of the above
11.	Which of the following is a non-nutritiv	e natural sweetener ?
	(1) Sucralose (2) Thaumatin	(3) Xylitol (4) Isomalt
12.	One of the functions of sodium nitrite in	meat products is to
	(1) Inhibit mold growth	-
	(2) Inhibit growth of Clostridium botulin	um in vacuum packaged cured meats
	(3) Minimize purge in vacuum package	
	(4) Reduce color fading in aerobically p	
13.	Cason regression models can be used to	describe:
	(1) Pasting properties of materials	
	(2) Convection heat transfer properties	of materials
	(3) Mixing behavior of materials	
	(4) Rheological properties of materials	
14.	Which of the following chemicals not ac	dded to bread to prevent mold growth?
	(1) Sodium benzoate	(2) Calcium propionate
	(3) Potassium sorbate	(4) Potassium benzoate
15.	Which is the correct sequence of the given their tensile properties?	ven plastic materials in the decreasing order of
U	(1) PVC, HDPE, LDPE, PET	(2) PET, HDPE, LDPE, PVC
	(3) PVC, LDPE, HDPE, PET	(4) PET, LDPE, HDPE, PVC
16.	Maltodextrins have dextrose value	
	(1) Less than 5	(2) More than 20
	(3) Less than 20	(4) Less than 50
17.	If the temperature of atmosphere increbulb temperature would.	eases at constant absolute humidity, the wet
	(1) Increase	(2) Decrease
	(3) Remains constant	(4) First decrease then increase
M.Phi	l./Ph.D./URS-EE-Nov2018/(Food Techi	nology)(SET-Y)/(C)

18.	The breaking of starch molecules to presence of dry heat is called:	to smaller and sweet tasting molecules in t	he
	(1) Caramelization	(2) Dextrinization	
	(3) Inversion	(4) Saccharification	
19.	Which of these processes is one of the of the most utilized, and the most ener	ne oldest techniques used to preserve foods, o ergy intensive?	ne
	(1) Drying	(2) Fermentation	
	(3) Refrigeration and freezing	(4) Pickiling	
20.	Tomatoes are stored and shipped at ter	emperature between	
	(1) 70 to 90°F	(2) 50 to 65°F	
	(3) 15-20°F	(4) 0 to 30°F	
21.	Tomato sauce is an example of :		
	(1) Casson plastic	(2) Pseudoplastic	
	(3) Newtonian fluid	(4) Dilatant	
22.	AGMARK was promulgated in :		
	(1) 1954 (2) 1934	(3) 1935 (4) 1937	
23.	In recent years biscuits, cookies and cr	crackers are packed in :	
	(1) RCF coated with LDPE/PVE	(2) PET/AI foil/LDPE	
	(3) OPP either plane or coextruded	(4) RCF coated with acrylic	
24.	Glazing of fish is done to protect fish	n from:	
	(1) Oxidation and freezer burn	(2) Microbial spoilage	
	(3) Freezer burn	(4) Chemical spoilage	
25.	The centrifugal pump depend upon the	the of a fluid to develop pressure.	
	(1) Inertia (2) Energy	(3) Density (4) Viscosity	
26.	is the process used primarily fo	for oils used in salad dressing.	
	(1) Winterization	(2) Deodorization	
	(3) Bleaching	(4) Degumming	
M DL	il /Ph D /LIPS_FF_Nov -2018//Food Tec	ochnology)(SET-V)/(C)	тΩ

27.	The germ constitutes in com.				
	(1) 11% (2) 12%	(3) 8% (4) 10%			
28.	The organism involved in the production	on of dhokla, idli or dosa is:			
	(1) Aspergillus oryzae	(2) Leuconostoc mesenteroids			
	(3) Latobacillus lactis	(4) Monascus purpureus			
29.	Protein content in soya protein concentr	rate is :			
	(1) 72% (2) 80%	(3) 42% (4) 52%			
30.	At what concentration salt acts as a pres	servative?			
	(1) 15-20% (2) 10-12%	(3) 8-10% (4) 3-5%			
31.	Which of the following compounds are responsible for the characteristics citrus of piney flavor?				
	(1) Ketones	(2) Phenolics			
	(3) Terpenoids	(4) Esters			
32.	Which of the following technique is concentrate?	emmonly used for the preparation of fruit juice			
	(1) Ultrafiltration	(2) Microfiltration			
	(3) Nanofiltration	(4) Osmosis			
33.	Which of the following statement is not	t correct?			
		e power of the M.O.'s to the heat treatment			
	(2) Hot fill is most effective with acid for				
		ohmic heating is mainly due to thermal effect			
	(4) Only (2) and (3) are correct				
34.	Kick's law is generally used to determin	nate the energy requirements during:			
	(1) Size reduction	(2) Microwave heating			
	(3) Ohmic heating	(4) Mass transfer			
35.	Which of the following is water soluble	?			
	(1) Carotenes	(2) Betanin			
	(3) Xanthophyll	(4) lycopene			

36.	Nature of Gliad	in is :			×.	
	(1) Viscous		(2)	Elastic		
	(3) Extensive	Ø 95	(4)	Tough		
37.	Which of these	is not a random ty	pe of samp	oling?		
	(1) Simple rand	dom sampling	(2)	Cluster samp	ling	
	(3) Composite	sampling	(4)	Quota sampl	ing	
38.	Which term is t	ısed while studyir	ng fluid pro	perties?		
	(1) Reynolds n	umber	(2)	Grashof num	ber	
	(3) Prandtl nui	mber	(4)	Nuselt numb	er	
39.		to maintain the in atcome is called :	tegrity of a	food process	to maintain the rel	liability of
	(1) Quality con	ntrol	(2)	Quality impr	rovement	
	(3) Quality ass	urance	(4)	None of the	above	
40.	Most extrusion	processes for food	d processin	g maintain m	oisture below :	
	(1) 40%	(2) 30%	(3)	50%	(4) 25%	
41.	Which of the fo	ollowing is a reduc	ing sugar	?		
	(1) Lactose		(2)	Maltose		
	(3) Cellobiose	2	(4)	All of the ab	ove	
42.	What is the us	ual particle size of	the comme	ercially milled	wheat flour?	
	(1) Less than 2	250 microns				
	(2) More than	200 micron but le	ss than 300	microns		
	(3) Not larger	than 200 microns				
	(4) Less than 3	350 microns				
43.	Which of the f	ollowing antistalir	ng agent is	used in bread	making as a softer	ner ?
	(1) Polysorba	te 60				
	(2) Sodium st	earoyl Lactylate				
	(3) Diaecetyl	tartaric acid				
	(4) All of the	above				

