

PARUL UNIVERSITY
PARUL INSTITUTE OF APPLIED SCIENCES
MID SEMESTER INTERNAL EXAMINATION, APRIL 2018
M. Sc. Food technology Semester II

Paper Name: Fermentation technology

Date: 5/3/2020

Paper Code: 11213156

Time: 1hr 30min

Max. Marks: 40

Instructions:

1. All questions are compulsory and options are given in first and second question only.
2. Numbers to the right of question indicate the marks of respective question.

- Q. 1** Attempt any one question of the following. **(08)**
 (i) What do you understand by fermenter design?
 (ii) Explain range of fermentation process.
- Q. 2** Attempt any three questions of the following. **(12)**
 (i) What are the factors involved in fermenter design ?
 (ii) Explain the process of chaise preparation.
 (iii) Process of wine
 (iv) Process of vinegar
 (v) Process of beer
- Q. 3** Do as directed. Attempt all five questions. **(05)**
 (i) Define the process of fermentation
 (ii) Diagram of prokaryotes with label
 (iii) Flowchart of Bread in short
 (iv) List of factors affecting microbial metabolism while fermentation
 (v) How to control or inhibit the growth of micro-organism while fermentation?
- Q. 4** Write correct option in your answer sheet for following 15 multiple **(15)**
 choice questions.

MCQ 1	The process of making beer is known as _____			
	(A)	Mashing	(B)	Brewing
	(C)	Malting	(D)	Sparging
MCQ 2	Which of the following is used to inhibit bacterial growth?			
	(A)	Yarrow	(B)	Chilli
	(C)	Juniper	(D)	Liquorice
MCQ 3	What do you mean by "Trophophase" ?			
	(A)	Production of waste materials	(B)	Production of topical products
	(C)	Production of primary metabolites	(D)	Production of secondary metabolites
MCQ 4	What do you mean by "Idiophase"?			
	(A)	Production of waste materials	(B)	Production of topical products
	(C)	Production of primary metabolites	(D)	Production of secondary metabolites
MCQ 5	Microbial process is advantageous than chemical process.			
	(A)	True	(B)	Fase
	(C)		(D)	

MCQ 6	Which of the following is not a product of fermentation?			
	(A)	Oxygen	(B)	Carbon dioxide
	(C)	Ethanol	(D)	Lactate
MCQ 7	Alcoholic fermentation is carried by yeast known as _____			
	(A)	Lactobacillus	(B)	Bacillus
	(C)	Saccharomyces cerevisiae	(D)	Escherichia coli
MCQ 8	Which of the following is not a probiotic?			
	(A)	Fungi	(B)	Saccharomyces cerevisiae
	(C)	Escherichia coli	(D)	Lactobacillus
MCQ 9	Biofuels are products of fermentation.			
	(A)	True	(B)	False
	(C)		(D)	
MCQ 10	Biorefinery is not an example of fermentation.			
	(A)	True	(B)	False
	(C)		(D)	
MCQ 11	In the following terms which is not the definition of fermentation process			
	(A)	Do not require an electron transport system	(B)	. Use an organic compound as the final electron acceptor
	(C)	Use an inorganic compound as the final electron acceptor	(D)	Alcohol is formed from sugar
MCQ 12	Pasteur effect discovered in 1857, is			
	(A)	Inhibiting effect of oxygen on the fermentation process	(B)	. Aerating yeasted broth causes yeast cell growth to decrease, while conversely, fermentation rate increases
	(C)	A and B	(D)	Akk of the above
MCQ 13	The final electron acceptor in lactic acid fermentation is			
	(A)	Oxygen	(B)	Lactic acid
	(C)	Pyruvat	(D)	NAD
MCQ 14	Identify the correct sequence during the industrial production of substances			
	(A)	. Inoculation, screening, fermentation, downstream processing, removal of waste	(B)	Screening, Inoculation, fermentation, downstream processing, removal of waste
	(C)	Fermentation, screening, inoculation, removal of waste, downstream processing	(D)	Fermentation, inoculation, inoculation, removal of waste, downstream processing
MCQ 15	_____ is the detrimental effect of microorganisms in the food			
	(A)	Generation of flour	(B)	Process of fermentation
	(C)	. Spoilage of food	(D)	All of the above

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