PATEL UNIVERSITY OF STREET

Seat	no:	

[27]

## No of Printed pages: 02

## Sardar Patel University

## Bachelor of Science (Semester-3) Examination-2022 US03CBIT22- Microbial Biotechnology

Date	: 18 <sup>th</sup>	November 2022, Friday							
Time	e: 10:0	00AM - 01:00 PM		Total Marks: 70					
Note	:- Figu	ures on the right indicates full marks.							
Q-1	1		10						
	1.	Which of the following agent is used as							
		a) Alcohol	•	Phenol					
	2	b) Quaternary ammonium salts		Aldehyde					
	2.	method use steam under pressure for killing microbes							
		a) Autoclave	•	Pasteurization					
	2	b) Radiation		filteration					
	3.	Which of the following is a byproduct at							
		a) Corn steep liquor		Pharmamedia					
		b) Sulfite waste liquor	•	Molasses					
	4.	Which of the following method is useful for detection of antibiotics?							
		a) Crowded plate technique	,	Enrichment culture					
	_	b) Auxanography		Auxanography					
	5.	Which growth phase is also known as adaptation phase?							
		a) Lag		Stationary					
		b) Exponential	d)	Death					
	6.	is known as closed culture		4					
		<ul> <li>a) Batch culture</li> </ul>	c)	Continuous culture					
		<ul><li>b) Fed-batch culture</li></ul>		All of the above					
	7.	Which of the following fix nitrogen by symbiotic association?							
		a) Azotobacter	c)	Rhizobium					
		b) <i>Clostridium</i>	d)	Rhodospirillium					
	8.	Which of the following is not used as biofertilizers							
		a) bacteria	c)	fungi					
		b) virus	d)	cynobacteria					
	9.	Growth of microorganism in a solid media is identified by the formation of							
		a) Pellicle	c)	Turbidity					
		b) Colonies		sedementation					
	10.	Rennet is	ŕ						
		a) The hard cheese	c)	The soft cheese					
	,	b) The complex set of enzyme	•	The semi hard cheese					
Q-2		Short Question (Attempt any ten)			20				
	1.	Give mode of action of phenol.							
	2.	Give an account on Pasteurization.							
	3.	Give an account on virus.							
	4.	What are crude and synthetic media?							
	5.	Define fermentation.							
	6.	What is whey?							

	7.	What are probletics?	
	8.	Discuss disadvantages and advantage of Continuous fermentation process.	
	9.	What are the advantages of fermented food?	
	10.	What is single cell protein give its use.	
	11.	What is Biopesticides?	
	12.	give advantages of Biofertilizer over chemical fertilizer.	
Q-3	A	Discuss heat as a physical antimicrobial agent in detail.	06
	В.	Give an account on bacteria as a major group of organism.	04
		OR	,
	A	Discuss heavy metal and alcohol as antimicrobial agent	06
	В.	Give an account on UV rays as antimicrobial agent.	04
Q-4	A	Why is secondary screening important?	06
	${f B}$	Give an account on auxanography,	04
		OR	
	A	Write note on strain improvement.	06
	В	Give an account on Molasses.	04
Q-5	A	Give a detail account on Cheese production.	06
	В	Discuss Batch culture.	04
		OR	•
	A	Give production of amylase as industrial important organism.	05
	В	Give an account on continuous fermentation	05
Q-6	Α.	Discuss various microorganism used as Biofertilizer.	06
	В.	Write note on Biopesticide.	04
		OR	
	A.	Give a detail steps for mushroom cultivation.	06
	D	Write note on Bioplastic	0.4