

Roll No .

**MPY-102**

**M.Pharmacy I Semester**

Examination, November 2018

**Biotechnology and Bioinformatics**

*Time : Three Hours*

*Maximum Marks: 70*

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

1. Describe the structure, function and replication of RNA.
2. Write a note on recombinant DNA technology.
3. Describe the potential target disease for gene therapy and gene transfer methods. Add a note on pharmaceutical production and regulation of gene therapy.
- 4.. Write a note on monoclonal antibodies.
5. Write a note on cell signalling and cell cycle.
6. Describe the molecular biology of cancer.

7. Discuss the molecular, structural and chemical biology in pharmaceutical research.

8. Write short notes on (any two) :
  - a) Genetic and physical mapping
  - b) Sampling and sampling plan
  - c) Vaccines

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