

Roll No.

Total No. of Pages : 02

Total No. of Questions : 10

B.Pharma (2012 to 2016) (Sem.-4)

PHARMACEUTICS IV

(Unit Operation-II)

Subject Code : BPHM-401

M.Code : 46231

Time : 3 Hrs.

Max. Marks : 80

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A** is **COMPULSORY** consisting of **FIFTEEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **FIVE** questions carrying **FIVE** marks each and students have to attempt any **FOUR** questions.
3. **SECTION-C** contains **FOUR** questions carrying **TEN** marks each and students have to attempt any **THREE** questions.

SECTION-A

1. Define :

- a. Define Unit Process.
- b. Define the term attrition.
- c. Define Overall Heat Transfer Coefficient.
- d. Explain Stefan Boltzmann's Law
- e. Describe Raoult's law.
- f. Mention the equipment used for solid-solid mixing.
- g. Define Different types of rectifying columns.
- h. Define LOD.
- i. Define Drying and its importance in dosage forms.
- j. Mention the factors affecting constant drying rate.

- k. Define flash distillation
- l. Define Impact and attrition in size reduction.
- m. Differentiate ideal and actual screens.
- n. Define Mechanism of mixing in liquid.
- o. Define Principle of sigma blade mixer.

SECTION-B

- 2. Explain the principle of freeze drying.
- 3. What is meant by steam distillation? What are its special advantages?
- 4. Explain the principle and working of fluidized bed dryer.
- 5. Describe the mechanism of size reduction with suitable examples of equipments.
- 6. Explain the working of a mixture used for mixing dry powder before granulation.

SECTION-C

- 7. Describe the construction, working and advantages of multipass heater.
- 8. Explain principle, working and applications of film evaporator.
- 9. Discuss the construction, working and advantages of drum dryer.
- 10. Describe the construction, working advantages and disadvantages of fluid energy mill.

NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.