

Rajiv Gandhi University of Health Sciences, Karnataka IV Year B. Pharm Degree Examination - 03-Jan-2020

Time: Three Hours Max. Marks: 70 Marks

PHARMACEUTICAL TECHNOLOGY AND BIOPHARMACEUTICS (RS - 4) Q.P. CODE: 2641

Your answers should be specific to the questions asked. Draw neat labeled diagrams wherever necessary.

LONG ESSAYS (Answer any Two)

 $2 \times 10 = 20 \text{ Marks}$

- 1. Classify granulation techniques. Discuss the wet granulation method along with equipments used in the each step.
- 2. Discuss in detail the production facilities for parenterals.
- 3. a) Write an elaborate note on three phase systems of aerosols with examples.
 - b) Describe stability testing methods for pharmaceutical aerosols.

SHORT ESSAYS (Answer any Six)

 $6 \times 5 = 30 \text{ Marks}$

- 4. Emphasize on passive diffusion of drug absorption
- 5. Explain the rotary die process for manufacturing of soft gelatin capsules.
- 6. Discuss and differentiate the pressure filling and cold filling of aerosols.
- 7. Explain the formulation of eye drops.
- 8. Enumerate the manufacturing considerations for liquid orals.
- 9. Discuss the formulation of toothpaste.
- 10. Discuss the steps involved in sugar coating with suitable examples of ingredients uses in each step.
- 11. What are the sources of contamination in parenteral production and write methods to overcome.

SHORT ANSWERS 10 x 2 = 20 Marks

- 12. What tablet troches and lozenges?
- 13. Draw the blood level curve for oral and IV administration.
- 14. Differentiate the absolute and relative bioavailability
- 15. What is Biopharmaceutic classification system of drugs?
- 16. Write on different sizes of hard gelatin capsules.
- 17. Name the methods of adjustment of isotonicity.
- 18. Classify the propellants with suitable examples.
- 19. Write the valve system of aerosol.
- 20. Write the merits of constant level filling technique of liquid orals.
- 21. Write the formulation of face powder.
