B. N. BANDODKAR COLLEGE OF SCIENCE, THANE

FIRST TERM-END EXAMINATION- OCTOBER - 2011

S.Y.B.Sc

MICROBIOLOGY : PAPER 3

Duration 2 hrs **Max Marks-60**

N.B. 1) All Questions are compulsory.
2) Figures to right indicate full marks.

Marks

Q.1)	A	Answer the following	3
	1	Define Fermentation	
	2	Define TDP	
	3	State the function of Ethidium bromide	
Q.1)	B)	Answer the following: (any three)	12
	1	Explain working of Antifoam agents with suitable examples.	
	2	Describe in brief factors affecting heat resistance in microorganism.	
	3	Discuss: biological structures and oxidation reduction potential of food.	
	4	State the principle, and diagrammatically explain the working of colorimeter.	
	5	Give advantages and disadvantages of Solid state fermentation.	
Q2)	A	Answer the following:	3
	1	Name Any two methods for Calibration of a pH meter.	
	2	State Lambert's law	
	3	Give significance of Monochromator	
Q2)	B	Attempt of the following: (any two)	12
	1	What is DNA fingerprinting? Explain the procedure and the applications of the technique	
	2	What is the purpose of a sequencing reaction? What are the end-products? State the components of a sequencing reaction and their importance	
	3	State the principle and applications of a pH meter. Draw a diagram to explain structure and working of a pH meter.	
Q 3)	A	Explain the role of	3
	1	Baffles	
	2	Heat exchanger	
	3	Sparger	

P.T.O.

Q 3) B Answer the following (any three) 12

1 List the benefits of Secondary Screening.

2 Schematically explain detection of Antibiotic producers from soil.

3 Distinguish between Batch and Continuous fermentation.

4 Explain the parts of a typical fermenter.

5 Describe the Surface fermentation with suitable example. .

Q.4) A Define the following (any three) 3

1 LTLT

2 D90

3 aW

4 MAP

5 Asepsis

Q 4) B Answer the following: (any three) 9

1 Explain radiation as method of food preservation

2 Explain the role of temperature for food preservation.

3 Write note on spoilage of egg and meat.

4 How does relative humidity of environment and pH of food influence food spoilage

5 Explain the role of sorbic acid, spices, organic acids as food preservatives

Q4) C Match the following 3

A	B
Nisin	*Pseudomonas spp.*
Custard rots	*Lactococcus lactis*
Psychrotrophs	*Proteus vulgaris*

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