

**PREFORMULATION AND PRODUCTION MANAGEMENT****(RS2 & RS3)****Q.P. CODE: 9282**

Your answers should be specific to the questions asked.

Draw neat, labeled diagrams wherever necessary.

**LONG ESSAY (Answer any TWO)****2 X 20 = 40 Marks**

1. Explain how preformulation studies of liquid orals undertaken.
2. Explain  $\beta$ -cyclodextrin drug dispersion system.
3. Discuss in detail about ISO 9000 series and total quality management.

**SHORT ESSAY (Answer any FIVE)****5 X 10 = 50 Marks**

4. Write a note on vendor development.
5. Discuss the procedure for applying international patent.
6. Salient features of GMP
7. Effluent treatment in pharmaceutical industry
8. List out the industrial hazards in a Pharma-industry and the preventive measures
9. Explain reorder quantity and EOQ methods in inventory management.

**SHORT NOTES****2 X 5 = 10 Marks**

10. Elements and benefits of QbD
11. Human resource development

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