B. N. BANDODKAR COLLEGE OF SCIENCE, THANE

~~II SEMESTER END~~ EXAMINATION- ~~MARCH~~ - 2015

ADDITIONAL/ATKT F.Y.B.Sc. JUNE -

USMB- 202

Duration: 2 hrs 30 min **Total Marks: 75**

N. B. 1) All questions are compulsory.
2) Figures to right indicate full marks.
3) Draw neat and labeled diagrams wherever necessary

Q.1 Answer the following (Any 2 of 4). **20M**

1 Explain predation and Co-operation type of microbial interaction.

2 Discuss relationship between microbiota and host. Explain the normal flora of large intestine.

3 Explain fungal and bacterial endophytes.

4 Explain agrobacterium and other plant pathagens

Q.2 Answer the following (Any 2 of 4). **20M**

1 Justify – 'Cell mediated & Antibody mediated immunity are both required for host defense.'

2 What are the microbial and host factors that affect infection?

3 Explain vector borne infections with suitable examples.

4 Justify – 'Different factors of individual resistance play an important role in Infection.'

Q.3 Answer the following (Any 2 of 4). **20M**

1 Explain validation and calibration of autoclave.

2 Compare between SEM & TEM.

3 Explain principal and working of LAF.

4 Explain the applications and limitations of colorimeter.

P.T.O.

Q.4 Answer the following.

a			
i	Explain Gnotobiotic animals. **OR** Give significance of stem nodulating rhizobia		2M
ii	What is inflammation? **OR** What is Phagocytosis?		2M
iii	Give significance of cold room. **OR** Give limits of resolutions for light microscopy		1M
b			
i	Which type of interaction is revealed by Lichen? **OR** Give the examples of organisms exists as normal flora of nose.		1M
ii	What are primary & Secondary Infections? **OR** Explain mechanisms of first line of defense associated with Respiratory tract.		2M
iii	How is pH meter calibrated? **OR** Explain calomel electrode		2M
c			
i	Define: nod factor. **OR** Define: phyllospere.		2M
ii	Define: Virulence factor. **OR** Define: Antibody.		1M
iii	State Beer and Lambert's law. **OR** Define: monochromater.		2M

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