

M. PHARM
(SEM-II) THEORY EXAMINATION 2018-19
PHARMACEUTICAL MANUFACTURING TECHNOLOGY

Time: 3 Hours

Total Marks: 75

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

- 1. Attempt all questions in brief. 10 x 2 = 20**
- a. State four major components of pharmaceutical sterile and aseptic area layout.
 - b. What do you mean by pharmaceutical production control?
 - c. State the principle of lyophilization.
 - d. Name four major in process quality control tests for small and large volume solutions.
 - e. State the working principle of marumerisers.
 - f. State the problems generally encountered during fluidized bed coating.
 - g. Mention the types of glass used to store pharmaceuticals.
 - h. State the uses of blister packs and tape seals.
 - i. Mention the advantages of QbD.
 - j. Write down the full forms of QTPP and RLD.

SECTION B

- 2. Attempt any two parts of the following: 2 x 10 = 20**
- a. Describe the roles of the factors influencing pharmaceutical plant location.
 - b. Draw a neat manufacturing flowchart for pharmaceutical ointments.
 - c. Write a brief note on drug plastic interactions and how to overcome the problem.

SECTION C

- 3. Attempt any five parts of the following: 7 x 5 = 35**
- a. Write brief notes on the following:
 - (i) Legal requirements for API
 - (ii) Pharmaceutical aseptic area layout..
 - b. Write a brief note on the construction and applications of lyophilizer.
 - c. Describe the in process quality control tests for coated tablets.
 - d. Describe the evaluation methods for checking stability of pharmaceutical packaging material.
 - e. Write a brief note on different types of closures and closure liners.
 - f. Explain the FDA initiatives on process analytical technology.
 - g. State and explain the current approaches and limitations of QbD.