

**15102(OR)**

M.Sc., DEGREE EXAMINATION, OCTOBER/NOVEMBER 2015  
FIRST SEMESTER

**Zoology**

Paper II – Genetics and Evolution

Time: Three hours

Max. Marks: 75

(No additional sheet will be supplied)

PART A- (5 x 3 =15 marks)

Answer any FIVE questions.

Each question carries 3 marks.

Each answer should not exceed 1 page

1. Multiple alleles
2. Gene Mapping
3. Positive eugenics
4. Consanguinity
5. Darwinism
6. Para patric
7. Genetic Drift
8. Phylogeny

PART B - (4 x 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks.

Each answer should not exceed 6 pages

9. Write an account on principles of Mendelian inheritance  
(or)
10. Define mutations and explain the molecular basis of mutations
11. What is artificial insemination and write about sperm banks  
(or)
12. Define pedigree and give the details of its analysis
13. Discuss the isolating mechanisms and its importance  
(or)
14. What is neo-darwinism ? Explain the process
15. Write an account on micro and macro evolution  
(or)
16. Define and discuss Phylogenetic gradualism and punctuated equilibrium.