

Roll No.

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Total No. of Pages : 02

Total No. of Questions : 22

B.Pharma (2017 & Onwards) (Sem.-3)

PHARMACEUTICAL ENGINEERING

Subject Code : BP-304T

M.Code : 75108

Time : 3 Hrs.

Max. Marks : 75

INSTRUCTIONS TO CANDIDATES :

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

SECTION-A

Define :

1. Reynold's Number
2. Pitot tube
3. Manometers
4. Edge filter
5. Adiabatic saturation temperature

6. Rate of filtration

Distinguish between :

7. Conduction and Radiation
8. Filtration and centrifugation.
9. Evaporation and Drying
10. Give principle behind Azeotropic distillation

SECTION-B

11. a. Highlight filter press
b. Explain the working of rotary filter.
12. Explain Bernoulli's theorem and highlight how it is used to find rate of flow of a fluid in a horizontal pipe?
13. Comment on the following :
 - a. Size reduction in a ball mill is by impact only.
 - b. Vortex formation is necessary in mixing liquids in cylindrical tanks.
 - c. Freeze drying materials have very good solubility.
 - d. Steam distillation occurs at 100°C

SECTION-C

14. Explain factors effecting size reduction.
15. How pressure difference across incline tube manometer could be estimated?
16. Give principle and working of cyclone separator.
17. Enumerate theories, types, prevention of corrosion.
18. Classify and Explain basket centrifuge.
19. Explain mechanism of drying process and application of EMC.
20. Give principle and working of vacuum distillation.
21. Explain merits and demerits of steam jacketed kettle.
22. Highlight heat interchangers.

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.