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

[LO 987] MAY 2019 **Sub. Code: 2987**

M.PHARM. DEGREE EXAMINATION
(PCI New regulations 2016)
SEMESTER-II
BRANCH-VI – PHARMACOLOGY – MPL
PAPER III – PRINCIPLES OF DRUG DISCOVERY

Q.P. Code : 262987

Time : Three hours **Maximum : 75 Marks**

I. Elaborate on: **(2 x 20 = 40)**

1. a) What are the different statistical methods applied to validate the developed QSAR model? Explain PLS model.
   b) Differentiate SAR & QSAR.

2. Explain the following:
   a) One Target validation techniques.
   b) Anti sense technologies.
   c) Briefly explain the cost involvement and feasibility of new drug discovery in India.

II. Write notes on: **(7 x 5 = 35)**

1. What are micro arrays? Write its importance in target discovery.
2. What are the parameters to be considered in lead optimization procedure?
3. What is meant by:
   a) αHelix b) Zinc finger proteins c) Pharmacophore
   d) Scaffold e) Nucleotide
4. Write a note on rationale drug design.
5. Name the programs used in docking process. What is meant by G score?
6. Why solubility has been considered as one of the important parameters in drug development? Explain.
7. Explain the term COMFA & COMSIA.

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