

[Total No. of Questions - 18] [Total No. of Printed Pages - 2]
(2063)

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B. Pharmacy 2nd Semester Examination

Unit Operations-I (NS)

BP-123

Time : 3 Hours

Max. Marks : 70

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary continuation sheet will be issued.

Note : Attempt any two questions from section A, any eight questions from Section B. Section C is compulsory.

SECTION - A

1. Explain principle, construction, working & merits of vacuum crystallizer.
2. Discuss construction & working of a centrifuge used for separation of slurry containing high solid contents.
3. Describe the construction, working, advantages & disadvantages of double reciprocating pump. **(2×10)**

SECTION - B

1. Discuss mechanisms of filtration.
2. Explain utility of glass & steel in Pharm. industry.
3. Describe mechanical & chemical industrial hazards.

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4. Discuss caking of crystals and factors affecting & preventive measures for caking.
5. What do you understand by Reynolds number?
6. What is dehumidification? Give its applications.
7. How solubility curve helps in predicting experimental conditions for crystallization.
8. Describe theory of centrifugation.
9. Discuss construction & working of leaf filters.
10. Give construction working of pneumatic conveyor.

(8×5)

SECTION - C

1. Enumerate different types of crystals.
2. Define humidity & dew point.
3. Give principle of centrifugal separation.
4. Differentiate between filtration & clarification.
5. What are pumps? Give their classification.

(5×2)