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

(LO 4267) FEBRUARY 2019 Sub. Code: 4267

## B.PHARM. DEGREE EXAMINATION FOURTH YEAR PAPER I – FORMULATIVE PHARMACY AND BIO-PHARMACEUTICS

Q.P. Code: 564267

Time: Three hours Maximum: 100 Marks

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

1. Write the advantages and limitation of prolonged action pharmaceuticals. Write about two method of preparation and evaluation of prolonged action pharmaceuticals.

2. Write the goals of pre-formulation studies. Explain the physical properties of drugs in pre-formulation studies and their importance.

II. Write notes on:  $(8 \times 5 = 40)$ 

- 1. Methods to enhance the solubility of poorly soluble drugs.
- 2. Microencapsulation by air suspension technique.
- 3. Dissolution testing.
- 4. Drug excipient compatibility studies.
- 5. Physico-chemical factors affecting drug absorption.
- 6. Evaluation of transdermal patches.
- 7. Filling of Hard capsules.
- 8. Accelerated stability studies.

## III. Short answers on: $(10 \times 2 = 20)$

- 1. Permeation enhancers.
- 2. Biopharmaceutics.
- 3. Partition co-efficient.
- 4. Polymorphism.
- 5. Various sizes of hard capsule.
- 6. Renal clearance.
- 7. Nanoparticles.
- 8. Bloom strength.
- 9. Elementary osmotic pump.
- 10. Organoleptic additives.

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