A N N A M A L A I U N I V E R S I T Y

(Accredited with 'A^{+}' Grade by NAAC)

CENTRE FOR DISTANCE AND ONLINE EDUCATION

Annamalainagar – 608 002

Semester Pattern: 2025-26

Instructions to submit Second Semester Assignments

1. Following the introduction of semester pattern, it becomes **mandatory for candidates to submit assignment for each course.**
2. Assignment topics for each course will be displayed in the A.U, CDOE website (**www.audde.in**).
3. Each assignment contains 5 questions and the candidate should answer all the 5 questions. Candidates should submit assignments for each course separately. (5 Questions x 5 Marks =25 marks).
4. Answer for each assignment question should not exceed 4 pages. Use only A4 sheets and write on one side only. **Write your Enrollment number on the top right corner** of all the pages.
5. Add a template / content page and provide details regarding your Name, Enrollment number, Programme name, Code and Assignment topic. Assignments without template / content page will not be accepted.
6. Assignments should be handwritten only. Typed or printed or photocopied assignments will not be accepted.
7. **Send all Second semester assignments in one envelope**. Send your assignments by Registered Post to The Director, Centre for Distance and Online Education, Annamalai University, Annamalai Nagar – 608002.
8. Write in bold letters, "ASSIGNMENTS – SECOND SEMESTER" along with PROGRAMME NAME on the top of the envelope.
9. Assignments received after the **last date with late fee** will not be evaluated.

Date to Remember

Last date to submit Second semester assignments : 01.11.2025
Last date with late fee of Rs.300 (three hundred only) : 15.11.2025

DIRECTOR
CDOE

CENTRE FOR DISTANCE AND ONLINE EDUCATION
S020 - M.Sc. CHEMISTRY
FIRST YEAR – II SEMESTER (2025-2026)
ASSIGNMENT QUESTION

020E1210: ORGANIC CHEMISTRY –II

1) Discuss the general mechanistic treatment to nucleophilic molecular rearrangement.
2) Give a brief note on cis and trans decalins.
3) Explain the preparation methods of α-amino acids.
4) Elaborate the preparation methods and physical properties of Indole.
5) Analyze the structural differences between cholesterol and cholic acid and discuss their biological applications.

020E1220: INORGANIC CHEMISTRY –II

1) What are the factors influencing the stability of complexes and explain it with examples.
2) Discuss the main assumptions of valence Bond Theory.
3) Explain the mechanism of base hydrolysis of Co (III) complexes.
4) Give a brief account on "Electron transfer reaction" in inorganic compounds.
5) Discuss the photo-oxidation and photo-reduction reactions.

020E1230: PHYSICAL CHEMISTRY –II

1) Explain the primary and secondary salt effects.
2) Give a brief account of unimolecular theory with special reference to Lindemann-Hinshelwood theory.
3) Discuss elaborately the Schrödinger time independent wave equation and its applications.
4) Explain the asymmetry wave function using slater determination.
5) Discuss the postulates of HMO theory.