M. PHARM
(SEM 1) THEORY EXAMINATION 2018-19
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.   Name the different possible methods of drug-excipient interactions.
b.   Define 'response surface method' and 'optimization'.
c.   Mention the scope and merits of pharmaceutical validation.
d.   What do you mean by validation and calibration of master plan?
e.   Mention the objectives of cGMP.
f.   State the different steps of materials management.
g.   Define the terms 'tablet compression' and 'consolidation'.
h.   With the help of a neat self-explanatory diagram, depict the distribution of forces during tablet compression.
i.   Define 'Heckel plots'.
j.   Write down the basic principle of ANOVA test.

SECTION B

2.   Attempt any *two*parts of the following: 2 x 10 = 20
a.   Write a brief note on pharmaceutical stability testing.
b.   Write a brief note on pharmaceutical inventory management and control.
c.   Describe the physics of tablet compression.

SECTION C

3.   Attempt any *five*parts of the following: 7 x 5 = 35
a.   Write a brief note on the theoretical aspects of SMEDDS.
b.   Describe the applications of factorial designs and contour designs in pharmaceutical formulations.
c.   Explain the ICH guidelines for calibration and validation of pharmaceutical equipments.
d.   Write brief notes on URS and PQ of facilities.
e.   Write a brief note on total quality management.
f.   Explain compaction profiles of tablets.
g.   Explain in brief the linearity concept of significance.