44.	Which of the following is not true abou	it damaged starch?
	(1) It absorbs more water	
	(2) It loses crystalline structure	\$
	(3) It loses the property of birefringence	ce
	(4) High level of damaged starch incre	ases stiffness of the dough
45.	Safe moisture content for the storage of	f paddy is :
	(1) 12% (2) 14%	(3) 13% (4) 16%
	(=) 11.0	(±) 1076
46.	Steeping during wet milling of corn inc	creases the moisture content upto:
	(1) 40-45%	(2) 25-30%
	(3) 30-40%	(4) 20-30%
47.	Who first stated that micro-organisms vegetables during storage?	are responsible for the spoilage of fruits and
	(1) Spallanzani	(2) Louis Pasteur
	(3) Mulder	(4) Nicolas Appert
48.	A food product containing less than calorie food.	calories per serving is known as low
	(1) 20 (2) 50	(3) 60 (4) 40
49.	Which of the following will be present	in large amounts in overripe fruit?
	(1) Protopectin	(2) Pectinic acid
	(3) Pectin	(4) Pectic acid
50.	The frequency of microwaves is in the	range of :
	(1) 100 - 4000 MHz	(2) 300-3000 MHz
	(3) 500-5000 MHz	(4) 250 - 2500 MHz
51.	The pH range of majority of juices is	
	(1) 3.0-4.5 (2) 3.5-4.5	(3) 3.5-4.0 (4) 4.0-4.5
52.	Legally, what is total soluble solid cont	tent of a fruit preserve ?
	(1) 68.0% (2) 68.5%	(3) 67.5% (4) 69.0%

53.	The pH of egg yolk in a	freshly laid egg	is:	S.
	(1) Slightly alkaline		(2)	Slightly acidic
100	(3) Neutral		(4)	Highly alkaline
54.	Phaseolus mungo is also	known as :		ê
	(1) Urd dal (2)	Mung dal	(3)	Masur dal (4) Tur dal
55.	During tempeh producti	ion from soyabea	n, tł	ne fermenting agents are :
	(1) Molds		(2)	Bacteria
	(3) Both mold and back	teria	(4)	None of above
56.	Which of the following	types of wheat h	as tl	ne highest protein content?
	(1) Bread wheat		(2)	Macaroni wheat
	(3) Club wheat		(4)	Durum wheat
57.	(1) These are the conce(2) These are obtained	entrated liquid for from the fresh na from the dried s	rm o ative	e spice using solvent extraction s using solvent extraction
58.	Pre-cooling of fruit and	l vegetables is do	ne a	t a temperature :
	(1) $5-10^{\circ}$ C (2)	10-12°C	(3)	15-17°C (4) 15-20°C
59.	The enzyme which is re	esponsible for bro	own	ing of fruit and vegetables is:
	(1) Lipooxidase		(2)	Polyphenoloxidase
	(3) Amylase		(4)	Protease
60.	Organic acids as preser	vatives are parti	cula	rly effective against :
	(1) Putrefaction		(2)	Rancidity
	(3) Autolysis		(4)	Lipolysis
61.	Which of the following	; is a sugar alcoho	ol pr	oduced from glucose?
	(1) Mannitol		(2)	Sorbitol
*	(3) Xylitol		(4)	Glycerol

63.	(1) Facilitate defea(3) Facilitate eviso		(2) Engilite		
63.			(2) Tacinta	ite bleeding	
63.	NT 11 1	eration	(4) Contro	ol bacterial gro	owth
	Normally used pre	essure in high pres	sure processin	g of foods is	
	(1) 600 MPa	į.	(2) 1200 N	ſPa	
	(3) 200 MPa		(4) 1500 N	IPa	
64.	A dose ofi	is effective in contr	colling the spro	uting in potat	oes and onions
	(1) 0.2 to 0.5 KGy		(2) 0.1 to 1	1.0 KGy	
323	(3) 0.02 to 0.05 KC	Gy	(4) 1.0 to 2	2.0 KGy	
65.	Blanching is prima (1) Reduction of r (2) Inactivate natu (3) Removal extra (4) Stabilize the co	microbial load ural food enzymes uneous matters and	d fruit peels		
66.			1		
00.	Cold storage temp	perature for the foo	ods ranges fron	ı:	
	-	(2) 4°C to 16°C	U		−2°C to 7°C
67.	(1) -2°C to 16°C	(2) 4°C to 16°C	(3) 4°C to	7°C (4)	−2°C to 7°C
	(1) -2°C to 16°C Cow milk contain.	(2) 4°C to 16°C	(3) 4°C to	7°C (4)	−2°C to 7°C 4.5, 8.5
	(1) -2°C to 16°C Cow milk contains (1) 5.0-6.0, 9.0	(2) 4°C to 16°C s% MF and (2) 3.5-4.0, 8.5	(3) 4°C to 1 % MSN1 (3) 3.0-3.5	7°C (4) F: 5,9.0 (4)	
67.	(1) -2°C to 16°C Cow milk contains (1) 5.0-6.0, 9.0 Egg yolk contains	(2) 4°C to 16°C s% MF and (2) 3.5-4.0, 8.5	(3) 4°C to 1 % MSN1 (3) 3.0-3.5 protein conten	7°C (4) F: 5,9.0 (4)	4.5, 8.5
67.	(1) -2°C to 16°C Cow milk contains (1) 5.0-6.0, 9.0 Egg yolk contains (1) 25	(2) 4°C to 16°C s% MF and (2) 3.5-4.0, 8.5 about% of	(3) 4°C to 1 % MSNI (3) 3.0-3.5 protein conten (3) 20	7°C (4) F: 5,9.0 (4) t.	4.5, 8.5
67. 68.	(1) -2°C to 16°C Cow milk contains (1) 5.0-6.0, 9.0 Egg yolk contains (1) 25	(2) 4°C to 16°C s% MF and (2) 3.5-4.0, 8.5 about% of (2) 17	(3) 4°C to 1 % MSNI (3) 3.0-3.5 protein conten (3) 20	7°C (4) F: 5, 9.0 (4) t. (4)	4.5, 8.5

