

**Dr. V.S. Krishna Government Degree College and PG College (A)**

**Department of Biotechnology**

**SEMESTER V**

**Course VII**

**INTRODUCTION TO DRUG DISCOVERY**

Time: 3hrs

Max Marks: 75

**Section – A**

**Answer ALL questions**

5 x 10 = 50 Marks

1. a) Write the role of genomics, proteomics and bioinformatics in target identification

OR

b) Briefly give the economics of Drug Discovery

2. a) Application of NMR and X-ray crystallography in protein structure prediction

OR

b) Give In silico lead discovery techniques

3. a) Describe the structure and Pharmacophore based approaches in Drug Design

OR

b) Explain the methods followed in traditional drug design

4. a) Describe the steps in QSAR

OR

b) Describe the Docking based screening

5. a) Explain the PLS analysis in QSAR

OR

b) Describe CoMSIA in QSAR

**Answer any FIVE of the questions:**

5 x 4 = 20 Marks

6. Role of transgenic animals in target identification.
7. Role of Microarrays in Target identification
8. Homology modeling
9. Hit identification
10. Pharmacophore mapping
11. Physicochemical parameters in QSAR
12. CoMSA
13. Prodrug design

