

S. Y. B. Pharm. Semester - III

Question Bank for BP308P - PHARMACEUTICAL ENGINEERING (Practical) for Semester Practical Exam

1. Give formula for calculation of radiation constant
2. Given all the parameters, calculate radiation constant for brass at temperature 80°C
3. Define Steam distillation
4. Give formula for calculation of efficiency of steam distillation
5. Give principle and working of steam distillation
6. Name parts of steam distillation unit
7. Give formula to determine overall heat transfer coefficient by heat exchanger
8. Discuss construction of drying curves
9. Give formula to determine moisture content and loss on drying
10. Give formula to determine humidity of air
11. Discuss construction, working and applications of:
 - a. Rotary tablet machine
 - b. Fluidized bed coater
 - c. Fluid energy mill
 - d. Dehumidifier
 - e. Colloid mill
 - f. Planetary mixer
 - g. Fluidized bed dryer
 - h. Freeze dryer
12. Give arithmetic and logarithmic probability plots in sieve analysis
13. Given all parameters, calculate Kicks, Rittinger's and Bond's coefficients
14. What is significance of critical speed of ball mill

15. Give formula to determine critical speed of ball mill
16. Discuss effect of factors affecting rate of filtration with respect to surface area, concentration and thickness/ viscosity
17. Discuss effect of factors affecting rate of evaporation with respect to surface area, concentration and thickness/ viscosity
18. Define:
 - a. Filtration
 - b. Evaporation
19. Discuss effect of time on the rate of crystallization
20. Give formula to determine uniformity index using double cone blender
21. Give significance of uniformity index for double cone blender
22. Discuss in short procedure for conducting following experiments:
 - a. Steam distillation – To calculate the efficiency of steam distillation
 - b. Determination of moisture content and loss on drying
 - c. Factors affecting rate of filtration (concentration and thickness/ viscosity)
 - d. To calculate the uniformity Index for given sample by using double cone blender