

QP Code: 324006

Reg. No.....

**Third Semester B.Pharm Degree Examinations January 2019**

**Pharmaceutical Engineering**

**(2017 Scheme)**

**Time: 3 Hours**

**Max. Marks: 75**

- Answer all questions
- Draw diagrams wherever necessary

**Essays**

**(2x10=20)**

1. Describe in detail about the principle, assembly and working of plate and frame filter press with merits and demerits.
2. Detailed note on freeze dryer with labelled diagram

**Short Notes**

**(7x5=35)**

3. Brief note on materials handling systems
4. Solid mixing.
5. Principle and working of sieve shaker.
6. Fluid energy mill.
7. Explain about double-pipe heat inter changer.
8. Explain the prevention and control of corrosion
9. Principle and working of fractional distillation

**Answer Briefly**

**(10x2=20)**

10. Differentiate between orifice meter and venturi meter.
11. Dalton's law.
12. What are heat exchangers
13. Applications of mixing
14. Centrifugal effect
15. Define conduction, convection and radiation.
16. Applications of drying.
17. Classify evaporators.
18. Mechanisms of size separation
19. Advantages of bag filter.

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