

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

(LQ 4256)

FEBRUARY 2020

Sub. Code: 4256

**B.PHARM. DEGREE EXAMINATION
SECOND YEAR
PAPER I – PHYSICAL PHARMACEUTICS**

Q.P. Code: 564256

Time: Three hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) Define dissolution, write about the factors affecting the rate of dissolution.
b) Explain one method for determining the particle size.
2. a) Define complexes. Explain method of analysis of complex.
b) What is Newtonian and non-Newtonian systems? Explain with suitable examples.

II. Write notes on:

(8 x 5 = 40)

1. Determination of expiry date.
2. Stability of emulsion.
3. Types of suspensions.
4. Explain steady – state diffusion.
5. Write about the pharmaceutical buffer and biological buffer.
6. Stability of colloidal system.
7. Isotonic solutions.
8. Electrical properties of colloids.

III. Short answers on:

(10 x 2 = 20)

1. Gold number.
2. Ban craft rule.
3. Ferrocene.
4. Critical Micellar Concentration.
5. Order of reaction.
6. Suspending agents.
7. Types of colloids.
8. Buffer equation.
9. BET Equation.
10. Stokes equation.