71.	Maize is poor in:		
7	(1) Lysine and methionine	(2)	Only lysine
	(3) Tryptophan and methionine	(4)	Lysine and tryptophan
72.	The percentage of ingested protein/ni as:	trog	en absorbed into blood stream is known
	(1) Net protein utilisation	(2)	Protein efficiency ratio
	(3) Digestibility coefficient	(4)	Biological value of protein
73.	Milk is a good source of:		
	(1) Proteins, calcium and iron	(2)	Proteins, calcium and ascorbic acid
Š	(3) Proteins, lactose and retinol	(4)	Proteins, lactose and essential fatty acids
74.	Which among the following is an essent	ial a	mino acid ?
	(1) Cysteine		Leucine
	(3) Tyrosine	(4)	Aspartic acid
75.	Which of the following is not essential fa	atty	acid ?
	(1) Oleic acid	(2)	Linoleic acid
	(3) Arachidonic acid	(4)	Linolenic acid
76.	People consuming polished rice as their	stap	ole food are prone to :
	(1) Beriberi	(2)	Pellagra
	(3) Both (1) and (2)	(4)	None of these
77.	Food safety and standards authority of	Indi	a was established in :
	(1) August 2006	(2)	Sept. 2008
	(3) August 2011	(4)	Sept. 2010
78.	The Indian standards on Food hygien (HACCP)-System and guidelines for its	e- H app	lazard analysis and critical control points lication is:
	(1) IS 18001 : 2007	(2)	IS 15000 : 1998
	(3) IS 14001 : 1996	(4)	IS 19011 : 2011

8	79.	Which of the following statements is not true?					
		(1)	Modified atmosphere can also be crinside the package	eate	ed passively by the respiration of product		
		(2) In modified atmosphere package, composition of the gas atmosphere char during storage					
		(3) Modified atmosphere storage and controlled atmosphere storage mostly op at ambient pressure					
	**	(4)	In vacuum packaging, air is remove initial atmosphere is controlled	ed fr	om the headspace of the package and the		
ž.	80.	Nisin, an antimicrobial peptide is produced by :					
			Lactococcus lactis		Streptococcus lactis		
		(3)	Leuconostoc mesenteroids	(4)	Both (1) and (3)		
	81.		st patent constitutes percent sej	para (3)			
				354 5	70 (4) 90		
	82.		highly acidic foods cans used are of		(4)		
		(1)	mR type (2) I type	(3)	mC type (4) m type		
	83.	In case of CAP and MAP which of these gases are introduced, monitored of adjusted?					
		(1)	Oxygen and carbon dioxide	(2)	Oxygen and nitrogen		
		(3)	Nitrogen and carbon dioxide	(4)	Oxygen, nitrogen and carbon dioxide		
	84.	Th	e chemicals used for the aseptic packa	agin	g of foods are :		
		(1)	Sulfur, peracetic acid and ethylene of	oxid	e		
		(2)	Hydrogen peroxide, per acetic acid,	eth	ylene oxide		
		(3)	Hydrogen peroxide, per acetic acid,	sul	fur		
		(4)	Hydrogen peroxide, sulfur and ethy	ylen	e oxide		
	85.	Ch	ymosin enzymes has been successful	ly c	oned in:		
		(1)	Mold	(2)	Yeast		
		(3)	Bacteria	(4)	All of the above		
M	.Phi	1./Pł	n.D./URS-EE-Nov2018/(Food Techn	olo	gy)(SET-Y)/(C)		

86.	. Which of the following vitamins are dominar	ntly present in cereals?
	(1) Thiamin, riboflavin, niacin	
	(2) Vitamin A, thiamine, niacin	
	(3) Vitamin B 12, thiamine, niacin	
	(4) Vitamin A, vitamin B 12 and vitamin C	3
87.	. Wheat gliadin and glutenin, which forms glu	ten, respectively belong to:
	(1) Globulins and prolamins	
	(2) Prolamins and globulins	
	(3) Prolamins and glutelins	
	(4) Albumins and globulins	±
	XAZI- i-la - Cult- C-11i-a In Cult- Cult- In In	
88.	0 71	
	9 € 19 € 19 € 19 1 € 12 € 12 € 12 € 12 €	Long patent
	(3) Second clear (4)	Fancy patent
89.	. Pumpernickel flour is a dark coarse meal pro	oduced from
	(1) Rye (2)	Oat
	(3) Corn (4)	Sorghum
90.	. Which of the following statement is not true	?
	(1) High ratio cakes have weight of sugar m	ore than flour
	(2) Both sugar and fat act as tenderizing age	ents in cake
	(3) Unshortened cake are leavened mainly b	by air or steam
	(4) Angel cake is an example of shortened c	ake
91.	I. The organisms which can grow both in prese	ence and absence of oxygen ?
	(1) Aerobes (2)	Anaerobes
	(3) Faculative anaerobes (4)	Strict aerobes
92.	2. Milk fat differs from other common fats in h	aving a larger percentage of
	(1) Free fatty acids (2)	Saturated fatty acids
	(3) Volatile fatty acids (4)	Long chain fatty acids
	R.	

