



# ADITYA DEGREE COLLEGES

## ANDHRA PRADESH

IV SEMESTER - MID -1 EXAMINATIONS

II – B.Sc MB MAJOR

Max. Marks : 60

Time :2 Hr

Date:

MOLECULAR BIOLOGY & MICROBIAL GENETICS

### SECTION – A

I. Answer any FIVE of the following:

5 x 4 = 20 M

1. Bacterial transposons
2. RNA as genetic material
3. Uninterrupted genes
4. Split genes
5. RNA polymerase
6. Griffith's experiment
7. Bidirectional and Unidirectional replication
8. Regulatory genes

### SECTION – B

II. Answer all the following questions:

4 x 10 = 40 M

9. a) Write in detail about Avery, MacLeod, McCarty and Blumberg's experiment with neat labelled diagrams  
(or)  
b) Write an essay on proof of semiconservative replication
10. a) Write about the process of replication in Prokaryotes  
(or)  
b) Write about the genome organization in Prokaryotes
11. a) Explain about the general characters, types and applications of Plasmids  
(or)  
b) Write a detailed account on Classical concept of gene
12. a) Write in detail about the mechanism of transcription in Prokaryotes  
(or)  
b) Write about the RNA Splicing process in eukaryotes

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