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

#### OCTOBER 2018

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** I. Elaborate on: $(2 \times 20 = 40)$ 1. a) Discuss about novel approaches in drug discovery. b) Discuss briefly the fundamentals of QSAR. 2. a) Describe different techniques used for gene transfer. b) Explain the applications of gene therapy. **II.** Write notes on: $(10 \times 6 = 60)$

- 1. Explain short note on biosensors.
- 2. Describe the Recombinant DNA technology.
- 3. What is soft drug? Explain their concepts.
- 4. Explain different steps of cell signaling mechanism.
- 5. Express the note on Rational Drug design.
- 6. Write note on theories of drug receptor interactions.
- 7. What is Pharmacogenomics? Explain their importance.
- 8. Enumerate the drawbacks of prodrug.
- 9. Write a note on oxidation-reduction potential.
- 10. Write a note on 2D Pharmacophore.

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## Maximum : 100 Marks

[LN 352]