

Roll No.

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Total No. of Pages : 01

Total No. of Questions : 06

M.Pharma. (Pharmaceutical Chemistry) (Sem.-2)

PHARMACEUTICAL PROCESS CHEMISTRY

Subject Code : MPC-204T

M.Code : 74958

Date of Examination : 19-12-2022

Time : 3 Hrs.

Max. Marks: 75

INSTRUCTIONS TO CANDIDATES :

1. Attempt any FIVE questions out of SIX questions.
2. Each question carries FIFTEEN marks.

- Q1. a) Write in detail about the impurities in Active Pharmaceutical Ingredients, types and their sources including genotoxic impurities.
- b) Discuss the metal hydride reduction.
- Q2. a) Describe the Azeotropic and steam distillations in detail.
- b) Explain the types of evaporators and factors affecting evaporators.
- Q3. Write short notes on the following :
- a) Kinetics of aromatic nitration.
- b) Production of B12.
- c) Oxidation by Sodium hypochlorite.
- Q4. a) Explain in detail about the catalytic hydrogenation and case study on industrial reduction process.
- b) What are the various source and cause of industrial fire? Write down the preventive measures to avoid and control hazards.
- Q5. a) Explain the principle and general methods of preparation of polymorphs.
- b) Give brief discussion of process control and validation of large scale process.
- Q6. Write briefly on the following :
- a) Homogeneous Catalytic hydrogenation.
- b) Material Safety Data Sheet (MSDS).
- c) Families of reagents useful for scale-up.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.