



قسم التكنولوجيا الصيدلانية

Third level-clinical program

Pharmaceutical technology

- 1- Write a report on lyophilization and its pharmaceutical applications. The report must include introduction and definitions, theory of lyophilization, description of the equipment and pharmaceutical applications including its use in production of pharmaceutical products and enhancing the dissolution rate of drugs.
- 2- Write a report on spray drying and its pharmaceutical applications. The report must include introduction and definitions, theory of spray drying, description of the equipment and pharmaceutical applications.
- 3- Write a report on Fluidized bed drying and granulation and their pharmaceutical applications. The report must include introduction and definitions, theory of the process, description of the equipment and pharmaceutical applications.
- 4- Write a report on wet granulation in tablet manufacture. The report must include introduction and definitions, theory of wet granulation and description of the equipment used in wet granulation.
- 5- Write a report on dry granulation in tablet manufacture. The report must include introduction and definitions, theory of dry granulation and description of the equipment used in dry granulation.
- 6- Write a report on spheronization. The report must include introduction and definitions, theory of spheronization and description of the equipment used in production of spheres and its pharmaceutical application.

- 7- Write a report on crystallization process. The report must include introduction and definitions, theory of crystallization and description of the equipment used in evaporative crystallization.**
- 8- Write a report on crystallization process. The report must include introduction and definitions, theory of crystallization and description of the equipment used in cooling crystallization.**
- 9- Write a report on mixing of liquids. The report must include introduction and definitions, theory of liquid mixing, description of the equipment used in mixing of liquids and role of baffles in mixing equipment.**
- 10- Write a report on mixing of semisolids. The report must include introduction and definitions, theory of semisolid mixing and description of the equipment used in mixing of semisolids.**
- 11- Write a report on mixing of solids. The report must include introduction and definitions, theory of solid-solid mixing and description of the equipment used in mixing of solids.**
- 12- Write a report on mixing of powders. The report must include definition of different types of mixtures, different degree of mixing, powder segregation and its effect on product quality together with description of diffusion mixers.**
- 13- Write a report on size reduction operation. The report must include an introduction, significance of size reduction, problems associated with size reduction and factor affecting size reduction.**