# Raghavendra Institute of Pharmaceutical Education and Research (Autonomous)

# Accorded Under 2(F) & 12(B) Of UGC, NBA & NAAC "B" Accredited Anantapuramu, Andhra Pradesh-515721

## M. Pharmacy – Department of Pharmaceutical Analysis

**Quality policy:** Dedicated to strive for excellence in pharmaceutical analytical techniques and quality assurance area through continuous improvement in line with international federal regulations".

### **Programme Outcomes:**

- 1. Design and conduct analytical experiments for effective quality control system.
- 2. Utilize tools and skills to perform analytical research work using modern techniques.
- 3. Use knowledge and abilities to solve problem in pharmaceutical quality system.
- 4. Engage in innovative activities through creative thinking to envision better ways of accomplishing professional goals.
- 5. Exhibit behaviour and moral values that required for a pharmaceutical analyst at the satisfaction of corporate industry, other health care providers.
- 6. Demonstrate the ability to work in team by combining individual strength, team dynamics and emotional intelligence.
- 7. Compare different techniques/technologies to assess and evaluate dosage forms for better quality.
- 8. Identify strategies for effective communication system to undertake multidisciplinary area at the interface of analytical method development.

#### **Course outcomes:**

Name of the course: Modern pharmaceutical analytical techniques (MPA 101T)

- 1. The analysis of various drugs in single and combination dosage forms
- 2. Theoretical and practical skills of the instruments

# Name of the course: Advanced pharmaceutical analysis (MPA 102T)

- 1. Appropriate analytical skills required for the analytical method development.
- 2. Principles of various reagents used in functional group analysis that renders necessary support in research methodology and demonstrates its application in the practical related problems.
- 3. Analysis of impurities in drugs, residual solvents and stability studies of drugs and biological products.

#### Name of the course: Pharmaceutical validation (MPA 103T)

- 1. Explain the aspect of validation
- 2. Carryout validation of manufacturing processes
- 3. Apply the knowledge of validation to instruments and equipments
- 4. Validate the manufacturing facilities

### Name of the course: Food analysis (MPA 104T)

- 1. Food constituents
- 2. Food additives
- 3. Finished food products
- 4. Pesticides in food
- 5. And also student shall have the knowledge on food regulations and legislations

#### Name of the course: Advanced instrumental analysis (MPA 201T)

- 1. interpretation of the NMR, Mass and IR spectra of various organic compounds
- 2. theoretical and practical skills of the hyphenated instruments
- 3. identification of organic compounds

# Name of the course: Modern bio-analytical techniques (MPA 202T)

- 1. Extraction of drugs from biological samples
- 2. Separation of drugs from biological samples using different techniques
- 3. Guidelines for BA/BE studies.

#### Name of the course: Quality control and quality assurance (MPA 203T)

- 1. the cGMP aspects in a pharmaceutical industry
- 2. to appreciate the importance of documentation
- 3. to understand the scope of quality certifications applicable to Pharmaceutical industries
- 4. to understand the responsibilities of QA & QC departments

#### Name of the course: Herbal and cosmetic analysis (MPA 204T)

- 1. Determination of herbal remedies and regulations
- 2. Analysis of natural products and monographs
- 3. Determination of Herbal drug-drug interaction
- 4. Principles of performance evaluation of cosmetic products.