

**VINAYAKA MISSION'S RESEARCH FOUNDATION
(DEEMED TO BE UNIVERSITY), SALEM**

**B.PHARM. DEGREE EXAMINATION – JULY 2019
Third Semester**

PHARMACEUTICAL ENGINEERING

Time : Three hours

Maximum: 75 marks

I. Write essays on any **TWO** questions: (2 x 10 = 20)

1. Explain heat transfer by conduction and discuss about Fourier Law of heat transfer.
2. Define distillation and explain the construction, working and advantages and steam distillation.
3. Describe the construction, working and principle behind filter press.

II. Write short answers on any **SEVEN** questions: (7 x 5 = 35)

4. Describe about Pitot tube.
5. Explain the factors influencing size reduction.
6. Describe about cyclone separator.
7. What are the factors involved in the process of evaporation?
8. Explain the methodology of simple distillation.
9. Explain the mechanism of solid mixing.
10. Describe about filter leaf.
11. Write a note on theories of corrosion.
12. Explain about the ferrous metals used in plant construction.

III. Write short notes on : (10 x 2 = 20)

13. What is variable head meter?
14. What is the unit of Reynolds number?
15. Define compression.
16. What is radiation?
17. What is boiling?
18. Define molecular distillation.
19. Enumerate the applications of drying.
20. What is propeller?
21. Define clarification.
22. What are the types of plastics?