


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: 2024-25

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 : 01.11.2024
Last date with late fee of Rs.300 (three hundred only) : 15.11.2024

Dr. T.SRINIVASAN
Director

S 020 - M.SC CHEMISTRY - CDOE

FIRST YEAR

(II SEMESTER)

ASSIGNMENT TOPICS

[CDOE Students enrolled during the year 2024 (January 2024-batch)]

020E1210 - ORGANIC CHEMISTRY - II

1. Explain briefly about cope and claisen rearrangements.
2. Discuss the conformation and stereochemistry of cis and trans-decalin and methyl decalin.
3. Elaborate the methods used for the synthesis of methyl orange and congo red dyes.
4. Give a brief note on synthesis and reactions of benzothiophene.
5. Discuss briefly the structural elucidation and synthesis of chlorophenicol.

020E1220 - INORGANIC CHEMISTRY - II

1. Discuss the following (a) symbiosis, (b) Theoretical basis of hardness and softness.
2. Explain the valence band theory with examples.
3. Give a note on Acid hydrolysis mechanism.
4. Summarize the theories of trans effect (polarization theory and π -bonding theory).
5. Explain photo-oxidation and photo-reduction reactions.

020E1230 - PHYSICAL CHEMISTRY - II

1. Discuss briefly about the influence of ionic strength (primary salt effect).
2. Explain the following (a) Hammett equation (b) Taft equation.
3. Briefly explain the application of schrodinger wave equation for hydrogen atom.
4. Explain the asymmetry wave function using slater determination.
5. Discuss the simple Huckel theory of the linear conjugated systems using ethylene and butadiene as examples.