SUPPLEMENTARY

MASTER OF PHARMACY (M. PHARM.) (CBCS-2019 COURSE) M.Pharm. Sem-II PHARMACEUTICAL QUALITY ASSURANCE :SUMMER- 2022 SUBJECT: PHARMACEUTICAL MANUFACTURING TECHNOLOGY

Day: Wednesday Time: 10:00 AM-01:00 PM Date: 21-09-2022 S-20800-2022 Max. Marks: 75 **N.B.:** Q.No.1 and Q.No.5 are COMPULSORY. Out of the remaining questions 1) attempt ANY TWO questions from each section. Answer to both the section should be written in the **SEPARATE** answer books. 2) 3) Figures to the right indicate **FULL** marks. **SECTION - I** Explain cGMP requirements for pharmaceutical plants. [07] Q.1 Q.2 a) Discuss legal requirements and licenses for API and formulation industries. [07] **b)** Explain lyophilization technology with example. [80]Discuss in detail pharmaceutical production planning. Q.3 [15] Write short notes on **ANY TWO** of the following: **Q.4** [15] Small Volume Parenterals a) b) Cleaning in Place c) Needle Free Injections SECTION - II Q.5 Describe types of containers and qualities of good container. [08]Describe the process of particle coating. Describe in detail problems **Q.6** encountered in tablet coating along with the remedies to each problem. What is PAT? Discuss the key features of PAT and its advantages. [15] **Q.7** Write short notes on **ANY TWO** of the following: **Q.8** [15] a) Extrusion spheronization process b) Blister packs and bubble packs Risk assessment and measures to be taken to minimize risk

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