

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA PHARMACY - SEMESTER-I • EXAMINATION-SUMMER • 2014

Subject Code: 410001

Date: 20-05-2014

Subject Name: Pharmaceutics-I

Time: 10:30 am - 01:30 pm

Total Marks: 80

Instructions:

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Define “Dosage form”. Classify them with suitable examples **06**
(b) Write a note on “Indian Pharmacopoeia”. Explain attractive features of IP’2007. **05**
(c) Enumerate the ayurvedic dosage forms and explain “Asavarista” and “Avaleha” in detail. **05**
- Q.2** (a) Define “Metrology”, “Weight” and “Measure”. And give conversions of the following: (1) 20 drams = _____ grains (2) 20 ʒ (scruple) = _____ drachm. **06**
(b) (1) Divide 9 gallon, 1 pint and 3fl.oz by 7. (2) Multiply 3 pint, 6 fl.oz. and 2 fl.dr. with 5. **05**
(c) In what proportion should 60% solution and 25% solution be mixed to make 400 ml solution of 30% strength? **05**
- Q.3** (a) Explain the types of containers with respect to method of closure and use. Give advantages and disadvantages of glass as a packing material. **06**
(b) Explain different mechanisms of size reduction. Give principle of “Hammer mill” with neat labeled diagram. **05**
(c) Give standards of powders according to IP and explain elutriation method for size separation. **05**
- Q.4** (a) Explain types of mixtures. Write a note on “Propeller Mixer”. **06**
(b) Define “Filter medium” and “Filter cake” Write a note on “Filter Aid” in detail. **05**
(c) Enumerate ideal qualities of menstruum and Explain “Soxhlet Extraction” in detail. **05**
- Q.5** (a) Explain factors affecting rate of evaporation. **06**
(b) Give difference between “Evaporation” and “Distillation”. Describe simple distillation in detail. **05**
(c) Define “Equilibrium Moisture Content” and “Critical Moisture Content”. Explain fluidized bed dryer with suitable diagram. **05**
- Q. 6** (a) Classify the sterilization processes and explain gaseous sterilization in detail. **06**
(b) Enumerate different types of tablets and write about wet granulation method in detail. **05**
(c) Explain sugar coating of tablets in detail. **05**
- Q.7** (a) (1) Define “Capsule” and give capsule sizes according to capacity. (2) Rotary die process for making soft gelatin capsule. **06**
(b) Differentiate (1) Active and passive immunity (2) Antigen and serum **05**
(c) Classify immunological products with suitable examples and explain BCG vaccine in detail. **05**
