



DBY-MPH-103-T Seat No. _____

M. Pharmacy (Sem. I) (W.E.F. 2017) Examination

July - 2022

MPH-103T : Modern Pharmaceutics

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 75]

Instructions : (1) Figures to the right indicate marks.

(2) Draw neat & clean diagrams as required.

1 Answer the following questions. **10×2=20**

- (A) What are the requirements of preformulation?
- (B) Define factorial designs with example.
- (C) Give the merits of validation.
- (D) Define IQ and OQ.
- (E) Explain the purpose of sales forecasting.
- (F) Give the importance of cost control.
- (G) What is consolidation?
- (H) Explain Higuchi equation and plot.
- (I) Explain the standard deviation with its interpretation.
- (J) How ANOVA test is better than t-test ?

2 Answer any two out of the following. **10×2=20**

- (A) Discuss the objectives and policies of cGMP. Write a note on production management.
- (B) Explain the various optimization techniques in pharmaceutical formulation and processing.
- (C) Explain the effect of friction in tableting. Write a detailed note on compaction profiles.

3 Answer any 7 out of the following. $7 \times 5 = 35$

- (A) Write a detailed note of various theories of dispersion.
- (B) Give the importance of similarity and dissimilarity factors.
- (C) Discuss various types of validation.
- (D) Write a note on stability testing.
- (E) Explain Dissolution parameters.
- (F) Explain layout of building, services, equipments in production organization according to cGMP.
- (G) Explain the concept of Total Quality Management.
- (H) Write a note on distribution of forces.
- (I) Write a note on students t-test.