93.	Cholesterol is a chemical that actually belongs to the family.			
	(1) Carbohydrate	(2)	Fat	
	(3) Alcohol	(4)	Oil	
94.	At what concentration chlorine sanitizindustry?	ing	solutions are usually used in the dairy	
	(1) 50-100 ppm	(2)	100-200 ppm	
	(3) 200-500 ppm	(4)	500-800 ppm	
95.	The time-temperature combinations used	d for	r producing sterilized milk are:	
	(1) 145°C for 3 sec		121°C for 15 min	
	(3) 136°C for 6 sec	(4)	115°C for 3 min	
96.	Which of the following is considered to l	oe o	ne of the hardest types of chesse?	
	(1) Roquefort		Cheddar	
	(3) Swiss	(4)	Parmesan	
97.	Khaman, a famous Gujarati fermented p	rodi	uct is produced from :	
	(1) Bengalgram (2) Blackgram		Greengram (4) Soybean	
98.	The fat content of margarine is generally	·:		
	(1) More than 80%	(2)	Less than 70%	
	(3) More than 65%	(4)	More than 90%	
99.	Which of the following is considered flavoring compound?	as p	precursor of vanillin, a universally used	
	(1) Isoamyl acetate	(2)	6 pentyl 2 pyrone	
	(3) Benzaldehyde		Ferulic acid	
00.	The sodium salt of glutamic acid, mone additive. MSG is produced by an efficier	osoc nt bi	lium glutamate (MSG), is used as a food oprocess using a strain of :	
	(1) Corynebacterium		Kluyveromyces	
	(3) Leuconostoc		Xanthomonas	

1.	First patent constitutes percent separation from 72% extraction.					
	(1) 100 (2) 80	(3) 70 (4) 90				
2	Facilities and in Constant and Constant					
2.	For highly acidic foods cans used are of					
	(1) mR type (2) I type	(3) mC type (4) m type				
3.	In case of CAP and MAP which of adjusted?	f these gases are introduced, monitored or				
	(1) Oxygen and carbon dioxide	(2) Oxygen and nitrogen				
e.	(3) Nitrogen and carbon dioxide	(4) Oxygen, nitrogen and carbon dioxide				
4.	The chemicals used for the aseptic pack	aging of foods are :				
	(1) Sulfur, peracetic acid and ethylene	oxide				
	(2) Hydrogen peroxide, per acetic acid					
	(3) Hydrogen peroxide, per acetic acid	50 202 140				
	(4) Hydrogen peroxide, sulfur and eth					
	(4) Trydrogen peroxide, sundr and ent	ylene oxide				
5.	Chymosin enzymes has been successfu	lly cloned in :				
	(1) Mold (2) Yeast	(3) Bacteria (4) All of the above				
6.	(1) Mold (2) Yeast Which of the following vitamins are do					
6.						
6.	Which of the following vitamins are do					
6.	Which of the following vitamins are do (1) Thiamin, riboflavin, niacin					
6.	Which of the following vitamins are do (1) Thiamin, riboflavin, niacin (2) Vitamin A, thiamine, niacin	minantly present in cereals?				
 7. 	 Which of the following vitamins are do (1) Thiamin, riboflavin, niacin (2) Vitamin A, thiamine, niacin (3) Vitamin B 12, thiamine, niacin (4) Vitamin A, vitamin B 12 and vitamine 	ominantly present in cereals?				
	 Which of the following vitamins are do (1) Thiamin, riboflavin, niacin (2) Vitamin A, thiamine, niacin (3) Vitamin B 12, thiamine, niacin (4) Vitamin A, vitamin B 12 and vitamine 	ominantly present in cereals?				
	Which of the following vitamins are do (1) Thiamin, riboflavin, niacin (2) Vitamin A, thiamine, niacin (3) Vitamin B 12, thiamine, niacin (4) Vitamin A, vitamin B 12 and vitam Wheat gliadin and glutenin, which form	ominantly present in cereals?				
	Which of the following vitamins are do (1) Thiamin, riboflavin, niacin (2) Vitamin A, thiamine, niacin (3) Vitamin B 12, thiamine, niacin (4) Vitamin A, vitamin B 12 and vitam Wheat gliadin and glutenin, which form (1) Globulins and prolamins	ominantly present in cereals?				
	Which of the following vitamins are do (1) Thiamin, riboflavin, niacin (2) Vitamin A, thiamine, niacin (3) Vitamin B 12, thiamine, niacin (4) Vitamin A, vitamin B 12 and vitam Wheat gliadin and glutenin, which form (1) Globulins and prolamins (2) Prolamins and globulins	ominantly present in cereals?				
	Which of the following vitamins are do (1) Thiamin, riboflavin, niacin (2) Vitamin A, thiamine, niacin (3) Vitamin B 12, thiamine, niacin (4) Vitamin A, vitamin B 12 and vitam Wheat gliadin and glutenin, which form (1) Globulins and prolamins (2) Prolamins and globulins (3) Prolamins and glutelins (4) Albumins and globulins	ominantly present in cereals? in C ms gluten, respectively belong to:				
7.	Which of the following vitamins are do (1) Thiamin, riboflavin, niacin (2) Vitamin A, thiamine, niacin (3) Vitamin B 12, thiamine, niacin (4) Vitamin A, vitamin B 12 and vitam Wheat gliadin and glutenin, which form (1) Globulins and prolamins (2) Prolamins and globulins (3) Prolamins and glutelins (4) Albumins and globulins	ominantly present in cereals? in C ms gluten, respectively belong to:				
7.	Which of the following vitamins are do (1) Thiamin, riboflavin, niacin (2) Vitamin A, thiamine, niacin (3) Vitamin B 12, thiamine, niacin (4) Vitamin A, vitamin B 12 and vitam Wheat gliadin and glutenin, which form (1) Globulins and prolamins (2) Prolamins and globulins (3) Prolamins and glutelins (4) Albumins and globulins Which of the following type of flour has	ominantly present in cereals? in C ms gluten, respectively belong to: as the least bran content in it?				

