



PG – 418

First Semester M.Sc. Degree Examination, Jan./Feb. 2014
(NS) (2010-11 Scheme)
ZOOLOGY
Paper – 103 : Biological Chemistry and General Physiology

Time : 3 Hours

Max. Marks : 80

Instructions : 1) Answer *all* the Parts.
2) Draw diagrams *wherever* necessary.

PART – A

Write short notes on the following :

(5×2=10)

1. Transamination
2. Ketone bodies
3. Rigor mortis
4. Endothermy
5. Brown adipose tissue.

PART – B

Write critical notes on the following :

(5×8=40)

6. Pentose pathway and its regulation.

OR

Oxidative phosphorylation.

7. Oxygen dissociation curves.

OR

Temperature adaptation in animals.

P.T.O.



8. Glycogen storage diseases.

OR

Oxidation of fatty acids and exoetetics.

9. Muscular dystrophies.

OR

Regulation of haemopoisis.

10. Nutritional disorders.

OR

Glyoxolate cycle and its regulation.

PART – C

Answer **any two** of the following :

(2×15=30)

11. Describe the feeding mechanisms and add a note on gastrointestinal hormones.
 12. Classify enzymes based on type of reactions catalyzed by them and add a note on co-enzymes.
 13. Justify the need of Gluconeogenesis in biological tissues and outline the steps involved in it.
 14. Explain in detail on the mechanisms of muscle contraction and its energetics.
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