

QP Code: 324006

Reg. No.....

**Third Semester B. Pharm Degree Supplementary Examinations
December 2023
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 theory of solid-solid mixing. Name the equipments used in solid-solid mixing. Describe the construction and working of any two mixers used in solid mixing.
2. Enumerate the various factors affecting during the selection of materials for pharmaceutical plant constructions. Discuss the role of ferrous as metal for pharmaceutical plant constructions.

Short Notes

(7x5=35)

3. Enumerate the working principles of filter press.
4. Explain the principle, construction, working and applications of vacuum dryer
5. Multiple effect evaporators.
6. Briefly explain the mechanisms and laws governing size reduction.
7. Discuss the construction and working principles of simple distillation.
8. Super centrifuge.
9. Explain Bernoulli's theorem and its applications.

Answer Briefly

(10x2=20)

10. Fluid flow-types.
11. Dalton's law.
12. Flash distillation
13. Filter aids.
14. Heat transfer methods.
15. Advantages of hammer mill.
16. Reynolds number.
17. Official standards of powders.
18. Black body and grey body.
19. Types of conveyors.