9.	Pumpernickel flour is a dark coarse meal produced from							
	(1)	Rye			(2)	Oat		
	(3)	Corn			(4)	Sorghum		
10.	Wh	ich of the follow	ing	statement is not	true	?		
				ve weight of sug				
	(2)			act as tenderizing				
	(3)			re leavened mai	- 220			
				ample of shorten		(5.0)		H.
11.	The pH range of majority of juices is							
	(1)	3.0-4.5	(2)	3.5-4.5	(3)	3.5-4.0	(4)	4.0-4.5
12.	Leg	ally, what is tota	al so	luble solid conte	nt o	f a fruit preserve	?	
		68.0%		68.5%		67.5%		69.0%
13.	The	epH of egg yolk	in a	freshly laid egg	is:			
		Slightly alkaline		, 66		Slightly acidic		
	(3)	Neutral			(4)	Highly alkaline		
14.	Pha	seolus mungo is a	lso	known as :				
	(1)	Urd dal	(2)	Mung dal	(3)	Masur dal	(4)	Tur dal
15.	Du	ring <i>tempeh</i> prod	lucti	ion from sovabea	ın, tl	ne fermenting ag	ents	are:
		Molds		7	(2)	Bacteria		
	(3)	Both mold and	bact	teria	(4)	None of above		
16.	Wh	ich of the follow	ing	types of wheat h	nas t	he highest protei	n co	ontent ?
		Bread wheat				Macaroni whea		
	(3)	Club wheat			(4)	Durum wheat		
17.	Wh	nich of the follow	ing	statement is not	true	e about the spice	olec	resins ?
	(1)			entrated liquid fo		- 78		
	(2)	These are obtai	ned	from the fresh n	ativ	e spice using solv	vent	extraction
	(3)	These are obtain	ned	from the dried s	pice	s using solvent e	xtra	ction
	(4)	These are main	ly u	sed as flavoring	ager	nts		
M.Phi	l./Ph	.D./URS-EE-No	v2	018/(Food Techn	olo	gy)(SET-Y)/(D)		

18.	Pre-cooling of fruit a	and vegetables i	s done at	a temperature	:		
	(1) 5-10°C	(2) 10-12°C	(3)	15-17°C	(4)	15-20°C	
19.	The enzyme which i	s responsible fo	r browni	ng∙of fruit and	vege	tables is :	
	(1) Lipooxidase		(2)	Polyphenoloxi	dase		
	(3) Amylase		(4)	Protease			
20.	Organic acids as pre	eservatives are p	articular	ly effective aga	inst :		
	(1) Putrefaction		(2)	Rancidity			
	(3) Autolysis		(4)	Lipolysis			
21.	Which of the follow piney flavor?	ving compound	ds are re	sponsible for tl	he ch	aracteristics	citrus or
	(1) Ketones		(2)	Phenolics			
	(3) Terpenoids		(4)	Esters			
22.	Which of the follow concentrate?	ring technique i	s commo	only used for th	ie pre	eparation of f	ruit juice
	(1) Ultrafiltration		(2)	Microfiltration	ı		
	(3) Nanofiltration		(4)	Osmosis		1	
23.	Which of the follow	ing statement is	s not corr	ect?			
	(1) Z Value is meas		17 St. 1788		's to t	he heat treat	ment
	(2) Hot fill is most					n 0 104	1 20 3
	(3) The microbial in (4) Only (2) and (3)		ng ohmi	c heating is mai	inly c	lue to therma	al effect
24.	Kick's law is genera	ally used to dete	rminate	the energy requ	iirem	ents during :	
	(1) Size reduction		(2)	Microwave he	eating	5	
	(3) Ohmic heating		(4)	Mass transfer			
25.	Which of the follow	ving is water sol	uble?				
	(1) Carotenes		(2)	Betanin			
	(3) Xanthophyll		(4)	lycopene			×
26.	Nature of Gliadin is	s:					
	(1) Viscous	(2) Elastic	(3)	Extensive	(4)	Tough	
M.Phi	1./Ph.D./URS-EE-No	v2018/(Food T	echnolo	gy)(SET-Y)/(D)	E		P. T. O.

