

S.N.D.T. WOMEN'S
UNIVERSITY



**Syllabus for
Ph.D. Programme**

Subject: Analytical Chemistry

Course II Advanced Analytical Chemistry

100 Marks (4 credits)

Analytical Techniques : Any four*

Principle, Instrumentation, Applications, Analysis and Interpretation of the data for the following techniques: Its implication in research field with reference write review article with minimum one oral/poster presentation in conference/symposium/seminar at state /national level.

UV-Visible Spectro-photometry, IR (FTIR), MS, Thermal Methods(TGA, DTA, DSC, EGA) Fluorimetry, NMR, Atomic Emission Spectroscopy, Advanced Chromatographic Methods (HPLC, HPTLC).

(*Above topics shall be prepared in consultation with research guide)

References :

1. Thermal Methods of Analysis, P.J. Haines, Blackie Academic and Professional, London, 1995.
2. Introduction to Instrumental Analysis- R. D. Braun, Pharmamed Press, Indian Reprint (2006)
3. Fundamentals of Analytical Chemistry- Skoog D.A., West D.M., Holler and Crouch Publication- Cengage Learning, Wiley-VCH Weinheim-2011.
4. Analytical Chemistry 7th Edition, Gary D. Christian, Purnendu Dasgupta, Kevin Schug, Publication - John Wiley, 2013.
5. Principles of Instrumental Analysis 5th Edition, Douglas A. Skoog, F. James Holler and Stanley R. Crouch, Publisher - Cengage Learning; 6th Edition (December 6, 2006)
6. Modern Instrumental Analysis 1st Edition, Ahuja & Jespersen, Imprint - Elsevier Science, 2006

