

  
**ANNAMALAI UNIVERSITY**

(Accredited with 'A+' Grade by NAAC)

CENTRE FOR DISTANCE AND ONLINE EDUCATION

Annamalainagar – 608 002

**Semester Pattern: 2025-26 [JANUARY SESSION]**

**Instructions to submit Fourth 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 Fourth 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 – FOURTH 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 Fourth semester assignments : 15.04.2026  
Last date with late fee of Rs.300 (three hundred only) : 30.04.2026

**Dr. S.ARULSELVI**  
**Director**

## Assignment Topics (2025 -2026)

**PROGRAMME: M.Sc., Microbiology (Two years)**

**YEAR: II / SEM : IV**

### **792E2410 : Bioprocess Technology**

1. Explain the types of fermentation.
2. Elaborate notes on isolation and preservation of industrially important microorganisms.
3. Explain the fermentor design and its body construction.
4. Elaborate notes on purification by different methods in the downstream process.
5. Discuss the microbial production of alcoholic beverages.

### **792E2420 : Biostatistics and Bioinformatics**

1. Explain the collection of data.
2. Elaborate notes on correlation and its types.
3. Explain the sequence databases.
4. Discuss the tools used in bioinformatics.
5. List out the applications of computers and the internet for research.

### **III) OPTIONAL PAPER**

#### **792E2430 (1) : Environmental Microbiology (or)**

1. Explain the food chain, food web, and ecological pyramids.
2. Elaborate notes on eutrophication.
3. Discuss the assessment of air quality.
4. Elaborate notes on waste type and characterization.
5. Explain the phytoremediation and bioleaching.

#### **792E2430 (2) : Techniques in Microbiology (or)**

1. Discuss the biosafety levels.
2. Explain calorimetry.
3. Elaborate notes on the principles and types of centrifuges.
4. List out the principles, types, and applications of paper and thin-layer chromatography.
5. Elaborate notes on principles and types of electrophoresis.

#### **792E2430 (3) : Microbial inoculants & Mushroom Technology**

1. Explain the fungal biofertilizers.
2. Discuss the free-living forms.
3. Elaborate notes on Actinomycetes biofertilizers.
4. List out the distribution and production of mushrooms in various countries.
5. Discuss the cultivation of the button mushroom.

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