REV-01 BFST/01/05

Duration: 3 hrs.

2023/12

## B.Sc. FOOD SCIENCE & TECHNOLOGY THIRD SEMESTER (REPEAT) CEREAL, PULSES AND OILSEED TECHNOLOGY BFST-302



Full Marks: 70

[USE OMR SHEET FOR OBJECTIVE PART]

(Objective)

Ti	me: 30 mins.		-)	Marks: 20
Ch	oose the correct answer from the follo	g:	1×20=20	
1.	<ul><li>a. Antioxidants</li><li>c. Both a and b</li></ul>	b.	fats and oils. Refrigerated temperature None of the above	
2.	is the protein present in wheat.  a. Oryzenin c. Zein		Gluten None of the above	
3.	Margarine is a type emulsion.  a. Oil in water  c. Both a and b		Water in oil None of the above	
4.	is the protein present in rice.  a. Oryzenin c. Zein		Gluten None of the above	
5.	The pulses after splitting is called		Dhal None of the above	
6.	As we move towards the centre of endosper a. Decreases c. Increases	b.	of Sorghum, the protein conter Remain constant None of the above	nt:
7.	Oil in the cereals products are present in a. Endosperm c. Germ	b.	Husk Bran	
8.	The nutritional content of paddy	b.	uring parboiling. Remain constant None of the above	
9.	is the example of major millet.  a. Kodo millet c. Proso millet		Pearl millet Foxtail millet	
10.	is the solvent used during solver a. Hexane c. Methane	b.	xtraction of oil. Propane All of the above	

11.	is the limiting amino acid in the pulses.				
	a. Aianine	b. Phenylalanine			
	c. Lysine	d. Methionine			
12.	Scientific name of Barley is				
	a. Oryza sativa	b. Hordeum vulgare			
	c. Zea mays	d. None of the above			
13.	is the step used to remove free fatty acid from oils during refining.				
	a. Degumming	b. Neutralisation			
	c. Wintering	d. Deodorisation			
14.	is the step to remove waxes from oil during refining.				
14.	The state of the s	b. Neutralisation			
	a. Degumming	d. Deodorisation			
	c. Wintering				
15.	is the equipment use				
	a. Beall Degermer	b. Hammer mills			
	c. Roller mills	d. Both a and b			
16.	is the step used in the milling of pulses for scratching the pulses for better penetration of oil.				
	a. Polishing	b. Pitting			
	c. Loosening of husk	d. Dehusking			
17					
17.	a. S. cerevisiae	b. S. varuum			
		d. Both b and c			
	c. S. carlsbergeng	d. Both b and c			
18.	is the only cereal without hull.				
	a. Wheat	b. Barley			
	c. Oats	d. Sorghum			
19.	is the major portion in the cereal kernel.				
	a. Bran	b. Germ			
	c. Endosperm	d. Husk			
20.	Beer contain % of alcohol.				
	a. 3.5 -5 %	<b>b.</b> 5.5-7 %			
	c 2-3 %	d. 10.2-12%			

## $\left( \underline{\text{Descriptive}} \right)$

Time: 2 hr. 30 mins.		
	[ Answer question no.1 & any four (4) from the rest ]	
1.	Discuss the steps used in milling of rice.	10
2.	What is brewing? Explain the manufacturing of beer.	2+8=10
3.	Explain dry and wet milling of pulses.	10
4.	What is parboiling? What are the changes that occur during parboiling? Write down the advantages of parboiling.	2+5+3=10
5.	What is texturization of protein? Explain the different methods used in texturization of protein.	2+8=10
6.	What is rancidity? Discuss different types of rancidity with their mechanism. How to prevent rancidity of fats and oils?	1+7+2=10
7.	Discuss in detail the different process used during refining of oil.	10
8.	Write note on: a) Quality characteristics of grains b) Different storage techniques used in cereals	5+5=10

== \*\*\* = =