REV-01 BMB/21/26

Duration: 3 hrs.

2022/07

B.Sc. FOOD SCIENCE & TECHNOLOGY SIXTH SEMESTER FOOD HYGIENE & SANITATION

BFST-605

(Use Separate Answer Scripts for Objective & Descriptive)

[PART-A: Objective]

Time: 20 min. Marks: 20

Choose the correct answer from the following:

 $1 \times 20 = 20$

Full Marks: 70

1. Aerobic lagoons are also known as:

a. Activated pond c. Shallow pond

b. Stabilization pond d. Aerated pond

2. The secondary treatment results in reduction of solids and BOD by:

a. 70-95%

b. 60-95%

c. 70-80% d. 60-80%

3. Methanogenic bacteria convert acetic acid, formic acid and hydrogen to: a. Hydrogen gas

b. Methane gas

c. Fatty acids

d. Alcohols

4. Stabilization ponds reduces the BOD level by:

a. 30-60% c. 50-80% b. 40-80% d. 70-90%

5. Fumarin is a chemical used to control:

a. Cockroaches

b. Rodents

c. Fruit flies

d. House flies

6. FOG stands for:

a. Fatty acid, oils or grease

b. Fats, oils or grits

c. Fumes, oils or gases d. Fats, oil or grease

7. An example of fumigants used in food industry is:

a. Phosphine

b. Methyl bromide

d. All of the above c. Ethylene oxide

8. What is the shelf life of butter when stored in freezer storage?

a. 6-9 months c. 2-6 months b. 1-2 months d. 5-10 months

9. What is the shelf life of raw chicken when stored in refrigerator storage?

a. 1 week

b. 4-6 days

c. 1-2 days

d. 2 weeks

12.	Meat stored in environment have a better color than			
	a. Carbon di oxide, oxygen	b. Oxygen, Carbon di oxide		
	c. Carbon di oxide, nitrogen	d. Nitrogen, oxygen		
13.	Windows in a food industry should be mad	le of		
	a. Breakable glass	b. Laminated, reinforced, or		
		polycarbonate sheet		
	c. Wood	d. All of the above		
14.	14. An agent that destroys or eliminates all forms of microbial life is called			
	a. Sanitizer	b. Sterilant		
	c. Disinfectant	d. All of the above		
15.	The reflectance of the light on the floor in a f	ood industry should be		
	a. 20%	b. 60-70%		
	c. 50%	d. 100%		
16.	Minimum height of the factory premises undand for a small & large scale			
	a. 10ft ,14ft.	b. 14ft ,10ft.		
	c. 20ft ,14ft	d. 10ft ,24ft.		
17.	ISO 9000 were developed for			
	a. Food safety management system	b. Quality management system		
	c. Food assurance system	d. Food quality control system		
18.	The jewellery policy inside the food process	sing facility		
	a. Allows the use of bangles	b. Prohibits the use of earrings and bracelets		
	c. Allows the use of necklaces	d. All of the above		
19.	Gutter drains should			
	A. Have rough vertical walls with round or coved bottoms	b. be normally set slightly below floor level		
	 Have grating strong enough to handle heavy traffic 	d. All of the above		
20.	serve as a barrier to maintain the	controlled environment inside the building		
	a. Windows	b. Doors		
	c. Exhaust system	d. Roofs		

10. The most common pests among food processing plants throughout the world are
a. Houseflies
b. Fruit flies
c. Cockroaches
d. Beetles

11. Which of the following is not the correct method to enhance storage?

a. Reducing pressure
b. Increasing ethylene
c. Decreasing respiration
d. None of the above

(PART-B : Descriptive)

Time: 2 hrs. 40 min. Marks: 50

[Answer question no.1 & any four (4) from the rest]

1.	What is plant layout? Give the advantages of good plant layout & requirements in planning layouts.	3+2+5 =10
2.	a. Write short note on controlled atmospheric packaging.	4+6=10
	b. Hygiene maintain is an important parameter during transportation of food material. explain why.	
3.	Why there is a need for management of waste from food industries?	2+8=10
	b. Explain the methods used in primary treatment to treat meat plant effluents.	
4.	a. Why pests and rodents are a threat to food industries?	2+8=10
	b. Explain any four methods by which pests can be controlled in food industries.	
5.	What is the main planning consideration for a dairy plant? Discuss the major factors for selection of dairy equipment.	4+6=10
6.	a. Why is the significance of byproduct utilization in food processing sector?	2+8=10
	b. Write about the various by-products from different food industries.	
7.	a. Write down the importance of cold storage to improve the forward and backward linkages.	6+4=10
	b. Inside the warehouse food materials is stored separately. Give reason.	
8.	Discuss the role of waste water treatment system/ETP in a Food Industry.	10