

Roll No.

MPY - 104**M. Pharmacy I Semester**

Examination, December 2015

Product Development and Formulation*Time : Three Hours**Maximum Marks : 70***Note:** i) Answer any five questions.

ii) All questions carry equal marks.

1. a) Explain the significance of determining partition coefficient and solubility of the drug in preformulation studies.
b) Write a note on excipient-excipient incompatibilities.
2. a) What are the various Techniques to enhance the solubility? Discuss co-solvency and complexation as techniques to increase solubility.
b) Write a note on solid dispersions and their advantages.
3. a) Give procedure and specifications of dissolution test for tablets.
b) Write a detailed note on IVIVC.
4. a) Give procedure and specifications of official quality control tests performed on tablets.
b) Give a detailed account of recent improvements in tablet manufacturing.

5. a) Write a note on ocular inserts, their types and examples.
b) Explain sterilization procedures employed for parenteral formulations.
6. a) Write down advantages and disadvantages of using plastic as packaging material.
b) Describe the evaluation tests performed for glass containers.
7. a) Explain the role of computers in pharmacy. Explain briefly the Computer aided drug formulations.
b) Give an account of ICH guidelines for stability.
8. Write a note on any two :
 - a) Nutraceuticals
 - b) Determination of shelf life
 - c) Biodegradable polymers
 - d) Formulation Additives
