

UKA TARSADIA UNIVERSITY

Maliba Pharmacy College

M. Pharm. Pharmaceutical Technology 3rd Semester Internal Examination December 2013**040120302 Pharmaceutical Technology III**

Time: 10:30 a.m. To 1:30 p.m.

Max. Marks: **70**

Date: 12/12/2013

Instructions:

- Attempt all questions.
- Make suitable assumption whenever necessary.
- Figures to the right indicate full marks.
- Draw diagrams/figures whenever necessary.

Section 1

- Q-1 Answer the following:** **11**
- a) Write a note on biological indicators in sterility testing. 03
- OR
- a) Enlist the factors that influence the scale up activities during fluid bed processing of pharmaceuticals. 03
- b) With a neat diagram explain the principle of Fluid bed processor. Enlist the advantages and applications of fluid bed processing. Describe different materials employed for agglomeration and coating during fluid bed processing of pharmaceuticals. [02+02+04] 08
- Q-2 Answer the following:** **12**
- a) Describe HVAC system as environmental contamination control system. 08
- OR
- a) Discuss freezing and primary drying stages with reference to lyophilization of pharmaceuticals. 08
- b) Describe the sources of product contamination and their control. 04
- Q-3 Answer the following: (Any 2)** **12**
- a) Give the advantages of laminar air flow systems. 06
- b) Prepare manuscript for validation of Autoclave. 06
- c) Describe scale-up activities in lyophilization process. 06

Section 2

- Q-4 Answer the following:** **11**
- a) Mention various advantages of nanoparticles and ways to control Ostwald ripening. 03
- OR
- a) How does the Ring cap system differ from the conventional oral matrix system? 03
- b) Describe Procise® as an oral modified delivery System along with its evaluation aspects. 08
- Q-5 Answer the following:** **12**
- a) Discuss precipitation techniques for nanoparticle manufacturing. 08
- OR
- a) Discuss the Atrigel drug delivery system. 08
- b) Explain hot homogenization and cold homogenization along with sequential steps involved. 04
- Q-6 Answer the following: (Any 2)** **12**
- a) Explain methods used for characterization of nanoparticles. 06
- b) Write a note on RESS technique for nano-engineering. 06
- c) Discuss D-Trans Technology. 06