

[Time: 3 Hours]

[Marks:70]

Please check whether you have got the right question paper.

- N.B:**
1. All questions are **compulsory**.
 2. **Draw neat labeled diagrams wherever necessary.**

- Q.1**
- a) Discuss the criteria for selection of suitable tablet excipients. 2
 - b) Elaborate on the disintegration test of enteric film coated tablets. 2
 - c) Give the desirable features of aerosols. 2
 - d) Discuss the various types of aerosol systems. 2
 - e) Why are mixtures of gelatin used in hard gelatin capsule shells? 2
 - f) State the mechanism of starch as a disintegrating agent. 1
 - g) List four ideal properties of packaging materials for capsules. 2
 - h) Explain in brief, dispersible tablets
- Q.2**
- a) What is picking and sticking during tablet compression? Give its causes and remedies. 4
 - b) Discuss in brief, the various packaging materials used in blister packing of solid oral dosage forms. 4
 - c) Discuss powder formulations for pharmaceutical aerosols. 3
- Q.3**
- a) Elaborate on raw materials used in sugar coating of tablets. 4
 - b) What are capsules? State the applications and limitations of capsules as a dosage form. 3
 - c) Discuss the various parts of a pharmaceutical aerosol container with a suitable diagram. 4
- Q.4**
- a) Discuss, in details the physics of tablet compression. 4
 - b) Discuss the large scale manufacturing of soft gelatin capsules. 4
 - c) Explain the particle size determination and spray pattern testing of aerosols. 3
- Q.5**
- a) Describe the preformulation studies carried out during development of tablets. 4
 - b) Discuss fluidized bed coating in brief. 3
 - c) Classify the capsule filling equipments. Discuss in brief, the excipients used in formulation of hard gelatin capsules. 4
- Q.6**
- a) Elaborate on wet granulation technique during manufacture of tablets discussing the advantages and drawbacks of the same. 4
 - b) Write a note on enteric film formers. 4
 - c) Discuss the quality control tests for hard gelatin capsules. 3