

B. N. BANDODKAR COLLEGE OF SCIENCE, THANE
FIRST SEMESTER-END EXAMINATION- OCTOBER - 2011

F.Y.B.Sc

USMB101

Duration 2 hrs		Max Marks 60
N.B.	1) All Questions are compulsory. 2) Figures to right indicate full marks.	Marks
Q.1)	A Give contribution of the following scientists to the field of microbiology 1 Robert Koch 2 Louis Pasteur 3 Joseph Lister	3
Q.1)	B 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 Answer the following: 1 State two functions of the Golgi. 2 Which organelle contains digestive enzymes? 3 Rough appearance of ER is due to -----	3
Q2)	B Answer any two of the following: 1 Describe the structure and function of ER. 2 Describe the structure of the cell membrane and modes of transport across the cell membrane. 3 What is the powerhouse of the cell? Describe the structure and the significance of this organelle.	12
Q 3)	A Give significance of: 1 Nutrient Agar 2 Pentagon method 3 Lyophilization	3
Q3)	B Answer the following (any three) 1 Discuss passive and facilitated diffusion methods 2 Write a note on nutritional requirements of micro-organisms 3 Justify “choice of medium will differ according to the aim of microbiological experiments” 4 With a suitable diagram explain ABC transporter	12

P.T.O.

- 5 How would you isolate micro-organisms from soil with spread plate technique
- Q.4) A Answer the following. 3
- 1 What is the function of calcium dipicolinate in bacterial endospores?
 - 2 What is symport?
 - 3 Define Mesosomes.
- Q.4) B Answer the following: (any three) 12
- 1 What are plasmids? Explain their significance to bacteria.
 - 2 Explain the functions of cell membrane in bacteria.
 - 3 Write a note on preservation of micro organisms
 - 4 How would you isolate fugal culture from the given sample
 - 5 Explain the composition and significance of bacterial capsule