27.	Which of these is not a random type of s	ampling?
	(1) Simple random sampling	(2) Cluster sampling
	(3) Composite sampling	(4) Quota sampling
28.	Which term is used while studying fluid	properties?
	(1) Reynolds number	(2) Grashof number
	(3) Prandtl number	(4) Nuselt number
29.	Ongoing effort to maintain the integrity achieving an outcome is called:	of a food process to maintain the reliability of
	(1) Quality control	(2) Quality improvement
	(3) Quality assurance	(4) None of the above
30.	Most extrusion processes for food proce	ssing maintain moisture below :
*	(1) 40% (2) 30%	(3) 50% (4) 25%
31.	Which of these IS/ISO 9000 standard is	meant for certification?
	(1) IS/ISO 9001 : 2008	(2) IS/ISO 9000 : 2005
	(3) IS/ISO 9004: 2009	(4) IS/ISO 19011 : 2011
32.		ill become convex when the side of the can is
	struck or the temperature of contents is	increased.
	(1) Flats	(2) Flipper
	(3) Soft swell	(4) Springer
33.	Spray dried cultures of <i>Propionibacterium</i> manufacturing of to improve the	n freudenreichii are added to milk used for the
	(1) Chedder cheese	
	(3) Swiss cheese	(4) All of the above
34.	Musty or earthy flavour in meat is due t	70 :
	(1) Actinomycetes	(2) Micrococcus
	(3) Serratia	(4) Chromobacterium
35.	Purplish red colour of meat is due to :	
	(1) Myoglobin (Fe ²⁺)	(2) Nitric oxide myglobin (Fe ²⁺)
	(3) Metmyoglobin (Fe ³⁺)	(4) Oxymyglobin (Fe ²⁺)
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36.	Cooking meat by direct radiant heat such as open fire of gas flame or electric oven is also known as:					
98	(1) Braising (2) Broiling	(3) R	Roasting	(4) Stewing		
37.	Lean meat contains about: (1) 15-20% protein (3) 20 23% protein	75. Att	2-15% protein			
	(3) 20-23% protein		3-12% protein			
38.	Which of the following are medium acid					
100	(1) Corn, asparagus		Meat, spaghetti	oannlo		
	(3) Pears, figs	(4) 3	Sauerkraut, pin	еарріе		
39.	Jonathan and Rome beauty are the va	rieties	s of which of	the following fruit used		
	commonly for canning? (1) Banana (2) Pineapple	(3)	Grapes	(4) Apple		
	**	3 5	•	str28 * *		
40.	Which of the following is used for the c		-5	y degrading the pectin?		
	(1) Kaolin	100	Filtragol All of the above			
	(3) Kieselguhr	(4) F	All of the above			
41.	The organisms which can grow both in	preser	nce and absence	e of oxygen ?		
	(1) Aerobes	•	Anaerobes			
	(3) Faculative anaerobes	(4) S	Strict aerobes			
42.	Milk fat differs from other common fats	in ha	ving a larger p	ercentage of		
	(1) Free fatty acids	(2) 5	Saturated fatty	acids		
	(3) Volatile fatty acids	(4) I	Long chain fatt	y acids		
43.	Cholesterol is a chemical that actually b	elong	s to the	family.		
	(1) Carbohydrate	(2) I	Fat			
	(3) Alcohol	(4)	Oil			
44.	At what concentration chlorine saniti industry?	zing s	solutions are ı	usually used in the dairy		
	(1) 50-100 ppm	(2)	100-200 ppm			
	(3) 200-500 ppm	(4)	500-800 ppm			

45.	The time-temperature combinations us	ed for producing sterilized milk are :	
	(1) 145°C for 3 sec	(2) 121°C for 15 min	
	(3) 136°C for 6 sec	(4) 115°C for 3 min	
46.	Which of the following is considered to	be one of the hardest types of chesse?	
	(1) Roquefort	(2) Cheddar	
	(3) Swiss	(4) Parmesan	
47.	Khaman, a famous Gujarati fermented	product is produced from:	
	(1) Bengalgram (2) Blackgram	(3) Greengram (4) Soybean	
48.	The fat content of margarine is generall	y:	
	(1) More than 80%	(2) Less than 70%	
	(3) More than 65%	(4) More than 90%	
49.	Which of the following is considered flavoring compound?	as precursor of vanillin, a universally use	ed
	(1) Isoamyl acetate	(2) 6 pentyl 2 pyrone	
	(3) Benzaldehyde	(4) Ferulic acid	
50.	The sodium salt of glutamic acid, mor additive. MSG is produced by an efficient	nosodium glutamate (MSG), is used as a foo ent bioprocess using a strain of :	d
	(1) Corynebacterium	(2) Kluyveromyces	
	(3) Leuconostoc	(4) Xanthomonas	
51.	Tomato sauce is an example of:		
	(1) Casson plastic	(2) Pseudoplastic	
	(3) Newtonian fluid	(4) Dilatant	
52.	AGMARK was promulgated in:		
	(1) 1954 (2) 1934	(3) 1935 (4) 1937	
53.	In recent years biscuits, cookies and cra	96 % all all all all all all all all all a	
	(1) RCF coated with LDPE/PVE		
		(2) PET/AI foil/LDPE	
	(3) OPP either plane or coextruded	(4) RCF coated with acrylic	

