Subject Code: MPH103T

PAPER ID-421228

Roll No: | | | | | | | | | | | | | |

MPHARM
(SEM I) THEORY EXAMINATION 2021-22
MODERN PHARMACEUTICS

Time: 3 Hours ***Total 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.	State the theories of dispersion.
b.	State the applications of factorial designs in pharmaceutical formulation.
c.	Mention the scope and merits of pharmaceutical validation.
d.	State the types of validation.
e.	Mention the objectives and policies of cGMP.
f.	What do you mean by 'total quality management'?
g.	Define the terms 'compression', 'compaction' and 'consolidation'.
h.	State the effects of friction during tablet compression.
i.	Mention the significance of conducting ANOVA test.
j.	What do you mean by Linearity Concept of Significance?

SECTION B

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

a.	Explain one major optimization technique used in pharmaceutical formulation and processing.
b.	Explain with a schematic diagram the physics of tablet compression.
c.	Write a brief note on Heckel plots and similarity factors.

SECTION C

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

a.	Describe the various methods of drug - excipient interactions.
b.	Explain the role of statistical design on optimization of pharmaceutical formulations.
c.	Write a brief note on validation and calibration of the Master Plan.
d.	Write down the various stages involved in inventory management and control.
e.	Explain with a schematic diagram the distribution of forces during tablet compression.
f.	Describe the compaction profiles of tablet manufacturing.
g.	Explain the principle and applications of Higuchi and Peppas plots.