[Time: 3 Hours] [Max. Marks: 100]

## Analytical Assurance (Revised Scheme 4)

Q.P. CODE: 9363

Your answers should be specific to the questions asked.

Draw neat, labeled diagrams wherever necessary.

## LONG ESSAY (Answer any TWO)

2 X 20 = 40 Marks

- What are Stability Indicating Assay Methods (SIAM)? Discuss the methodology for development and validation of SIAM.
- Write the production, chemistry and properties of Bacterial Pyrogens and Endotoxins.
- Explain in detail the various ICH guidelines for validation of LC method.

## SHORT ESSAY (Answer any FIVE)

5 X 10 = 50 Marks

- 4. Discuss the WHO guidelines for standardization of Herbal drugs.
- 5. Explain the different sources and types of impurities.
- Write the Principle, Methodology and Applications of ELISA.
- 7. Explain in detail the Qualification of UV-Visible spectrometer.
- 8. Discuss the statistical principles involved in bioassay.
- 9. Explain the USP Methodology for testing Preservative Efficacy.

SHORT NOTES 2 X 5 = 10 Marks

- GC-MS
- Applications of Near IR Spectroscopy

