Sl.No: M21935 **Course Code: BP304T**

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

B.PHARM. DEGREE EXAMINATION – JANUARY 2020
Third Semester

PHARMACEUTICAL ENGINEERING

Time : Three hours Maximum: 75 marks

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

1. What is corrosion? Types of corrosion. Methods to prevent it.
2. Write the principle, construction, working, merits and demerits of ball mill.
3. Explain the working of rotary filter press with a neat diagram.

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

4. Construction and working of Rotameter.
5. Discuss the factors affecting size reduction.
6. Various heat transfer mechanisms .
7. Write the principles of size reduction.
8. Climbing film evaporator.
9. Drying rate curve.
10. Different types of propellers and turbines.
11. Factors influencing rate of filtration.
12. Write the different grades of steel with their composition.

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

13. Application of Bernoulli's theorem.
14. Mechanism of fluid energy mill.
15. What is a sieve?
16. What is convection?
17. Molecular distillation.
18. Principle in spray drying.
19. Liquid mixing equipments.
20. Filter aids with examples.
21. What is centrifugation?
22. Theories of corrosion.

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