

IV B.Tech I Semester Supplementary Examinations, November 2005
TECHNOLOGY OF PHARMACEUTICALS & FINE CHEMICALS
(Chemical Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. (a) Write the principle and reaction involved in the following limit tests. [2x2=4]
 - i. chloride
 - ii. Iron

(b) What is the main interference in the limit test for arsenic? How can it be eliminated? [4]

(c) What is the reason for the presence of a small hole near the lower tip of the tube carrying arsine gas to mercuric chloride paper in the apparatus used for arsenic limit test. [8]
2. Give the synthesis of the following compounds and write their important properties:
- [8x2=16]
 - (a) Riboflavin
 - (b) Fluorescence
3. Discuss the manufacture of fluorescence in brief. Enlist various parameters and process conditions and discuss in brief. [16]
4. Give the flowsheet for manufacture of penicillin G by Deep-Tank Fermentation method. [16]
5. Discuss benzene sulfate process in brief. Enlist important process conditions and reactions involved. [16]
6. Explain about different physico chemical properties of a powder to be formulated, which influence the process of manufacture of tablets. [16]
7. By means of a neat graph discuss the general pattern of the Performance Indicators of Sterility Efficiency as a function of Temperature for different types of sterilization. [16]
8. Discuss the use of Saturated Steam, Super Heated steam, Wet and dry Steam and mention Tolerable Degrees of Super Heating with reference to Steam Sterilization [16]
