


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 [JANUARY SESSION]

Instructions to submit Third 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 Third 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 – THIRD 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 Third semester assignments : 15.04.2026

Last date with late fee of Rs.300 (three hundred only) : 30.04.2026

Dr. S.ARULSELVI
Director

M.Sc. Chemistry (CDOE) – Assignment topics

II Year - Third Semester

020E2310 – Organic Chemistry- III

1. Explain the retrosynthetic approach for the synthesis of camphor.
2. Discuss the uses of the following reagents in organic synthesis. (i) Lithium diisopropylamide (ii) Lithium dimethyl cuprate
3. Illustrate the Wolff–Kishner reduction with mechanism
4. How will you choose a protecting group for a specific functional group in a multi-step synthesis? Provide any two examples.
5. Explain the synthesis and applications of conducting polymers such as polyacetylene and polyaniline.

020E2320 – Inorganic Chemistry- III

1. Discuss the structures of Sodium Chloride and Zinc Sulphide (Wurtzite).
2. Illustrate the structure, preparation and classification of higher boranes.
3. Write a short note on Kinetics of phase transitions.
4. Explain the inert gas rule (18-electron rule) with any two examples and discuss their limitations.
5. Discuss the following
 - (i) Alkene hydrogenation
 - (ii) Hydroformulation reaction

020E2330 – Physical Chemistry- III

1. Derive DHO equation.
2. Discuss the ION-SOLVENT interactions (The Bohr Model)
3. Narrate the applications of Electrogravimetry, Coulometric, Amperometric and Potentiometry methods.
4. What are the difference between Raman and IR spectra and mention the principle of Raman Spectroscopy.
5. Discuss the following terms:
 - (i) Electronic Spectroscopy
 - (ii) Calculation of λ_{\max} value for α , β -unsaturated carbonyl compounds and Dienes systems.