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 First 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 First 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 – FIRST 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 First 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

I Year - First Semester

020E1110 – Organic Chemistry- I

1. Discuss the unique structural features of azulene and annulene
2. Illustrate the S_N1 and S_N2 mechanisms with example
3. How does the Bredt's rule applies to the stability of cyclic systems during the elimination reactions?
4. Explain how atropisomerism manifests in biphenyls and allenes
5. Discuss the application of photochemical reactions in organic synthesis.

020E1120 – Inorganic Chemistry- I

1. Explain the neutron activation analysis method with example.
2. How the lanthanides are extracted and separated from their ores?
3. Illustrate the active and passive ion transport mechanism across the cell membrane.
4. Discuss the different types of nitrogen fixation.
5. Describe about the experimental procedures involved for the synthesis of $MgAl_2O_4$ and Zeolite.

020E1130 – Physical Chemistry- I

1. Derive thermodynamic equation of state I and II.
2. What are the methods to determine the fugacity of gas?
3. Derive the Maxwell Boltzmann Fermi-Dirac and Bose-Einstein statistics
4. Explain the Radiolysis of water
5. How will you synthesize carbon nanotubes (CNT)? and mention its application.

020E1140 – Applied Chemistry

1. Discuss the types of Plastics.
2. How will you protect the metals from corrosion?
3. Discuss the types of Water pollution.
4. Clarify and discuss the various types of fuels.
5. Describe the Methods of synthesis and discuss the properties of ammonia and urea.