

Roll No.

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 student has to attempt any TWO questions.
3. SECTION-C contains NINE questions carrying FIVE marks each and student has to attempt any SEVEN questions.

**SECTION-A**

**Explain briefly :**

1. Centrifugation
2. Passivity
3. Stefan Boltzman Law
4. Principle of Bernoullis theorem
5. Rate of drying
6. Neutral mixers
7. Kick Law
8. Corrosion
9. Flash distillation
10. Elutriation

## SECTION-B

11. Describe the principle and applications of steam distillation.
12. Write a note on filter press.
13. Describe the construction, applications, advantages and disadvantages of planetary mixers.

## SECTION-C

14. What is double metal corrosion? Describe methods to prevent.
15. Describe the principle behind freeze dryers.
16. Describe the various mechanisms of heat transfer.
17. What are manometers? Discuss with examples.
18. What are the various factors affecting choice of material for plant construction.
19. Write a note on disc centrifuge.
20. Discuss the construction and working of cutter mill.
21. Discuss the construction and working of pitot tube.
22. Describe the principle behind cyclone separator.

**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.**