## 23242 3 Hours / 80 Marks

Instructions – (1) All Questions are Compulsory.

- (2) Illustrate your answers with neat sketches wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Assume suitable data, if necessary.
- (5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

## 1. Attempt any <u>SIX</u> of the following :

- a) Discuss development of pharmacy profession in India.
- b) What are different types of containers commonly used in pharmacy? Write in brief about glass containers.
- c) Define preservatives. Write it types with examples and uses.
- d) Define size reduction. Write in detail about ball mill.
- e) Enlist excipients in tablet. Define sustain release tablet, Extended release tablet, fast dissolving tablet multi layered tablet.
- f) Draw a layout design of pharmaceutical manufacturing plant. Write its sections and activities.
- g) Define Noval drug delivery system. How will you classify it? Write in brief about examples and challenges in Noval drug delivery system.

## 2. Attempt any <u>TEN</u> of the following :

- a) Define quality control, quality assurance and CGMP.
- b) Give in brief the method of preparation of smallpox vaccine.
- c) Describe the method of preparation of effervescent granules.
- d) Define ointment. Write classification of ointment bases.
- e) How will you differentiate between a hard gelatin capsule and soft gelatin capsule?
- f) Define extraction. Write classification of extraction.
- g) Draw a well labelled diagramme of F.B.D. write its principle.
- h) Draw a well labelled diagramme of Tripple roller mill. Write its advantages and disadvantages.
- i) Define pharmaceutical aid-write role of colouring, flavoring and sweetening agents.
- j) Write about career opportunities in pharmacy.
- k) Write short note on Indian pharmacopeia.

30

Marks

30

All Questions are Compulso

s Seat



20111

[2]



			l i i čale	<b>WIALKS</b>
	Attempt ALL of the following :			20
a)	Define extended-release tablet.			
b)	Define elixir			
c)	Write full form of USP (U.S.P.)			
d)	Define container			
e)	The disintegration time for coated tablet is minutes.			
f)	What is use of Non-staining Iodine ointment.			
g)	Which is the most commonly used vehicle in eye drops?			
h)	Define Pessaries.			
i)	Name any two preservatives.			
j)	The rate of filtration is proportional to the surface area of filter media.			
k)	Hammer mill work on principle of			
1)	In cyclone separator the powder is separated depending on its			
	i) Particle size	ii)	Density of particle	
	iii) Shape of powder	iv)	Particle size and density	
m)	Sublimation of water from ice phase to gas phase is known as			
n)	The drugs cannot be filled in hard gelatin capsule.			
0)	Dusting powder is dispensed in container.			
p)	Gum acacia is used as in emulsion.			
	i) Solvent	ii)	Solute	
	iii) Emulsifying agent	iv)	Colourant	
q)	Solution is stored in			
	i) Wide mouth bottle	ii)	Narrow mouth bottle	
	iii) Both i) and ii)	iv)	None of above	
r)	Name two identification test for emulsion.			
s)	Solutions are which type of liquids?			
	i) Bi-phasic	ii)	Monophasic	
	iii) Suspension	iv)	Other than these	
t)	What is the use of glycerin in elixir?			
	i) Preservative	ii)	Vehicle	
	iii) Colouring agent	iv)	Flavouring agent	

Marks 20