



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) Assume suitable data, if necessary.
- (6) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1.	Attempt any <u>SIX</u> of the following:	30
a)	Describe History of India Pharmacopoeias in brief.	
b)	Explain the construction, working, advantages, disadvantages and uses of a mill working on principle of both impact and attrition.	
c)	Enlist various official and non-official evaluation tests of tablets. Explain disintegration test along with apparatus.	
d)	Describe various types of ointment bases in details.	
e)	Explain formulation of parenteral products.	
f)	Define vaccine. Give procedure of preparation, storage and uses of small pox vaccine using animal.	
g)	What is c-GMP? What are the basic facility requirements that have to be followed by the pharmaceutical manufacturers?	

2.	Attempt any <u>TEN</u> of the following:	30
a)	Define effervescent granules. Describe heat method of preparation?	
b)	Enlist various parts of single punch tablet machine along with significance of each part.	
c)	Enlist at least six roles of community pharmacist.	
d)	Define and classify immunity.	
e)	Differentiate between simple maceration and maceration with adjustment. Write any six points of differentiation.	
f)	Explain any three tests for identification of emulsion.	
g)	Why glass is a good material for packaging of pharmaceutical? Give any six points.	
h)	Give any six advantages of parenteral preparations.	
i)	Define Pharmaceutical aids. Enlist ideal properties of sweetening agents.	
j)	Differentiate between hard gelatin capsules and soft gelatin capsules.	
k)	Define liposomes. Give their applications.	

3.	Attempt <u>ALL</u> of the following:	20
a)	Define containers.	
b)	Define fine powder.	
c)	Give two advantages of dry powers for reconstitution.	



d) Which part of hand operated capsule filling machine is used to remove filled capsules from the bed?

e) Whom we call father of Pharmaceutical education in India.

f) Why oily solutions are not preferred for nasal drops?

g) Which of the following is an example of neutral mixing?

- Mixing of solid with solid
- Mixing of gases
- Mixing of immiscible liquids
- Mixing of insoluble solids with liquid.

h) Which of the following is not a reason behind capping and lamination of tablets?

- Defective punches
- Too dry granules
- High degree of compression
- Low speed of machine.

i) What is fluidization of solids?

j) Which formulation you select from elixir and syrup for administration in children? Why?

k) Glycerin is commonly used as base in throat paints because –

- Remain at the site of application for short duration
- Less viscous
- Remain at the site of application for longer duration
- Bitter in taste.

l) Which of the following is not an advantage of Plastic as a packaging material?

- Light in weight
- Poor conductor of heat
- Permeable to water vapor
- No flakes formation.

m) IVth edition of I.P. published in

n) Define controlled drug delivery system.

o) Which of the following tablet is used to prepare solution?

- Sublingual tablet
- Film coated tablet
- Implantation tablet
- Hypodermic tablet

p) As per “Darcy’s law”, K stands for –

- Pressure coefficient
- Filtration coefficient
- Area coefficient
- Permeability coefficient.

q) Enlist two benefits of Novel drug delivery system.

r) Why tablets are coated, Give any two reasons.

s) Which of the following chemical is used as lubricant in tablet?

- Sucrose
- Magnesium stearate
- Mucilage of tragacanth
- Cyclamate.

t) What happens if RBC's are suspended in hypotonic solution?
