

Assignment Submission Instructions for Thrid Semester
Students of the Academic Year 2026-27 (July Session)

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 : 15.10.2026

Last date with late fee of Rs.300 (three hundred only) : 30.10.2026

Dr. S.ARULSELVI
Director

CDOE (chemistry wing)-Assignments
IIIst semester

Course code: 020E2310- S310 (Organic chemistry) - III

1. Illustrate logical and illogical disconnections of olefins and ketones.
2. Compare and contrast the COREY-KIM and KMnO₄ oxidation methods in organic synthesis
3. Elaborate on general methods used to study organic reaction mechanism
4. Describe various asymmetric synthesis strategies using chiral reagents and catalysts.
5. Explain the synthesis, structure, stereochemistry, and applications of the Nylon -6,6 and polystyrene .

Course code: 020E2320 - S320 (Inorganic chemistry) - III

1. Classify the various types of crystal defects and their impact on properties.
2. Describe the structure and bonding of higher boranes and carboranes.
3. Explain the thermodynamic and kinetic aspects of phase transition including Buerger's and Ubbelohde's classifications
4. Discuss the 18 electron rule, its limitations and examples
5. Elucidate the Ziegler-natta polymerisation process, providing a comprehensive account of its catalytic mechanism.

Course code: 020E2330 - S330 (physical chemistry) - III

1. Explain the structure of the electrical double layer using Stern's model.
2. Schematically illustrate and describe the construction and working principle of hydrogen -oxygen fuel cells.
3. Discuss in detail the principles, instrumentation and applications of polarography and anodic stripping voltammetry.
4. Explain the origin and interpretation of electronic spectra in diatomic molecules using potential energy diagrams.
5. Apply Woodward-fieser rules to calculate λ_{max} for α,β - unsaturated carbonyl compounds