FACULTY OF SCIENCE
B. Sc. III-Year Examination, March / April 2016
Subject : Zoology
Paper – III : Animal Physiology, Genetics and Evolution
Time : 3 Hours
Max. Marks : 100

Note : Draw the diagrams wherever necessary.

Section – A (5x8=40 Marks)
(Short Answer Type)

Note: Answer any five questions. Attempt at least one question from each unit.

UNIT-I
1  Digestion of Carbohydrates
2  Structure of Nephron
3  Transport of Carbon dioxide

UNIT-II
4  Structure and types of muscles
5  Adrenal gland

UNIT-III
6  Human Karyotyping
7  Hardy Weinberg Law
8  Speciation

Section – B (4x15= 60 Marks)
(Essay Answer Type)

Note: Answer all questions.

9  (a) Explain the process of digestion in different parts of the alimentary canal.
    OR
    (b) Discuss the formation of nitrogenous waste material.

10 (a) What is cell respiration? Explain the glycolysis in detail.
     OR
    (b) Describe the structure and function of heart.

11 (a) Explain the sliding filament mechanism in muscle contraction.
     OR
    (b) Describe various experiments in identifying DNA as genetic material.

12 (a) What are chromosomal disorders? Explain autosomal and sex chromosomal disorders in human beings.
     OR
    (b) Write about genetic theory of evolution.

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