

Total No. of Questions : 6]

SEAT No. :

[Total No. of Pages : 2

**P1426**

**[5049]-101**

**F.Y. B.Pharmacy  
PHARMACEUTICS - I  
(2013 Pattern) (Semester - I)**

*Time : 3 Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) Answers to the two Sections should be written in separate books.*
- 2) Neat diagram must be drawn wherever necessary.*
- 3) Figures to the right indicate full marks.*

**SECTION - I**

**Q1)** Attempt any one:

- a) What are the various branches of Pharmaceutics? Write the scope of pharmaceutical engineering. **[10]**

OR

- b) Write the history of pharmacy profession and industry in India, also write a note on career opportunities after pharmacy graduation.

**Q2)** Attempt any Five:

**[15]**

- a) What is Pharmacopoeia? Add a note on Indian Pharmacopoeia.
- b) Write the principles of Unani as alternative system of medicine.
- c) Write the classification of dosage forms.
- d) Describe ayurvedic system of medicine.
- e) Enlist the different routes of drug administration.
- f) What are excipients? Explain the different flavours used in pharmaceuticals.
- g) Define drug, write the different sources of drug with suitable examples.

**Q3)** Write short note (any two):

**[10]**

- a) Pharmacy code of ethics.
- b) USP.
- c) Preservative used in pharmaceuticals.
- d) Ayurvedic Pharmacopoeia.

**P.T.O.**

## **SECTION - II**

**Q4)** Attempt any one:

- a) What are solution? Explain various methods to improve the solubility of poor water soluble drug. **[10]**

OR

- b) Write in detail account of bulk characterisation in preformulation study. Add a note on importance of pH and  $pK_a$  in it.

**Q5)** Attempt any Five:

**[15]**

- a) Differentiate between syrup and Elixir.
- b) Write methods of preparation of Aromatic water.
- c) Discuss formulation of thorat paints.
- d) Enlist various IPQC and quality control tests for solution.
- e) Justify the statement “Preformulation is key step in pharmaceutical product development”.
- f) Explain factor affecting the rate of solution.
- g) Give the importance of particle size as preformulation parameter.

**Q6)** Write short notes (any two):

**[10]**

- a) Raw material control of quality variation.
- b) Enema.
- c) Concept of preformulation.
- d) Factor affecting the stability of pharmaceutical product.

