Roll No. | | | | | | | | | | | | |

Total No. of Pages : 02

Total No. of Questions : 10

B.Pharma (2011 to 2016) (Sem.–3)

PHARMACEUTICS-III (Unit Operation-I)

Subject Code : BPHM-303

Paper ID : [D1124]

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 has to attempt any FOUR questions.**
3. **SECTION-C contains FOUR questions carrying TEN marks each and students has to attempt any THREE questions.**

SECTION-A

1. Answer briefly :

i. Define the term unit operation.

ii. Define mass balance.

iii. What is Reynolds number? Describe its importance.

iv. Explain the term filter aids.

v. Define ultracentrifugation.

vi. What are the applications of air conditioning?

vii. Define different mechanisms of filtration.

viii. Define QO Valves.

ix. Define Mier's Supersaturation theory.

x. Define the term dew point.

xi. Define Kozeny-Carman equation.

xii. Define crystal lattice.

xiii. Define refrigerants.

xiv. Define dehumidification process.

xv. Define wet bulb temperature.

SECTION-B

2. Describe the working of refrigerator.

3. Describe the construction and working of perforated basket centrifuge.

4. Write construction and working of a reciprocating pump.

5. Describe the factors affecting caking and prevention of caking.

6. Explain industrial pollution and control.

SECTION-C

7. Explain the principle and working of air conditioner.

8. Explain principle, working and applications of venturi meter.

9. Explain principle, construction, working and applications of drum filter.

10. Describe the principle, construction, working and applications of pneumatic conveyors.