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Paper Id: | 5 | 5 | 1 | 6 | **Roll No.** | | | | | | | | | | |

M. PHARM
(SEM- I) THEORY EXAMINATION 2017-18
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) What are the objectives of preformulation studies?
b) Mention the need of formulation optimization.
c) Define validation.
d) What do you mean by concurrent validation?
e) What is the need of user specific requirements during instruments validation?
f) Define cGMP.
g) What is the importance of sales forecasting in production management?
h) What is the effect of friction on tablet compression?
i) Define level of significance.
j) Give the formula for calculation of standard deviation.

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SECTION B

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

a) Discuss in detail about various techniques to detect drug-excipients interactions.
b) Discuss in detail about various steps of equipment validation.
c) What is production management? Discuss Pharmaceutical production management in detail.

SECTION C

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

a) Describe various theories of emulsification.
b) Discuss the concept and parameters of formulation Optimization.
c) Write a note on manufacturing and evaluation of large volume parenteral.
d) What is factorial design? Explain with suitable example.
e) What are the ICH guidelines for calibration and validation of equipments?
f) Discuss total quality management.
g) Give a brief description of physics of tablet compression.
h) Discuss various consolidation parameters in brief.
i) Describe chi-square test with suitable example.

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