

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LP 352]

OCTOBER 2019

Sub. Code: 2913

**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 x 20 = 40)**

1. What is QSAR? How it differs from SAR? Explain the principle, methods to determine the QSAR activity?
2. What is rational drug design? What are the steps followed in drug designing using CADD?

**II. Write notes on:**

**(10 x 6 = 60)**

1. Mention the physiological importance for drug development.
2. Write a note on partition coefficient and solubility.
3. What is proteomics? How it influences the drug discovery process.
4. What are biosensors? Explain with one example.
5. What is gene mapping? Give its application.
6. Write the process of rDNA technology.
7. How non viral vectors are used for transfection? Explain.
8. Write a note on protein drugs.
9. Why receptor polymorphism is important for drug action and discovery? Explain.
10. What is restriction enzyme? Explain its application.

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