

B.N. BANDODKAR COLLEGE OF SCIENCE, THANE

F.Y.B.SC - FIRST SEMESTER END EXAMINATION OCTOBER 2011

USBT102

DURATION 2 HRS

MAX MARKS-60

N.B.			Marks
	1) 2)	All Questions are compulsory. Figures to right indicate full marks.	
Q.1)	A 1. 2. 3. 4.	Answer any three of the following. 1. Give two functions of mesosomes. 2. Name the polyphosphate reserves present in bacteria. 3. The fluidity of the lipid bilayer depends on _____ 4. What are desosomes?	3
Q.1)	B 1. 2. 3.	Answer any two of the following. 1. Explain the structure of Gram positive cell wall 2. Explain the structure of Gram negative cell wall 3. Explain the structure and functions of bacterial flagella	12
Q2)	A 1. 2. 3.	Explain the following terms. 1. Homo-polysaccharide 2. Nucleoside 3. Universal solvent	3
	B 1. 2. 3. 4. 5.	Answer any 3 of the following. 1. Covalent bonds (any two). 2. Importance of mono-saccharides 3. Structure of DNA 4. Buffers in the cell 5. Importance of carbohydrates in the structural aspects	12
Q 3)	B 1. 2. 3. 4. 5.	Define any three of the following. 1. Gene revolution 2. Bacteremia 3. Vertical transmission 4. Biotechnology 5. Neurotoxin	3
	B 1. 2. 3.	Answer any 3 of the following. 1. Discuss potential of modern Biotechnology at global level. 2. Define an endoparasite and describe Vector borne mode of disease transmission 3. Differentiate between endotoxin and exotoxin.	12 P.T.O.

	4.	Write a note on invasion mechanisms of pathogens.	
Q.4)	A	Answer any three of the following. 1. What is the function of F pili? 2. Define virulence 3. Define pyogenic infections 4. Define Hexoses	3
	B	Answer any three of the following. 1. Describe role of Biotechnology in Health care 2. Explain the functions of capsule to bacteria. 3. Explain the structure of bacterial endospore and its significance to bacteria 4. Write a note on types of RNA. *****	12