

Roll No .

MPY-102

M.Pharmacy I Semester

Examination, November 2019

Biotechnology and Bioinformatics

Time : Three Hours

Maximum Marks: 70

- Note:** i) Attempt any five questions.
ii) All questions carry equal marks.

1. What do you mean by term "genetics"? Write a detail note on DNA-replication and discuss how it preserve genetic informations.
2. Define and discuss the term "recombination". Write a complete note on rDNA technology with reference to bioproduction of any one hormone.
3. Write a detail note "Gene therapy" and its clinical significance.
4. Define and classify immune system. Write a detail note on modern vaccine technology.
5. Write short notes on any two :
 - a) Cell signaling
 - b) Transport mechanism across cell membranes
 - c) Monoclonal antibodies and its applications.

6. Write an exhaustive note on molecular biology of cancer and new strategies for combating cancer.
7. Write short notes on any two :
 - a) Sampling and sampling plans
 - b) Probability distribution
 - c) Application of bioinformatics in pharma. Industries.
8. Write short notes on : (Any two)
 - a) Structural biology and rational drug design
 - b) Molecular biology of disease and invivo transgenic models.
 - c) Biological databases and its applications in drug research industries.
