## MPY-102

## M.Pharmacy 1 Semester Exam illation, December 2016 Biotechnology and Bioinformatics

Time: Three Hours Maximum Marks: 70

Note: i) Attempt any five questions.

- ii) All questions carry equal marks.
- 1. a) Describe the structure and function of DNA.
  - b) Write a note on expression Genetic Information,
- 2. a) Describe the Polymerase Chain reaction-based DNA cloning.
  - b) Give an account Constructing Recombinant DNA molecules.
- 3. a) What is gene therapy? Describe the potential target diseases for Gene therapy.
  - b) Discuss the various Gene transfer methods.
- 4. a) Give an account on Hybridoma technology and its pharmaceutical application.
  - b) Describe the Genetically improved live vaccines, Genetically improved subunit vaccines.
- 5. a) Write a note on Cellular reproduction.
  - b) What is Cell Signaling? Describe the Communication between cells and their environment.
- 6. Comment on the following:
  - a) Causes and Genetics of Cancer.
  - b) Strategies for Combating Cancer.
- 7. Write notes on:
  - a) Sampling and Sampling plans.
  - b) Chemical biology and Molecular diversity.
- 8. Write notes on any two of the following:
  - a) Genomic protein targets and recombinant therapeutics.
  - b) Molecular biology of disease and in-vivo transgenic models.
  - c) Normal and Probability distribution.