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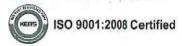
UNIVERSITY OF EMBU

2017/2018 ACADEMIC YEAR

SECOND SEMESTER EXAMINATIONS

THIRD YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN MICROBIOLOGY AND BIOTECHNOLOGY

		SBT 317: FOOD MICROBIO	LOOGY
DATE: APRIL 3, 2018 TIME: 2:00 -4:			TIME: 2:00 -4:00 PM
		CTIONS: Answer ALL Questions from SECTIO from Section C.	NS A and B, and ONE Question
		N A: Multiple Choice Questions (1 Mark each) in the box opposite the correct answer.	
1.	Which	h of the following is not an intrinsic factor for the n	nicrobial growth;
		pH	
		Moisture	
		Oxidation-Reduction potential	
		Temperature	
2. '	Which	h microorganism causes greening of the sausages?	
		Pseudomonas	
		Leuconostoc	
		Micrococcus	
		Streptococcus	



3.	The ti	time temperature combination for HTST pasteurization of 71.7°C for 15 sec is selected		
	on the	basis of;		
		Coxiella Burnetii		
		C. botulinum		
		E. coli		
		B. subtilis		
4.	Which	of the following requires two types of fermentations for its production?		
		Pickle		
		Yoghurt		
		Vinegar		
		Sausages		
5.	A spec	ial beer yeast of the top type is;		
		S. cerevisiae		
		S. thermophillus		
		S. carlsbergensis		
		None of the above		
6.	Which	of the following bacteria genus is used to make yoghurt?		
		Lactobacillus		
		Acetobacter		
		Propionibacteria		
		Formicillus		
7.	In brea	d manufacturing, alcoholic fermentation is carried out by;		
		Streptococcus thermophillus		
		Lactobacillus bulgaricus		
		Saccharomyces cerevisae		
		None of the above		

٥.	The cr	ushed grapes used for wine manufacturing are also known as,		
		Wort		
		Must		
		Нор		
		None of the above		
9.	A stable food is;			
		One that has not spoiled yet		
		Nonperishable		
		One that has had additives added		
		All the above		
10.	The m	ain cause of green rot in eggs is?		
		Pseudomonas fluorescens		
		Micrococcus species		
		Molds		
		All the above		
11. Botulism is caused by the presence of toxin developed by;				
		Clostridium tyrobutyricum		
		Clostridium sporogenes		
		Clostridium botulinum		
		None of the above		
12. Which of the following microorganisms is commonly used as probiotics?				
		Saccharomyces cerevisiae		
		Lactobacillus acidophilus		
		Ralstonia eutropha		
		All the above		

13. Hydrolysis is undergone by which food products;			
	Meat		
— П	Starchy-food		
	Fruits		
	All the above		
14. The chief spoilage organisms on smoked fish are;			
	Molds		
	Bacteria		
	Fungi		
	None of the above		
15. Lactic acid bacteria include;			
	Lactococcus lactis		
	Lactococcus cremoris		
	Bifidobacterium		
	All the above		

SECTION B: SHORT ANSWER QUESTIONS (5 Marks Each)

Your answers should be brief and to the point (Use the examination answer book provided)

- 16. Describe the microbial growth cycle in a contaminated food sample.
- 17. Outline the types of spoilage that can occur in raw meat under aerobic condition.
- 18. You have been appointed as a chief quality control officer of a regional wine manufacturing industry. Discuss briefly the mechanisms you would put in place, to ensure that the company produces quality and safe wine as required by the authority.
- 19. Explain the principle behind sauerkraut preparation.
- 20. Give a brief account of the contamination of cereal and cereal products.
- 21. Distinguish between food borne infections and food intoxication.

SECTION C: ESSAY QUESTIONS (25 Marks Each)

Write an essay on any ONE of the following topics (Use the examination answer book provided)

- 22. Discuss the common food preservation methods.
- 23. You are appointed as a senior Public Health Officer in your county. Explain how you would investigate a suspected incident of food borne pathogen outbreak.
- 24. Give an account of the microbiology of fruits and vegetables.

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