

Code: 13R00602

R13

B.Pharm III Year II Semester (R13) Supplementary Examinations December 2016

PHARMACEUTICAL TECHNOLOGY – II

Time: 3 hours

Max. Marks: 70

PART – A

(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- State the importance of binder in tablet formulation.
 - Classify the various hard gelatin capsule filling machines with example.
 - Explain irradiation method of sterilization.
 - Explain the importance of air capacity in tablet coating process.
 - Define microencapsulation. Enlist its applications in pharmacy.
 - State what is meant by "Capping" and "Lamination" problems in tablet manufacture.
 - State storage conditions for hard gelatin capsules with justification.
 - Zein is better material for seal coating as compared to Shellac- Justify.
 - LAL testing is better than rabbit testing in detection of pyrogens- Justify.
 - State the principal of leaker testing.

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

- 2 Explain the properties of gelatin, which make it suitable for manufacturing of capsules. Give the flow chart of extraction of gelatin from bovine bones. Explain in detail large scale manufacture of Hard gelatin capsule.

OR

- 3 Explain solid fill composition of soft gelatin capsule. Explain in detail large scale manufacture of soft gelatin capsule.

UNIT – II

- 4 Describe multiorifice centrifugal process for microencapsulation. Explain microencapsulation by spray drying technique.

OR

- 5 Write a note on pan coating technique and air suspension technique for microencapsulation.

UNIT – III

- 6 Enlist various tablet excipients. Write a note on any one excipients.

OR

- 7 Classify film formers used in tablet coating. Discuss advantages of using HPMC as a coating polymer. Write a note on sugar coating.

UNIT – IV

- 8 (a) Discuss the HEPA filter and laminar air flow. How do you monitor the environment in aseptic area?
(b) Write a short note on clarity testing of parenterals.

OR

- 9 Discuss the formulation ingredients and large scale manufacturing for a typical parenteral suspension.

UNIT – V

- 10 Differentiate between Strip packaging and Blister packaging. Discuss the methods of evaluation of packaging components used for pharmaceutical products.

OR

- 11 Write a note on Transit worthiness package and Tamper evident packaging.