

# Shree H. N. Shukla Institute of Pharmaceutical Education & Research

(Affiliated to Gujarat Technological University, Approved by PCI)

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# M.Pharm PHARMACEUTICAL QUALITY ASSURANCE SEMESTER: I

Subject Name: PHARMACEUTICAL QUALITY ASSURANCE

Subject Code: MQA105P

# **Teaching scheme and examination scheme:**

Teaching Scheme				Evaluation Scheme			
Theory	Tutorial	Practical	Total	Theory		Practical	
				External	Internal	External	Internal
0	0	12	6	0	0	100	50

## **List of Practicals:**

### PART A:

- 1. Analysis of pharmacopoeial compounds and their formulations by UV Vis spectrophotometer
- 2. Simultaneous estimation of multi component containing formulations by UV spectrophotometry
- 3. Experiments based on HPLC
- 4. Experiments based on Gas Chromatography
- 5. Estimation of riboflavin/quinine sulphate by fluorimetry
- 6. Estimation of sodium/potassium by flame photometry

# **PART B:**

- 1. Case studies on
- a. Total Quality Management
- b. Six Sigma
- c. Change Management/ Change control. Deviations,
- d. Out of Specifications (OOS)
- e. Out of Trend (OOT)
- f. Corrective & Preventive Actions (CAPA)
- g. Deviations
- 2. Development of Stability study protocol
- 3. Estimation of process capability
- 4. In process and finished product quality control tests for tablets, capsules,
- 5. parenterals and semisolid dosage forms.
- 6. Assay of raw materials as per official monographs
- 7. Testing of related and foreign substances in drugs and raw materials
- 8. To carry out pre formulation study for tablets, parenterals (2 experiment).
- 9. To study the effect of pH on the solubility of drugs, (1 experiment)
- 10. Quality control tests for Primary and secondary packaging materials
- 11. Accelerated stability studies (1 experiment)
- 12. Improved solubility of drugs using surfactant systems (1 experiment)
- 13. Improved solubility of drugs using co-solvency method (1 experiment)
- 14. Determination of Pka and Log p of drugs.