

Roll No ..

MPY-104

M.Pharm., I Semester

Examination, November 2018

Product Development and Formulation

Time : Three Hours

Maximum Marks: 70

- Note:** i) Attempt any five questions.
ii) All questions carry equal marks.

1. a) Describe the goals of preformulation and how does solubility and partition coefficient play role in preformulation studies?
b) Explain in detail about drug excipient compatibility in the development of solid dosage forms.
2. Discuss about the theory of solubilisation and elucidate the various methods for solubility enhancement.
3. Classify polymers along with the general methods of synthesis. Give a detailed account of biodegradable polymers.
4. What is optimization? Discuss the Lagrangian method of optimization.

5. What are the recent developments in nutraceuticals? Give the various laws governing nutraceuticals.
6. Write the ICH guidelines for stability testing of Pharmaceuticals. How is the expiry date of a dosage form determined?
7. Describe the formulation aspects of dispersible tablets. How will you evaluate the floating and multi-layered tablets?
8. Write short notes on (any two):
 - a) Solid dispersion
 - b) Computer aided drug formulations
 - c) Tests of containers and closures
