

Time: 3 Hours

Total marks: 80

- N.B: (1) All questions are compulsory.  
(2) Figures to the right indicate full marks.

- 1 Answer the following
- Differentiate between direct compression and wet granulation process. 2
  - List four attributes of film coating material. 2
  - State four advantages of tablet dosage form. 2
  - What is role of enteric coating? 2
  - Give significance of disintegration test for tablets. 2
  - Briefly discuss advantages of soft gelatin capsules. 2
  - Name excipients commonly used in hard gelatin capsule formulations. 2
  - Write Arrhenius equation and state its applications. 2
  - Define Quality Assurance and explain how it differs from Quality Control. 2
  - What are Batch Manufacturing Records? 2
- 2 (a) With help of neat diagram, explain compression cycle of a rotary tablet press. 4
- Write short note on fluidised bed coaters. 4
  - Give Arrhenius equation and discuss advantages and limitations. 4
- 3 (a) Draw layout for large scale manufacture of sugar coated tablets. 4
- Comment on tablet hardness. 4
  - Prepare SOP for operation of any equipment used for powder mixing. 4
- 4 (a) Comment on formulation aspects of tablets. 4
- List official evaluation parameters of hard gelatin capsules and explain in brief. 4
- OR
- (c) Write about HPMC capsules. 4
- What are QC standards for raw materials? 4
- 5 (a) Discuss wet granulation technique with help of a flowchart. 4
- Describe special features of soft gelatin capsule shell. 4
  - Discuss in detail oxidative degradation pathway. 4
- 6 (a) Discuss problems commonly encountered during tablet compression. 4
- OR
- Comment on evaluation of tablets. 4
  - Discuss sugar coating of tablets. 4
  - Comment on Quality Control Charts. 4