

QP Code: 324006

Reg. No.....

**Third Semester B. Pharm Degree Supplementary Examinations  
December 2020**

**Pharmaceutical Engineering**

**(2017 Scheme)**

**Time: 3 Hours**

**Max. Marks: 75**

- *Answer all questions to the point neatly and legibly* • *Do not leave any blank pages between answers* • *Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together* • *Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

**Essays**

**(2x10=20)**

1. Explain the principle, construction and working procedure of fractional distillation apparatus. Illustrate the fractional distillation of the mixture of components with the boiling point composition curve.
2. Explain the various factors affecting evaporation with the help of a neat diagram. Explain the principle, construction and working of climbing film evaporator

**Short Notes**

**(7x5=35)**

3. Explain the principle, construction and working of ball mill.
4. Discuss the types of manometer.
5. Sigma blade mixer.
6. Explain about Fourier's law.
7. Explain the principle, construction, working and applications of filter leaf
8. Fluidized bed dryer.
9. Discuss about theories of corrosion.

**Answer Briefly**

**(10x2=20)**

10. Types of pharmaceutically important glass.
11. Bound and unbound water.
12. Types of conveyors.
13. Filter medias.
14. Equilibrium moisture content.
15. Turbulent flow.
16. Centrifugal effect.
17. Uses of Forced Circulation Evaporator.
18. Define grey body.
19. List out the equipment used for liquid mixing.

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