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54.	Glazing of fish is done to protect fish from:					
	(1) Oxidation and	freezer burn	(2)	Microbial spoil	age	
	(3) Freezer burn		(4)	Chemical spoil	age	
55.	The centrifugal pu	mp depend upon	the	of a fluid to	develop pressure	
	(1) Inertia	(2) Energy		Density	(4) Viscosity	
56.	is the proces	s used primarily f	or oils ı	ısed in salad dre	essing.	
	(1) Winterization			Deodorization	C	
	(3) Bleaching	5	(4)	Degumming	×	
57.	The germ constitut	es in com.				
	(1) 11%	(2) 12%	(3)	8%	(4) 10%	
58.	The organism invo	lved in the produc	ction of	dhokla, idli or d	losa is :	
	(1) Aspergillus or	yzae) Leuconostoc mesenteroids		
	(3) Latobacillus la	ctis	(4)	Monascus purp	oureus	
59.	Protein content in s	soya protein conce	ntrate i	s:		
	(1) 72%	(2) 80%		42%	(4) 52%	
60.	At what concentrat	ion salt acts as a p	reserva	tive?		
	(1) 15-20%	(2) 10-12%		8-10%	(4) 3-5%	
61.	Maize is poor in :					
	(1) Lysine and me		(2)	Only lysine		
	(3) Tryptophan an	d methionine	(4)	Lysine and tryp	otophan	
62.	The percentage of as:	ingested protein/	'nitroge	en absorbed into	blood stream is	known
	(1) Net protein uti		(2)	Protein efficiency ratio		
	(3) Digestibility co	efficient	(4)	Biological value	e of protein	
63.	Milk is a good sour	ce of :	¥			
	(1) Proteins, calciu		(2)	Proteins, calciur	m and ascorbic aci	d
	(3) Proteins, lactos	e and retinol			e and essential fatt	
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64.	Which among the following is an ea	sential amino acid ?	
	(1) Cysteine	(2) Leucine	
	(3) Tyrosine	(4) Aspartic acid	
65.	Which of the following is not essen	ial fatty acid ?	
	(1) Oleic acid	(2) Linoleic acid	
	(3) Arachidonic acid	(4) Linolenic acid	
66.	People consuming polished rice as	heir staple food are prone to :	
	(1) Beriberi	(2) Pellagra	
	(3) Both (1) and (2)	(4) None of these	
67.	Food safety and standards authori	y of India was established in :	
	(1) August 2006	(2) Sept. 2008	
	(3) August 2011	(4) Sept. 2010	
68.	The Indian standards on 'Food hy (HACCP)-System and guidelines f	giene- Hazard analysis and critical contro or its application is :	l points
	(1) IS 18001: 2007	(2) IS 15000: 1998	
	(3) IS 14001:1996	(4) IS 19011 : 2011	
69.	Which of the following statements	is not true?	
	(1) Modified atmosphere can also inside the package	be created passively by the respiration of	product
	(2) In modified atmosphere pac- during storage	age, composition of the gas atmosphere	changes
	(3) Modified atmosphere storage at ambient pressure	and controlled atmosphere storage mostly	operate
	(4) In vacuum packaging, air is r initial atmosphere is controlle	emoved from the headspace of the package	and the
70.	Nisin, an antimicrobial peptide is	produced by :	
	(1) Lactococcus lactis	(2) Streptococcus lactis	
	(3) Leuconostoc mesenteroids	(4) Both (1) and (3)	
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	71.	Which of the following is a non-nutritive natural sweetener?					
		(1) 0 1		Thaumatin			
		(3) Xylitol	1)	Isomalt			
	72.	One of the functions of sodium nitrite in m	ne	at products is to			
		(1) Inhibit mold growth					
		(2) Inhibit growth of Clostridium botulinum	n i	n vacuum packaged cured meats			
		(3) Minimize purge in vacuum packaged					
		(4) Reduce color fading in aerobically pac	ka	aged cured meats			
	73.	Cason regression models can be used to de	es	cribe:			
		(1) Pasting properties of materials					
		(2) Convection heat transfer properties of	m	naterials			
		(3) Mixing behavior of materials		2			
		(4) Rheological properties of materials					
	74.	Which of the following chemicals not adde	ed	to bread to prevent mold growth?			
		(1) Sodium benzoate (2	2)	Calcium propionate			
		(3) Potassium sorbate (4)	1)	Potassium benzoate			
	75.	Which is the correct sequence of the given their tensile properties?	ηp	plastic materials in the decreasing order of			
		(1) PVC, HDPE, LDPE, PET (2	2)	PET, HDPE, LDPE, PVC			
		(3) PVC, LDPE, HDPE, PET (4	1)	PET, LDPE, HDPE, PVC			
	76.	Maltodextrins have dextrose value					
		(1) Less than 5	2)	More than 20			
		(3) Less than 20 (4)	1)	Less than 50			
	77.	If the temperature of atmosphere increase bulb temperature would.	se	s at constant absolute humidity, the wet			
		(1) Increase (2	2)	Decrease			
		(3) Remains constant (4)	4)	First decrease then increase			
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78.	The breaking of starch molecules to presence of dry heat is called:	smaller and sweet tasting molecules in the	ne				
	(1) Caramelization	(2) Dextrinization					
	(3) Inversion	(4) Saccharification					
79.	Which of these processes is one of the of the most utilized, and the most energy	oldest techniques used to preserve foods, or gy intensive?	ne				
	(1) Drying	(2) Fermentation					
	(3) Refrigeration and freezing	(4) Pickiling					
80.	Tomatoes are stored and shipped at ten	nperature between					
	(1) 70 to 90°F	(2) 50 to 65°F					
	(3) 15-20°F	(4) 0 to 30°F					
81.	Which of the following is a reducing su	gar ?					
	(1) Lactose	(2) Maltose					
	(3) Cellobiose	(4) All of the above					
82.	What is the usual particle size of the co	mmercially milled wheat flour?					
	(1) Less than 250 microns						
	(2) More than 200 micron but less than	300 microns					
	(3) Not larger than 200 microns						
	(4) Less than 350 microns						
83.	Which of the following antistaling ager	nt is used in bread making as a softener?					
	(1) Polysorbate 60	(2) Sodium stearoyl Lactylate					
	(3) Diaecetyl tartaric acid	(4) All of the above					
84.	Which of the following is not true abou	at damaged starch?					
	(1) It absorbs more water						
	(2) It loses crystalline structure						
	(3) It loses the property of birefringen	ce					
	(4) High level of damaged starch incre	eases stiffness of the dough					
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85.	Safe moisture conte	ent for the storage of	pad	dy is:		
6	(1) 12%	(2) 14%		13%	(4) 16%	
86.	Steeping during we	et milling of corn inc	rease	es the moisture o	content upto :	
	(1) 40-45%			25-30%		
	(3) 30-40%		(4)	20-30%		
87.	Who first stated th vegetables during s	at micro-organisms storage ?	are	responsible for	the spoilage of fru	its and
	(1) Spallanzani		(2)	Louis Pasteur		
	(3) Mulder		(4)	Nicolas Appert		
88.	A food product co	ontaining less than		calories per	serving is known	as low
	(1) 20	(2) 50	(3)	60	(4) 40	
89.	Which of the follow	ving will be present	in laı	ge amounts in o	verripe fruit ?	
	(1) Protopectin			Pectinic acid		
	(3) Pectin		(4)	Pectic acid		
90.	The frequency of m	icrowaves is in the r	ange	e of :		
	(1) 100 - 4000 MHz	;	(2)	300-3000 MHz		
	(3) 500-5000 MHz		(4)	250 - 2500 MHz	:	
91.	Which of the follow	ring is a sugar alcoh	ol pr	oduced from glu	icose ?	
	(1) Mannitol	el.	(2)	Sorbitol		
	(3) Xylitol		(4)	Glycerol		
92.	Scalding in poultry	processing is done	to:		**	
	(1) Facilitate defea	thering	(2)	Facilitate bleed	ing	
	(3) Facilitate evisce	eration	(4)	Control bacteri	al growth	
93.	Normally used pres	ssure in high pressu	re pr	ocessing of food	s is	
	(1) 600 MPa		(2)	1200 MPa		
	(3) 200 MPa		(4)	1500 MPa		
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94.	A dose of is	effective in control	ling the sprouting ir	n potatoes ar	nd onions		
	(1) 0.2 to 0.5 KGy	38.0	(2) 0.1 to 1.0 KGy	7			
	(3) 0.02 to 0.05 KGy	7	(4) 1.0 to 2.0 KGy				
95.	Blanching is primar	rily done to :					
	(1) Reduction of m	icrobial load					
	(2) Inactivate natur	ral food enzymes					
	(3) Removal extrar	neous matters and fi	ruit peels				
	(4) Stabilize the col	or and flavor of the	products				
96.	Cold storage tempe	rature for the foods	s ranges from :				
	(1) -2°C to 16°C		(2) 4°C to 16°C				
	(3) 4°C to 7°C		(4) −2°C to 7°C				
97.	Cow milk contains	% MF and	% MSNF :				
	(1) 5.0-6.0, 9.0	(2) 3.5-4.0, 8.5	(3) 3.0-3.5, 9.0	(4) 4.5, 8	.5		
98.	Egg yolk contains about% of protein content.						
	(1) 25	(2) 17	(3) 20	(4) 12			
99.	Which of the follow	ving has highest fat	content?				
	(1) Sorghum	(2) Bajra	(3) Maize	(4) Oat			
100.	Radurization is:						
	(1) Use of low rad	iation 0.75 - 2.5 kGy	7				
	(2) Use of 2.5 - 10	kGy radiation dose					
	(3) Use of high rac	diation dose 10- 25 l	кGy				
	(4) Pasteurization	without radiation					

