Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER- III - EXAMINATION - SUMMER 2014

Subject Code: 130402 Subject Name: Cell Biology Time:02.30 pm to 05.00 pm Instructions:			Date: 04-06-2014 Total Marks: 70	
		2.30 pm to 05.00 pm Total Marks:		
	1. 2.	Attempt all questions.		
Q.1	(a)	What is the meaning of word Eukaryotes? Discuss its characteristic features of it in detail.	07	
	(b)	Comment: mitochondria are a power house of the cell.	07	
Q.2	(a) (b)	How prokaryotes are differentiate from eukaryotes? Elaborate your answer. Describe in detail about eukaryotic chromosome organization. OR	07 07	
	(b)	Draw a neat labeled diagram of prokaryotic cell.	07	
Q.3	(a)	Enlist and explain important functions perform by cytoskeleton network in a living system.	07	
	(b)	Define the following term with suitable example and explanation: Mesosomes, Akaryotes, pili, cilia, cytosol, basal bodies, gas vesicle OR	07	
Q.3	(a) (b)	Discuss in detail on Gram Positive and Gram negative bacterial cell wall. Write a note on prokaryotic ribosome.	10 04	
Q.4	(a) (b)	Explain in detail about plasmid found in prokaryotic cells. Describe in detail about cell membrane found in prokaryotic and eukaryotic cells.	07 07	
Q.4	(a)	OR What are the important physiological significances played by Golgi apparatus	07	
ζ	(4)	in prokaryotes and eukaryotes?		
	(b)	Differentiate structurally & functionally rough and smooth endoplasmic reticulum.	07	
Q.5	(a) (b)	Discuss in detail with structure and functions of eukaryotic nucleus. Describe in detail about endospore formation in adverse condition for bacterial cell.	07 07	
0.5	(a)	OR Comment: Lysosome is the organelle involved in cellular digestion.	07	
Q.5	(a) (b)	Explain the structure and components of chloroplast with its importance in plant cell.	07	
