

QP Code: 324006

Reg. No.....

**Third Semester B.Pharm Degree Supplementary Examinations  
June 2019**

**Pharmaceutical Engineering**

**(2017 Scheme)**

**Time: 3 Hours**

**Max. Marks: 75**

- **Answer all questions**
- **Draw diagrams wherever necessary**

**Essays**

**(2x10=20)**

1. Explain the principle, construction, working of planetary mixer with merits and demerits.
2. Describe in detail about flash distillation with neat diagram

**Short Notes**

**(7x5=35)**

3. Explain the theories of filtration.
4. Derive Bernoulli's theorem.
5. Define corrosion. Explain the prevention and control of corrosion
6. Explain the principle, construction and working of freeze dryer.
7. Mechanism of liquid mixing.
8. Explain the Fourier's law of heat transfer by conduction
9. Mechanisms and laws of size reduction

**Answer Briefly**

**(10x2=20)**

10. Reynolds number.
11. Kozeny- Carman equation.
12. Differentiate sorption and desorption.
13. Raoult's law.
14. Filter aids with example.
15. Types of corrosion
16. Objective of centrifugation
17. Stefan- Boltzmann's law.
18. Types of conveyors.
19. Applications of evaporation.

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