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S.No	Α	(B)	С	D
1	4~	4	1	3
2	3~	3′	2	2_
3	3~	3.⁄	3	4
4	3 4 2	2⁄	1	2
5	2	1~	1	2⁄
6	1~	1⁄	2	1⁄
7	1~	2~	3	3′
8	4~	2	2	4
9	1 1 4 4 4 4 4	4~	4	1
10	2 ~	1~	2	4
11	2~	3′	2	3 🗂
12	1~	2′	2	1
13	1./	4	4	2
14	1.⁄ 3.⁄	1⁄	4	1
15	2	1⁄ 2⁄	2	1 4
16	1	1⁄	3	1/
17	2 ~	1 4	2	2
18	2 · 1 · 2 · 2 · 2 · .	3′	2	3
19	4 ~	1/	1	2
20	1~	1	2	2 1
21	1	3	1	3′
22	2~	2	4	
23	3~	4	3	2-4
24	1~	2	1	1
25	1~	2	4	2
26	2~	1	1	1/
27	3	3	2	4
28	2~	4	2	3
29	4~	1	1	1
30	2~	4	1	1
31	3 ~	4	3	1/
32	1~	3~	2	2/
33	2~	3 🗸	4	3
34	1~	3~	1	10
35	4	2~	2	1
36	1~	1~	1	2
37	2 ⁄	1 ~	4	3^
38	3~	4~	3	2^
	2	4		4
39	1~	2	1	
40		2	1	2′
41	4~	2~	4	
42	3~		3	3
43	3 V	4~	3	3
44	2 1	4-	4	3/
45	1	2/	2	1_



	A	B	C	D
46	1~	3-	1	4
47	2~ 2~ 4~ 1~	2/	1	1
48	2~	2/	4	
49	4~.	1⁄	4	4
50	1_	2	2	1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
51	2	1	3	1
52	2/	3	1	1 4 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
53	4	3	2	3-
54	4	3	1	1/
55	2~	1	4	4
56	3~ 2~	1	1	1
57	2~	1′	2	2
58	2~	1 4	3	2
59	1~	4	2	1~
60	2~	1	1	1
61	1~	1 1 2 -	2	4^
62	2 / 1 / 2 / 1 / 3 / 3 / 3 /	2~	1	1 2 2 1 1 1 2 2 2 4
63	3~	3✓	1	3
64	3	3~ 1~	3	2-
65	1	1- 2-	2	□ 1 ′
66	4~ 1~	2	1	1
67	1~	3~	, 2	2
68	1	2~ 4~	2	2
69	4~	4	4	4
70	1~	2 ~ 2 ~ 1 ~	1	2 2
71	3 2	2∽	4	2
72	2	1~	3	2
73	4~	1′	3	4
74	1~	3∽	2	4
75	2	2~	1	2
76	1~	1	1	3
77	4~	2~	2	2
78	3∕	2	2	2
79	1~	4^	4	1
80	1~	1	1	2 4
81	1/	1/	3	
82	4	4	2	3
83	3~	3′	4	3
84	1∽	1^	2	4
85	4~	4	2	2
86	1/	1⁄	1	1
87	2 -	2′	3	1/
88	2 🗸		4	4
89	1	1⁄	1	4
90	1/	1/	4	2 2
91	3 1	31	1	
92	2	1√	3	1′



	A	B	\subset	D
93	4~	2~	3	1
94	2~	1~	3	3
95	2~	4 ~	1	2
96	1~	1✓	4	1⁄
97	3~	2⁄	1	2
98	4~	3/	1	2
99	1~	2/	4	4
100	4~	1	1	1

