

Exam Date & Time: 11-Sep-2021 (02:00 PM - 05:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

Pharmaceutical Production Technology [PCE-MIP203T]

Marks: 75

Duration: 180 mins.

PCE-MIP203T: Pharmaceutical Production Technology

Answer all the questions.

Section Duration: 180 mins

- 1) Discuss the benefits of improved tablet production systems and write on material- handling risks. Explain the construction and working of Extruder-Spheronizer with diagram. (10)
- 2) Explain the sources of contamination in parenteral production with their preventive methods. (10)
- 3) Explain the principle, steps and design aspects of lyophilization technology (2+4+4) (10)
- 4) Explain rotary die process for manufacture of soft gelatin capsules. (10)
- 5) Write notes on 'blister packaging' and 'reverse osmosis for water purifications'. (5 Marks + 5 Marks) (10)
- 6) Explain any THREE factors to be considered in fluid bed coating. (5)
- 7) Enlist the features of an ideal granulation technique. Explain the dry granulation process. (5)
- 8) Give layout of parenteral production unit. (5)
- 9) Explain the principle and working of High Pressure Homogenizer. (5)
- 10) Give different components of air handling unit. Classify different types of heat exchangers and write their functions in air handling unit. (5)

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