	Enrolln	nent No:		Exam Seat No:					
				JNIVERSITY mination-2017					
	Subject Name: Industrial Microbiology								
	Subject Code: 5SC02IMB1			Branch: M.Sc. (Microbiology)					
	Semesto	er : 2	Date: 06/05/2017	Time: 02:00 To 05:00	Marks: 70				
	(2) (3)	Use of P. Instruction Draw ne	rogrammable calculator and arons written on main answer boat diagrams and figures (if necsuitable data if needed.	•	prohibited.				
Q-1	SECTION – I Attempt the Following questions								
	 Streptomycin was the first antibiotics produced on a large scale for human use. True/False. 								
Atter Q-2	b. c.	b. Write names of two methods of microbial culture preservation.c. What is SCP?							
	d. e.		•	used for microbial strain improv	vement.				
	f. g.	What is	selection media? fermentation?						
	_		ns. notes on- ics production		7				
	b	Microbia	al growth parameters		7				
Q-2				OR plain various components and th	eir (3+11)				
Q-3	a b	What is	ot all questions downstream processing? Exp the role and importance of bi		7 7				



Q-3	a b		Explain the differences between batch and continuous cultivation process. Explain the production of microbial product (any one) using rDNA technology.	7 7
Q-4			SECTION — II Attempt the Following questions	7
		a. b.	What are primary metabolites? What is biomass?	
		c. d. e. f. g.	Write names of two industrial microorganisms. What are enzyme inhibitors? Citric acid is a secondary metabolite. True/False. What is pH probe? Write its function in fermentor. Mushroom is a type of SCP. True/False.	
Q-5	a b		Write notes on- Maintenance of microbial cultures Growth kinetics	7 7
Q-5	a b		OR Explain the SSF with suitable diagram. Explain the types of media used for microbial growth.	7 7
Q-6	a b		Write notes on- Genetic improvement of microbes Industrial enzymes	7 7
			OR	
Q-6	a		Attempt all Questions Explain the selection criteria for industrial microbes.	7
	b		What do you mean by biofertilizer? Explain it with suitable examples.	7

