



Reg. No. :

Name :

Fifth Semester B.Sc. Degree Examination, December 2018
First Degree Programme under CBCSS
ZOOLOGY
Core Course VI
ZO1543 : Genetics and Biotechnology
(Common for 2013 and 2014 Admissions)

Time : 3 Hours

Max. Marks : 80

I. Answer the following questions (In **one** or **two** sentences. **Each** question carries **one** mark.)

- 1) Alkaptonuria
- 2) Alleles
- 3) Allosomes
- 4) Ligases
- 5) Kappa particle
- 6) Plasmids
- 7) Barr bodies
- 8) Test cross
- 9) Transversion
- 10) Lipofection.

(10×1=10 Marks)

II. Answer **any eight** of the following. (Not to exceed **one** paragraph. **Each** question carries **two** marks) :

- 11) Sex influenced genes
- 12) Gene therapy
- 13) Western blotting
- 14) Poly genes
- 15) Cri du Chat syndrome



- 16) Gene cloning
- 17) Lethal genes
- 18) Gene Doping
- 19) Edwards syndrome
- 20) Heteroploidy
- 21) Sex linked inheritance
- 22) Epistasis.

(8×2=16 Marks)

III. Answer **any six** of the following. (Not to exceed 120 words. Each question carries 4 marks) :

- 23) PCR
- 24) Chromosome mapping
- 25) Arrhenotoky
- 26) Gene transfer techniques
- 27) Stem cell therapy
- 28) DNA finger printing
- 29) Human sex chromosomal anomalies
- 30) Mechanism of crossing over
- 31) Multiple alleles.

(6×4=24 Marks)

IV. Answer **any two** of the following. (Each question carries 15 marks) :

- 32) Give an account on Recombinant DNA technology. Comment on its practical applications.
- 33) Write an essay on various blotting techniques.
- 34) Describe the extra chromosomal inheritance adding suitable examples.
- 35) Explain the different types, significance and causing agents of mutations.

(2×15=30 Marks)
