

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

[BPHARM 0321]

MARCH 2021

Sub. Code: 2042

(SEPTEMBER 2020 EXAM SESSION)

B. PHARMACY DEGREE EXAMINATION

PCI Regulation SEMESTER – IV

PAPER III – PHYSICAL PHARMACEUTICS II

Q.P. Code : 562042

Time: Three hours

Maximum: 75 Marks

I. Elaborate on: Answer any TWO questions. (2 x 10 = 20)

1. Explain about formulation of suspensions.
2. Summarize the derived properties of powders.
3. Explain briefly on degradation and stabilization study of medicinal agents.

II. Write notes on: Answer any SEVEN questions. (7 x 5 = 35)

1. Explain the electrical method to determine particle volume.
2. Discuss about instabilities of emulsion.
3. What is thixotrophy? Explain thixotropic behavior in formulations.
4. Discuss the methodology and limitations of accelerated stability testing.
5. Define colloid. Classify colloids with suitable examples.
6. Describe about multipoint viscometers.
7. Explain about micro emulsion.
8. Define specific surface. Describe about fisher's subsieve sizer.
9. Explain about donnan membrane effect.

III. Short answers on: Answer ALL questions. (10 x 2 = 20)

1. Write about rheopexy.
2. What is Bancroft's Rule?
3. Define shelf life.
4. What is protective colloid? Give any two examples.
5. Write any two applications of micromeritics in pharmacy.
6. Define pseudo zero order reaction with example.
7. Projected diameter and stoke's diameter.
8. Define multiple emulsion.
9. Define yield value in plastic system.
10. State any two applications of colloids.
