

ADIKAVI NANNAYA UNIVERSITY

RAJAMAHENDRAVARAM

CBCS / Semester System

(From 2015-16 Admitted Batch)

MICRO BIOLOGY

III SEMESTER

MODEL QUESTION PAPER

MICROBIAL GENETICS AND MOLECULAR BIOLOGY

Time: 3 Hrs

Max. Marks: 75

SECTION – A

Answer any five questions

5 x 5 =25

1. Plasmids
2. Transposons
3. SOS repair mechanism
4. Ribosomes
5. Restrictions enzymes
6. PCR
7. Genetically modified microorganisms
8. pBR 322

SECTION – B

Answer all the Questions

5 x 10 = 50

9. a) Explain semi-conservative mechanism of replication?
(Or)
b) Write notes on experiments to prove that DNA is Genetic material?
10. a) Write in detail about various types of mutations?
(Or)
b) Write notes on methods of genetic recombination in bacteria?
11. a) Discuss in detail about types of RNA and their functions?
(Or)
b) Write in detail about genetic code?
12. a) Explain in detail about transcription in bacteria?
(Or)
b) Explain about *Lac Operon* model?
13. a) Write in detail about gene cloning methods?
(Or)
b) Write an essay on applications of genetic engineering?