**[Total No. of Questions - 7] [Total No. of Printed Pages - 2]**
**(2064)**

**14824**

**M. Pharmacy 2nd Semester Examination**

**Industrial Pharmacy**

**MP-122**

**Time : 3 Hours** **Max. Marks : 90**

*The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.*

**Note :** Section A consists of Nine questions, Section B consists of Four questions and Section C has Two questions. Attempt Seven from Section A, Three from Section B and One from Section C.

## SECTION - A

1. (a) Explain effect of particle size, moisture content and lubrication on strength of tablets.

   (b) Explain inventory management in industrial pharmacy.

   (c) Discuss layout and design of pharmaceutical industries.

   (d) Explain regulatory guidelines for sustained/controlled release products.

   (e) What is pilot plant scale up? Explain pilot study of capsules in detail.

   (f) Explain finished product specification in pilot plant scale up techniques.

   (g) Write a short note on industrial hazards alongwith their preventive measures.

(h) Explain USFDA requirements for animal drugs.

(i) Explain role of TQM (Total Quality Management) in production of dosage funds. (7×5=35)

## SECTION - B

2. Write a note on formulation aspects of sublingual tablets.

3. Explain the structure of pharmaceutical industry with special reference to packaging division.

4. Explain the role of documentation in production management with suitable examples.

5. Explain ISO 9000 series. (10×3=30)

## SECTION - C

6. Discuss process validation for tablets in detail.

7. Define GMP. Explain GMP considerations in production management in detail. (25×1=25)