

Total No. of Questions : 6]

SEAT No. :

P1450

[5049]-501

[Total No. of Pages :2

T.Y.B.Pharmacy
INDUSTRIAL PHARMACY-I
(2013 Pattern) (Semester-V)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

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

SECTION-I

Q1) What is spherical crystallization? Explain in detail the steps involved in process of spherical crystallization. What are pharmaceutical applications of spherical crystallization? **[10]**

OR

What is pelletization? Describe in details steps involved in extrusion spheronization.

Q2) Solve any Five: **[15]**

- a) What is compression coating technique? Mention advantages of compression coated tablets.
- b) Describe disintegration test and uniformity of dispersion test for dispersible tablets as per IP 2010.
- c) How do you differentiate between glidants, lubricants and antiadherants
- d) What are advantages of direct compression technique? Name directly compressible excipients.
- e) Explain need and advantages of layered tablets.
- f) Describe construction and principle involved in working of fluidised bed granulator.
- g) What is double impression? How it is avoided?

P.T.O.

Q3) Attempt any Two: **[10]**

- a) Explain various excipients used in tablet formulation and their role in tableting.
- b) Describe dissolution test with acceptance criteria for uncoated tablets as per IP 2010.
- c) Explain biopharmaceutical principles of dosage form design.
- d) Describe construction and working of Diosna granulator.

SECTION-II

Q4) Answer the following (Any one): **[10]**

- a) Differentiate between hard gelatin and soft gelatin capsule. Discuss filling of hard gelatin capsule.
- b) Explain standard coating pan with its modifications in details.

Q5) Answer in brief(Any five): **[15]**

- a) Draw a layout plan for capsule manufacturing.
- b) Explain compression coating of tablets.
- c) Explain 'evaluation of coated tablets'.
- d) What do you mean by enteric coating of tablets. Which polymers are used for enteric coating and how do they act?
- e) Explain different types of gelatin. Enlist various steps involved in manufacture of empty gelatin shell. How is capsule protected against tampering.
- f) What are the problems involed in filling hard gelatin capsules?
- g) Discuss formulation of soft gelatin capsules.

Q6) Answer the following(any two): **[10]**

- a) Explain fluidized bed coating of tablets
- b) Explain the principle and operations of automatic capsule filling machine.
- c) Discuss various film coating defects and remedies to resolve these defects.
- d) Give an account of various materials used in film coating of tablets.

