## M.PHARM. DEGREE EXAMINATION FIRST YEAR BRANCH IV – PHARMACOLOGY PAPER IV – DRUG DESIGN AND MOLECULAR PHARMACOLOGY

Q.P. Code: 262913

Time: Three hours Maximum: 100 marks

I. Elaborate on:  $(2 \times 20 = 40)$ 

1. Write a note on protein structure prediction and molecular modeling.

- 2. a) Discuss detail on regulation of gene expression.
  - b) Write essay on combinatorial chemistry.

II. Write notes on:  $(10 \times 6 = 60)$ 

1. Write the pharmacodynamic and pharmacokinetics of peptide and protein drug.

- 2. Discuss about the vectors used in gene therapy.
- 3. Discuss briefly about rational drug design.
- 4. Write a note on gene mapping.
- 5. Explain about the isolation of RNA from yeast.
- 6. Applications of molecular pharmacology.
- 7. Discuss about the signal transduction pathway.
- 8. Discuss about the oxidation reduction potential.
- 9. Explain about isosterism.
- 10. Write a note on computer aided drug design.

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