## 21222

# 3 Hours / 80 Marks

Seat No.				
Scat Ind.				

15 minutes extra for each hour

- Instructions (1) All Questions are Compulsory.
  - (2) Answer each next main Question on a new page.
  - (3) Illustrate your answers with neat sketches wherever necessary.
  - (4) Figures to the right indicate full marks.
  - (5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

**Marks** 

#### 1. Answer any TEN of the following:

**20** 

- a) Enlist the method of size reduction of powder.
- b) State the ideal properties of menstruum used for extraction.
- c) Name the different types of closures used.
- d) Give application of Freeze drying.
- e) Why injectables are not to be stored in soda lime glass container?
- f) What are unit packing? Give two examples.
- g) Define.
  - i) Suspension
  - ii) Syrup
- h) What are main objective of mixing?
- i) Define Pharmacopoeia. When II<sup>nd</sup> edition of pharmacopoeia was published?

## 2. Answer any <u>FOUR</u> of the following:

separation.

**12** 

- a) Why there is need for formulation of different dosage forms?
- b) Draw a well labelled diagram of cyclone separator and describe its working.
- c) Explain the official grades of powder.
- d) Discuss construction of Hammer mill with neat diagram.
- e) Differentiate between maceration of organized drug and unorganized drugs.
- f) Define Aerosol packaging. Enumerate its advantages and disadvantages.

#### 3. Answer any FOUR of the following:

**12** 

- a) Explain factors affecting rate of filtration by Darcy's law.
- b) Define the term 'Filer aids'. Write the four qualities of an ideal aids.
- c) Explain the double maceration process for extraction of drugs.
- d) What are salient features of Third edition of I.P.?
- e) How many parts of 85%, 65%, 45% and 25% of alcohol should be mixed, to get 55% of alcohol, 500 ml.
- f) Explain construction of Vacuum Dryer with neat diagram.

0805 [3]

		M	arks
4.		Answer any FOUR of the following:	12
	a)	Explain various stages of sugar coating of tablet.	
	b)	Explain the principle of steam distillation and give its application in pharmacy.	
	c)	Give construction and working of Silverson's Mixer Homogenise	er.
	d)	What do you mean by Glidant, antiadherant and lubriants? Explain their role with example.	
	e)	Give the construction and working of fluid energy mill.	
	f)	Draw a well labelled diagram of soxhlet apparatus.	
5.		Answer any FOUR of the following:	12
	a)	Give difference between Active Immunity and Passive Immunity.	
	b)	Explain working of Hand operated capsule filling machine.	
	c)	Describe the various factors which affect rate of evaporation.	
	d)	Give the principle, method and application of sterilization by Autoclaving.	
	e)	Define Drying. Give application of drying in Pharmacy.	
	f)	Why tablets are coated? and give the types of coatings.	
6.		Answer any FOUR of the following:	12
	a)	Discuss in brief the disintegration test for uncoated tablets.	
	b)	Explain method of preparation of small pox vaccine using Egg.	
	c)	What are advantages of Novel Drug delivery system? What are liposomes.	
	d)	State manufacturing defects in tablets. Write note on capping.	
	e)	Define capsule and differentiate between Hard gelatin capsules and soft gelatin capsules.	
	f)	Explain construction of Fluidized Bed dryer.	