## **GUJARAT TECHNOLOGICAL UNIVERSITY**

## M.Pharm PHARMACEUTICAL QUALITY ASSURANCE SEMESTER: I

Subject Name: AUDITS AND REGULATORY COMPLIANCE

**Subject Code: MQA203T** 

**Scope:** This course deals with the understanding and process for auditing in pharmaceutical industries. This subject covers the methodology involved in the auditing process of different in pharmaceutical industries.

**Objectives**: Upon completion of this course the student should be able to

- 1. To understand the importance of auditing
- 2. To understand the methodology of auditing
- 3. To carry out the audit process
- 4. To prepare the auditing report
- 5. To prepare the check list for auditing

Sr No	Course Contents	Total Hrs
1	Introduction: Objectives, Management of audit, Responsibilities, Planning process, information gathering, administration, Classifications of deficiencies	12
2	Role of quality systems and audits in pharmaceutical manufacturing environment: cGMP Regulations, Quality assurance functions, Quality systems approach, Management responsibilities, Resource, Manufacturing operations, Evaluation activities, Transitioning to quality system approach, Audit checklist for drug industries	12
3	Auditing of vendors and production department: Bulk Pharmaceutical Chemicals and packaging material Vendor audit, Warehouse and weighing, Dry Production: Granulation, tableting, coating, capsules, sterile production and packaging	12
4	Auditing of Microbiological laboratory: Auditing the manufacturing process, Product and process information, General areas of interest in the building raw materials, Water, Packaging materials	12
5	Auditing of Quality Assurance and engineering department: Quality Assurance Maintenance, Critical systems: HVAC, Water, Water for Injection systems, ETP	12

## **REFERENCES:**

- 1. Compliance auditing for Pharmaceutical Manufacturers. Karen Ginsbury and Gil Bismuth, Interpharm/CRC, Boca Raton, London New York, Washington D.C
- 2. Pharmaceutical Manufacturing Handbook, Regulations and Quality by Shayne Cox Gad. Wiley-Interscience, A John Wiley and sons, Inc., Publications
- 3. Handbook of microbiological Quality control. Rosamund M.Baird, Norman A.Hodges, Stephen P. Denyar. CRC Press. 2000
- 4. Laboratory auditing for quality and regulatory compliance. Donald C. Singer, Raluca-loana Stefan, Jacobus F. Van Staden. Taylor and Francis (2005).