	Utech
Name:	
Roll No.:	To Opening (N' Exemples and Explana)
Invigilator's Signature :	

CS/B.Tech/(FT-NEW)/SEM-6/FT-604/2013 2013

MICROBIAL TECHNOLOGY AND FOOD BIOTECHNOLOGY

Time Allotted: 3 Hours Full Marks: 70

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

GROUP - A

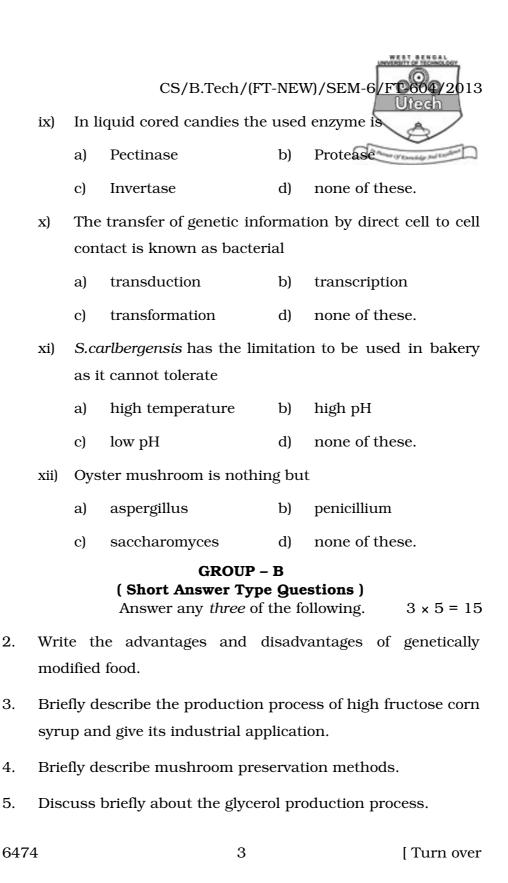
(Multiple Choice Type Questions)

- 1. Choose the correct alternatives for any ten of the following : $10 \times 1 = 10$
 - i) Host microorganism for cloning is
 - a) E.coli
 - b) Lactobacillus
 - c) Bacillus thurangensis
 - d) Steptococcus.
 - ii) Disadvantages of single cell protein is
 - a) contain higher amount of nucleic acids
 - b) cause gout
 - c) contains heavy metals
 - d) all of these.

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iii)	Saci	Sacharomyces cerevisea is responsible for production of		
	a)	Yeast cell	b)	Alcohol
	c)	Glycerol	d)	all of these.
iv)	Peni	cillin		
	a)	disrupts the cell wall		
	b)	inhibits transcription j	proce	SS
	c)	inhibits the cell wall synthesis		
	d)	inhibits metabolic path	ıway.	
v)	Vita	$\min B_{12}$ contains		
	a)	Zn	b)	Cd
	c)	Co	d)	Mn.
vi)	Exa	ample of consumable mushroom is		
	a)	Agarious bisporus	b)	Amanita muscaria
	c)	Ramaria gelatinosa	d)	Tricholoma pardinum.
vii)	The	ne disadvantage of bacteria as SCP is		
	a)	its large size		
	b)	its undigestable cell wa	all	
	c) its high content of nucleic acid			
	d)	none of these.		
viii)	,	M foods		
,	a)	genotype is changed		
	b)	phenol type is changed	4	
	c)	both are changed		
	·	G		
	d)	none of these.		
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- 6. What are the ingredients used in brewing? Discuss their role in the process.
- 7. Write short notes on the following enumerating techniques:
 - a) Electrical method
 - b) Immunological methods.

GROUP - C (Long Answer Type Questions)

Answer any *three* of the following. $3 \times 15 = 45$

- 8. Describe Baker's yeast fermentation highlighting the nutritional sources, medium composition, pH and temperature.
- 9. a) What are the characteristics of penicillin fermentation?

 What are the different stages of penicillin fermentation? What do you mean by precursors and which types of precursors are used for penicillin fermentation?

 3 + 3 + 3
 - b) Where is streptomycin used ? What are the limitations of streptomycin ? How one can overcome these problems ? 2 + 2 + 2
- 10. What do you mean by RDT? What is plasmid? Write short note on transduction. 3 + 3 + 9
- 11. Describe Watson-Crick Model of DNA. What do you mean by mutation? Briefly write about different types of mutation.

10 + 1 + 4

12. What do you mean by mutagen? Name some mutagens. Describe briefly about bacterial transformation. 1 + 3 + 11

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