

B.Pharm. 4th year 2nd semester examination, Session 2021-22

Sub: Industrial Pharmacy II

Ref: Ex/Pharm/T/425A

Total Marks 70

Time 4 hr

(Each question carries 14 marks. Answer any 5 questions from Group A and Group B)

Group A

Q1.(a) How 'Del factor' is used to design time-temperature regime in sterilization of broth?

(b) Draw flow sheet diagrams of 'Steam injector type' and 'Heat exchanger type' continuous sterilizers and explain its functioning. (4+10)

Q2. Describe the industrial method of production of Riboflavin by fermentation method along with flow sheet diagram. **14**

Q3. Write short notes on the following: 7x2

- (i) Continuous Stirred Tank Reactor
- (ii) Gassing out technique for the determination of K_{La}

Group B

4. Moisture plays a very important role in all tablet and capsule formulations. Discuss. (14)

5. What are the various effects of compressional forces on a bed of powder particles. Elaborate with suitable diagrams. (14)

6. Characteristics of granules have a significant effect on the tableting process and also on the properties of the final tablets produced. Discuss. (14)