[Time: 3 Hours] [Max. Marks: 75]

Advanced Pharmaceutical Technology - II O.P. CODE: 5165

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

- Explain pharmacopoeial specifications, tests, standards for packing materials.
- 2. Define stability testing. Explain accelerated stability studies with one method of predicting shelf
- 3. Write in details about the USFDA's aspects in quality by design.
- 4. Discuss the methods and applications of optimization techniques in pharmaceuticals.

SHORT ESSAY (Answer any Nine)

9 X 5 = 45 Marks

- 5. State the packaging machines used filling liquids.
- 6. Discuss about modern pharmaceutical packing technology.
- 7. Write about the solid state drug stability testing.
- 8. State the packaging machines used filling of semisolid preparations.
- 9. Write note on label and types of labeling systems in pharmaceutical packing technology.
- Describe about the target product profiles and critical quality attributes in QbD. 10.
- 11. State the tools involved in pharmaceutical ObD.
- 12. Write short note on DOE in pharmaceutical optimization.
- an of p 13. State an example involved in factorial design of pharmaceutical optimization.
- Write short note on strategies to prolong the shelf life of pharmaceutical products. 14.

