

**FACULTY OF PHARMACY****M. Pharmacy (Pharmaceutical Chemistry) II-Semester (PCI) (Suppl.)****Examination, February 2019****Subject: Pharmaceutical Process Chemistry****Time: 3 Hrs****Max. Marks: 75****Note: Answer any five questions. All questions carry equal marks.**

1. a) Explain in detail validation of Large scale Process.  
b) Write the Case studies of some Scale up Process of APIs. (7+8)
2. a) Write a note on types of filtration.  
b) Discuss the principle and general methods of preparation of polymorphs, hydrates, solvates and amorphs APIs. (7+8)
3. a) Write a note on nitrating agents, equipment for technical nitration.  
b) Write a note on types of halogenations, Catalytic halogenations. (8+7)
4. a) Explain abt aerobic and anaerobic fermentation with examples.  
b) Write a note on cost effective rtes, families of reagents useful for scale up (6+9)
5. a) Write a detail note on MSDS.  
b) Discuss abt effluents and management system in industries. (6+9)
6. a) Give a note on fire hazards and types of fire extinguishers.  
b) Write abt personal protection equipment. (8+7)
7. a) Discuss the types of extraction.  
b) Explain hydrogen transfer reactions in reduction. (8+7)
8. a) Write the Importance of OHSAS.  
b) Explain abt steam distillation. (8+7)

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