13DD 44 – V (50)

B.Sc. V Semester Degree Examination, Nov./Dec. 2013
ZOOLOGY
Paper – 5.1 : Genetics

Time : 3 Hours Max. Marks : 80

Instructions : *1) Answer **should be** specific to questions.*
*2) Draw **neat** labelled diagram **wherever** necessary.*

I. Answer **any ten** of the following : **(2×10=20)**

1) Sat-chromosome
2) Euchromatin
3) Homozygous
4) Rh-factor
5) Terminating Codons
6) Polygenic traits
7) Wobble Hypothesis
8) Y-Linkage
9) Triploidy
10) Albinism
11) DNA polymerase
12) Palindrome sequence of DNA.

II. Answer **any four** of the following : **(5×4=20)**

13) Transfer RNA structure
14) Complementary factors
15) Lamp brush chromosome
16) Sex determination in Drosophila
17) Klinefelter's syndrome
18) PCR-Technology.

P.T.O.

III. Answer **any four** of the following : **(10×4=40)**

19) What are Nucleic acids ? Describe the structure of DNA.

20) Write an account on process of transcription during protein synthesis.

21) What is sex linkage ? Explain sex linked inheritance in Drosophila.

22) Describe the mechanism of crossing over with suitable example.

23) What is gene mutation ? Write a note on types of gene mutations.

24) Describe the role of Biotechnology in Agriculture and Medicine.

13DD 44 – V (51)

B.Sc. V Semester Degree Examination, Nov./Dec. 2013

ZOOLOGY

Paper – 5.2 : Animal Behaviour, Evolution and Palaeontology

Time : 3 Hours Max. Marks : 80

Instructions : *1) Answers should be **specific** to the questions.*
*2) Draw **neat** labelled diagram **wherever** necessary.*

I. Answer **any ten** of the following : **(2×10=20)**

1) Nuptial flight.
2) Pollen brush.
3) Mermaid's purse.
4) Polygamy.
5) Pendent nest.
6) Tilapia.
7) Jacana.
8) Viviparity.
9) Nasutes.
10) Imprinting.
11) Genetic drift.
12) Homo habilis.

II. Answer **any four** of the following : **(5×4=20)**

13) Explain different types of colouration with suitable examples.
14) Define Courtship. Explain Courtship behaviour in Scorpion.
15) Explain different types of nests constructed by Amphibians.
16) What is migration ? Explain Anadromous migration with examples.
17) Write a note on microevolution.
18) Explain communication in honey bees.

P.T.O.

III. Answer **any four** of the following : (10x4=40)

19) Describe conditioned reflex learning with an experiment.

20) Define chronobiology. Explain various types of rhythms.

21) Write a critical note on migration in birds.

22) What is innate behaviour ? Explain different types with suitable examples.

23) Explain the principles of Darwin Wallace theory of Natural selection with examples.

24) Explain different types of fossils and add a note on significance of fossils.
