

Roll No.

Total No. of Questions : 10]

[Total No. of Pages : 02

J-733[5378]

[2126]

B.Pharmacy (Semester - 3rd)
PHARMACEUTICS - II (PHM - 2.3.1)
(UNIT OPERATIONS - I)

Time : 03 Hours

Maximum Marks : 80

Instruction to Candidates:

- 1) Section - A is **compulsory**.
- 2) Attempt any **Four** questions from Section - B.
- 3) Attempt any **Three** questions from Section - C.

Section - A

Q1)

(15 x 2 = 30)

- a) Define unit operations? List the unit operations involved in Tablet making?
- b) What is Reynold's number? How it is useful in the study of flow of fluids?
- c) Write about Air-Lift.
- d) Explain the factors influencing filtration rate.
- e) List the mechanisms by which supersaturation is achieved in crystallization.
- f) Define
 - (i) Humid heat.
 - (ii) Humidity Ratio.
- g) Explain Brine Systems used in Refrigeration.
- h) Classify materials of construction with examples.
- i) Mention the mechanical hazards in Industry?
- j) Explain the use of psychrometric charts?
- k) Write the use of glass in Pharmaceutical plant construction?



P.T.O.

- l) What is corrosion? Write types of corrosion?
- m) Write the theory of filtration?
- n) Write the differences between Batch processes and continuous processes?
- o) Explain "Industrial Dermatitis"?

Section - B

(4 x 5 = 20)

- Q2)** Explain the construction and working of plate-and frame filter presses?
- Q3)** Describe the venturi meter with a neat diagram?
- Q4)** Write about Krystal crystallizer?
- Q5)** Explain pneumatic conveyor with a neat diagram.
- Q6)** Explain refrigeration cycle.

Section - C

(3 x 10 = 30)

- Q7)** Describe various types of flow? Derive Bernoulli's equation for flow of fluids?
- Q8)** Write about safety precautions to avoid Industrial hazards?
- Q9)** Explain briefly about methods of prevention of corrosion?
- Q10)** Explain the principle and construction of Air conditioning equipment.



* * * *