

B.N Bandothkar College of science, Thane

F.Y.B.SC ATKT /Failure Examination Feb 2011

Sub: zoology

Paper: II

Duration:3hrs

Total Marks: 90

N.B. 1) All questions are compulsory.

2) Figures to right indicate full marks.

3) Draw neat and labeled diagrams wherever necessary.

4) Answers to the **Two** sections should be written in same answer book.

SECTION I

Q1 A] Explain the biological role of Carbohydrates. 3

B] Write Short notes on: (any three) 12

i) Types of amino acids.

ii) Isomers.

iii) Polysaccharides.

iv) Functional proteins.

v) Glycosidic bonds.

Q2 A] Define: 3

1. Pasteurization

2 Top fermentation in beer making.

3 Biodetergents.

B] Write Short notes on: (any three) 12

a) Enzymes as meat tenderizers

b) Safe handling of microscope.

c) Method of paper chromatography.

- d) Functions of yeast in baking of bread.
- e) Yogurt.

Q3. A] Explain recessive lethal	3
B] Write Short notes on: (any three)	12
a) Sigma factor in Drosophila	
b) Effect of external environment on heredity	
c) Hemophilia	
d) Dihybrid crosses with suitable example.	
e) Genetic counseling.	

SECTION II

Q4. A] Explain types of fatty acids.	3
B] Write short notes on: (any Three)	12
i) Sterols	
ii) Nitrogen bases.	
iii) r-RNA.	
iv) Functions of DNA.	
v) Biological role of lipids.	
Q5 A] what are biosensors?	3
B] Write short notes on: (any Three)	12
a) Phytoremediation.	
b) Ethical issues with reference to Gene Therapy.	
c) Production of growth hormone	
d) Transgenic animals.	
e) Biodegradation of petroleum	

Q6 A] Describe causes for microevolution.

3

B] Write short notes on: (any Three)

12

a) Coevolution

b) Predation.

c) Unique features of modern man.

d) Himalayan biodiversity (Hot spot).

e) Biowealth of India.