MT-605

Seat No.____

Diploma in Pharmacy (Part-I) Examination

May / June - 2003

Pharmaceutics - I

Time: 3 Hours] [Total Marks: 80

Instructions: (1) Attempt any **three** questions from each section.

- (2) Tie both sections **separately**.
- (3) All questions carry equal marks.

SECTION - I

- 1 (a) Define Size Reduction. What are the objects of size reduction?
 - (b) Explain principle, construction, working, advantages, disadvantages and applications of Ball-Mill.
- **2** (a) Write note on Cyclone Separator.
 - (b) Find out the amount of Sodium Chloride required to render 100 ml of 3% w/v solution of sulphacetamide sodium solution isotonic with tears:

FPD of 1% sulphacetamide-Na = -0.132°C

FPD of 1% NaCl = -0.58°C

FPD of tears = -0.52° C

- **3** (a) Explain:
 - Clarification
 - Filtration.

Explain factors affecting rate of filtration.

- (b) Explain construction, working, advantages, disadvantages and applications of plate and frame filter press.
- **4** (a) Explain Mixing. Explain different types of Mixtures with example.
 - (b) Write note on Planetary Mixer.

- **5** (a) Define:
 - Extraction
 - Menstruum
 - Marc.

Explain different steps for Percolation Process.

(b) How many parts of 80%, 65%, 32% and 20% Alcohol to be mixed together so as to give 40% alcohol.

SECTION - II

- **6** (a) Define Tablets. Classify the Tablets.
 - (b) Explain formulation ingredients with examples.
- **7** (a) What are the different steps involved in capsules dosage form formulation ?
 - (b) State different Distillation Processes.
- **8** (a) Write note on Rectification.
 - (b) Classify Immunological product.
- **9** (a) Classify different sterilization methods. Write note on Autoclave.
 - (b) Q. C. tests of Tablets.
- **10** Write notes on **three** :
 - (a) Latest IP
 - (b) Fluid bed drier
 - (c) Glass as a container
 - (d) Modern drug delivery systems.