Se	at No.: GUJARAT TECHNOLOGICAI	Enrolment No	
	BE - SEMESTER-III • EXAMINATION		
Sı	abject Code: 131302	Date: 07-12-2013	
	bject Name: Environmental Microbiology	Dutc. 07 12 2013	
	me: 02.30 pm - 05.00 pm	Total Marks: 70	
	structions:	Total Walks. 70	
	 Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks. 		
Q-1	(a) With the help of neat and labeled diagram enlist and parts of bacterial cell.	explain the internal & external	
	(b) What is Pure Culture? Enlist & Explain all the four to Culture.	echniques for isolation of Pure	
Q-2	(a)Explain the importance of Microbiology in the field of (b) List down the characteristics of an ideal disinfectant. OR	f Environmental Engineering.	
	(b) What is the role of algae in environment? Explain its	beneficial & harmful effects.	
Q-3	(a)Write a note on Chlorine & Chlorine compounds for a	disinfection.	
	(b)How is Moist heat more effective in killing the microbes as compared to Dry heat? Explain the construction & working of an Autoclave with the help of a neat Sketch. OR		
Q-3	(a) Explain the producer to perform the Presumptive test Highlight the importance of MPN test in drinking w		
	(b)Differentiate between Prokaryotic & Eukaryotic cell g differences.		
Q-4	(a) Give the clear difference between Optical(light) Microscope & Electron Microscope. With the help of neat diagram, explain the working principal of Bright field Microscope.		
	(b)Explain the Producer for Production of Vinegar. OR		
Q-4	(a) Enlist and explain the factors affecting the antimicrobial action.(b)Answer the following :		
	(1)Enlist & Explain the different types of media used (2)Difference between Pure culture &Mixed culture.	in Microbiology.	
Q-5	(a)Prepare a list of Water borne diseases & explain any a symptoms &Preventive measures.	ne giving causative agent,	
	(b) What is Eutrophication? Explain the measures to con	trol Eutrophication.	
Q-5	(a) Write a note on disease Malaria highlighting the caus prevention.	ses, symptoms, treatment &	
	(b) Diffentiate Between:(Any Two)		
	(1)Disinfection & Sterilization		
	(2) Antiseptic & Sanitizer (3) Dry host sterilization & Moist host sterilization		
	(3)Dry heat sterilization & Moist heat sterilization ***********************************		