

T.Y.B.Sc. Examination, Oct - 2017

Microbiology

MI-301

(Virology, Molecular Biology, and Genetic Engineering)

Time:2 Hr.

Code:8955

Marks:75

Instructions: 1) Right side indicates the marks of the respective questions

2) Draw a neat, clean and labeled diagram if necessary

- Q-1. A Give a detail account on viral assay. 09
B Discuss the structure of T-Bacteriophage. 09
OR
- Q-1 A Discuss various types of plasmid used as vectors. 09
B Enlist the methods used to select mutants. Discuss any two methods in details 09
- Q-2. A Give a detail account on structure of RNA 09
B How does lac operon work? 09
OR
- Q-2. A Discuss various enzymes used in Genetic Engineering 09
B Give an account on transduction. 09
- Q-3. A Discuss principle and application of Western blotting. 09
B What is Bioinformatics? Give various application of Bioinformatics. 09
OR
- Q-3. A Outline the process of protein synthesis on ribosome's 09
B Discuss Excision repair and Mismatch repair. 09
- Q-4. A Write Short note on: 21
1. Prions
2. Transposons
3. Genetic Code
OR
- Q-4. B Write Short note on: 21
1. Gene Bank
2. PCR
3. R-DNA technology for Insulin production