

[Time: 3 Hours]

[Max. Marks: 75]

Modern Pharmaceutics**Q.P. CODE: 5129**

Your answers should be specific to the questions asked.

Draw neat, labeled diagrams wherever necessary.

LONG ESSAY (Answer any Three)**3 X 10 = 30 Marks**

1. Explain the different methods to study the drug excipients interactions.
2. Define optimization. Classify and explain factorial design.
3. Define cGMP. Explain the fundamental principles of cGMP.
4. Explain the pre-formulation studies of new drug formulated in to semi solid dosage form.

SHORT ESSAY (Answer any Nine)**9 X 5 = 45 Marks**

5. Quantification of compressibility and compactibility of powder.
6. Explain the formulation of self emulsifying drug delivery system.
7. Explain the statistical design optimization technique.
8. Explain theories of emulsifications.
9. Define validation. Classify, write important characteristics of validation as per ICH guidelines.
10. Explain f1 and f2 similarity factors, write its significances.
11. Explain the concept of TQM
12. Write the different inventory control techniques in Pharma industries.
13. Explain the solubility analysis of new drug molecule.
14. Explain the photo stability test with suitable example.

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