

Total No. of Questions : 6]

SEAT No. :

**P3161**

[Total No. of Pages : 2

**[5245]-501**

**Third Year B. Pharmacy (Semester - V)**

**INDUSTRIAL PHARMACY - I**

**(2013 Pattern)**

*Time : 3 Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) *All the questions are compulsory.*
- 2) *Answers to the two sections should be written in separate books.*
- 3) *Neat diagrams must be drawn wherever necessary.*
- 4) *Figures to the right indicate full marks.*

**SECTION - I**

**Q1)** Discuss biopharmaceutical consideration for dosage form design. **[10]**

OR

Discuss in detail IPQC tests for tablet.

**Q2)** Answer ANY FIVE **[15]**

- a) Write a note on co-processed excipients.
- b) Discuss wet granulation process with example.
- c) Give detail account on mechanism of granulation.
- d) Discuss types of tablet.
- e) Discuss chilsonator roller compaction process.
- f) Give detail account on evaluation of granules.
- g) What do you mean by embossing? Give account on double impression.

**Q3)** Solve ANY TWO **[10]**

- a) Give the different methods of preparation of effervescent granules.
- b) Discuss Heckel plot and Kawakita plot.
- c) Discuss force volume relationship in tablet manufacturing.
- d) Discuss Extrusion and Spheronization.

***P.T.O.***

**SECTION - II**

**Q4)** Describe in detail steps involved in Sugar coating. **[10]**

OR

Discuss in details the process of Manufacturing of Hard Gelatin Capsule.

**Q5)** Solve ANY FIVE **[15]**

- a) What are different shapes of Soft gelatin capsule? Discuss concept of Gel strength.
- b) Enlist various enteric coating materials?
- c) Write about Glatt immersion sword system?
- d) Filling capacity For Empty capsule shell ranges from 0 to 5?
- e) Explain various material used in Film coating?
- f) Discuss Dip coating process?
- g) Enlist difference between Hard Gelatin Capsule and Soft Gelatin Capsule.

**Q6)** Solve ANY TWO **[10]**

- a) Discuss in details variables involved in Film coating.
- b) Add note on Fluidized Bed Granulator.
- c) IPQC test for Capsules as per I.P.
- d) Write a note on Accela-coata and Dria-coater.

