



Paper id: 252121

Printed Page: 1 of 1
Subject Code: BP304T

Roll No:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

BPHARM
(SEM III) THEORY EXAMINATION 2024-25
PHARMACEUTICAL ENGINEERING

TIME: 3 HRS**M.MARKS: 75****Note:** 1. Attempt all Sections. If require any missing data; then choose suitably.**SECTION A****1. Attempt all questions in brief.****10 x 2 = 20**

a.	Define Reynold's number and its Significance.
b.	Why there is a need for size separation?
c.	Name any four equipments used for heat transfer.
d.	How is distillation differing from evaporation?
e.	Mention equipment suitable for semisolid mixing.
f.	Compare freeze drying and spray drying.
g.	What is Darcy's law? Give its significance.
h.	Give ideal characteristics of Filter Media.
i.	Define corrosion. Give the composition and uses of steel.
j.	Advantages and limitations of plastics.

SECTION B**2. Attempt any two parts of the following:****2 x 10 = 20**

a.	Classify evaporators. Discuss the principle, construction and working of a film evaporator.
b.	Explain the construction, working, advantages, disadvantages and uses of rotary filter.
c.	Give a neat sketch of two fluid manometer. Explain the construction and working principle of simple manometer.

SECTION C**3. Attempt any five parts of the following:****7 x 5 = 35**

a.	Classify mills. State why centrifugation is not desirable in ball mill?
b.	Discuss the principle and application of molecular distillation.
c.	Derive the equation of centrifugal effect. Discuss the working of top driven centrifuge with a suitable diagram.
d.	What is drying? Explain the rate of drying curve.
e.	Draw a neat labeled diagram of fluidized bed dryer (FBD) and discuss it in detail.
f.	What are the various factors affecting corrosion? How can corrosion be prevented?
g.	Briefly discuss the different types of materials of construction. Explain the properties of glass and its advantages and limitations.