

Roll No.

Total No. of Pages : 02

Total No. of Questions : 10

B.Pharma (2012 to 2016) (Sem.-3)
PHARMACEUTICS-III (Unit Operation-I)
Subject Code : BPHM-303
M.Code : 46223

Time : 3 Hrs.

Max. Marks : 80

INSTRUCTION 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. Answer briefly :

- a. Define the term dimensionless equation.
- b. What is Reynolds number? Describe its importance.
- c. Define ultracentrifugation.
- d. Define Black body.
- e. Define QO Valves.
- f. Define crystal lattice.
- g. Define refrigerants.
- h. Define dehumidification process.
- i. Define drying and its importance in dosage forms.
- j. Mention the factors affecting constant drying rate.
- k. Define Mier's Supersaturation theory.

- l. Define Kozeny-Carman equation.
- m. What are the applications of air conditioning?
- n. Define mechanism of mixing in solids.
- o. Define CMC.

SECTION-B

- 2. Describe the construction and working of screw conveyor.
- 3. Describe Reynolds classic experiment elucidating different types of flow patterns.
- 4. Describe the working of refrigerator.
- 5. Write construction and working of a reciprocating pump.
- 6. Explain industrial pollution and control.

SECTION-C

- 7. Define the devices used for transportation of solids. Describe pneumatic conveyors.
- 8. Explain principle, working and applications of venturi meter.
- 9. Explain principle, construction, working and applications of rotary filter.
- 10. Explain properties and applications of the material of construction with reference to stainless steel and glass.

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