

25125

**M.Sc. DEGREE EXAMINATIONS – APRIL 2018**  
**II SEMESTER**  
**GENETICS & GENOMICS**  
**PAPER : BASICS IN GENETICS**  
**(Noncore)**

(No additional sheet will be supplied)

**Time: 3 Hours**

**Max.Marks: 75**

**PART – A**

Answer *any Five* Questions

**5 x 3 = 15 Marks**

Each Question carries *Three (3)* Marks

Each Answer should not exceed *One (1)* page

1. rRNA
2. Biological catalyst
3. Golgi complex
4. Cell wall
5. Telocentric chromosome
6. Cytokinesis
7. Self- fertilization
8. Genotype

**PART – B**

Answer *all* Questions

**4 x 15 = 60 Marks**

Each Question carries *Fifteen (15)* Marks

Each Answer should not exceed *Six (6)* pages

9. Discuss the structure and function of DNA.  
OR
10. Discuss the structure and function of mRNA and tRNA.
11. Explain the structural organization of mitochondria and its function.  
OR
12. Discuss the structure and function of bacterial cell wall.
13. Explain the organization of euchromatin and heterochromatin and their functions.  
OR
14. Give an account on meiosis and formation of haploids.
15. Explain the law of segregation with suitable examples.  
OR
16. Explain the non-mendelian inheritance with suitable examples.

