



GANDHI INSTITUTE OF TECHNOLOGY AND MANAGEMENT (GITAM)

(Declared as Deemed to be University u/s 3 of UGC Act, 1956)

Visakhapatnam | Hyderabad | Bengaluru

Accredited by **NAAC** with **A++** Grade

Website: www.gitam.edu

GITAM SCHOOL OF PHARMACY

PhD in Pharmacy: Pharmaceutical Analysis

PhD Entrance Test Syllabus - 2024-2025

PhD in Pharmacy: Pharmaceutical Analysis

1. Chromatographic methods of pharmaceutical analysis: Principles of separation, theory, instrumentation and applications of Column chromatography, Paper chromatography, Ion Exchange chromatography, TLC and HPTLC, HPLC, Gas chromatography

2. Instrumental methods of pharmaceutical analysis:

Theoretical aspects, instrumentation, elements of interpretation of spectra, and applications of Ultraviolet and Visible spectrophotometry, Spectrofluorimetry, Infrared spectrophotometry, Nuclear Magnetic Resonance spectroscopy, Mass Spectrometry, Flame Photometry, Atomic Absorption Spectroscopy, X-ray Diffraction Analysis, Thermal methods (TGA, DSC, DTA)

3. Quality assurance: GLP, ISO 9000, TQM, Validation, quality audit, quality of equipment, validation of equipment and validation of analytical procedures.