	Enrollm	ent No):	Exam Seat No:				
			C.U.SH	AH UNIVERSIT	$\Gamma \mathbf{Y}$			
	Summer Examination-2017							
	Subject Name: Industrial Biotechnology							
	Subject	Code:	4SC06IBT1	Branch: B.Sc. (Biotechno	logy)			
	Semester Instruction		Date: 21/04/2017	Time: 02:30 To 05:30	Marks: 70			
	(2) I (3) I	Instruc Draw n	tions written on main a	tor & any other electronic instrumtions and are strictly to be obeytes (if necessary) at right places.	-			
Q-1	Attempt the following questions:							
	a) Write the full form of DO.b) What is Log phase?							
	c)		e one method of heat S	terilization.				
	d)		is Cell disruption?					
	e)	In SS	F product recovery is	easy. True/False.				
	f)	kcat i	is related to enzyme ac	tivity. True/False.				
	g) Which enzyme is used in diagnostic kits for detecting Urea?							
	h) Lactobacillus bulgaricus is used for yogurt production. True/False.i) During fermentation boiling appearance is due to the production of carbon							
	1)	During fermentation boiling appearance is due to the production of carbon dioxide bubbles caused by the anaerobic catabolism of the sugars present in the extracts. True/False.						
	j)	What is Incoculum?						
	k) Fed-batch fermentation is a type of LSF. True/False.							
	l) What is anabolism?m) Pekilo is a fungal protein rich product. True/False.							
	n)		0 1	ion in downstream processing. Tr	ue/False.			
Atte	mpt any f	four q	uestions from Q-2 to	Q-8				
Q-2			e short notes on- nuous fermentation			7		
	a					-		
	b	Indus	trial strain improvement			7		
Q-3		Expl	ain the following with	suitable diagram-				
	a.		mercial Production of A	Antibiotics (any one).		7		
	b.	Solid	state fermentation			7		

Q-4



What do you mean by downstream processing? Explain the various methods of

(3+11)

Q-5	Attempt all questions						
	a.	Briefly explain the differences between batch and continues fermentation.	7				
	b.	What is enzyme immobilization? Briefly explain the applications of immobilized enzymes.	7				
Q-6		Attempt all questions					
	a.	What is SCP? Briefly explain the production of mushroom.	7				
	b.	What do you mean by fermentation? Briefly explain main components of a	7				
		fermentor.					
Q-7		Attempt all questions					
	a.	Explain the industrial production of alcohol.	7				
	b.	Explain the methods of enzyme immobilization with suitable diagram.	7				
Q-8		Write short notes on-					
-	a.	Fermented dairy products.	7				
	b.	Effect of pH and Temperature on microbial growth.	7				
		Effect of pir and remperature on intersocial growin.	•				

