ANNAMALAI UNIVERSITY

(Accredited with 'A+" Grade by NAAC)

Directorate of Distance Education

<u>S010 B.Sc. Mathematics -   Fourth Semester -   2022-2023</u>

<u>Instructions for submission of Assignment for Fourth Semester:</u>

1. Following the introduction of semester pattern, it becomes mandatory for candidates to submit assignments for all the courses of the Programme. Assignment topics for all the courses are intimated to candidates through website (www.audde.in).
2. Assignments for each course carry 25 marks. Candidates should submit assignments for each Course / subject separately. (5 Questions x 5 Marks = 25 marks).
3. The answers for each Course / subject should not exceed 20 pages.
4. Assignments should be in the own handwritten of the student concerned and not type-written or printed or photocopied.
5. Assignments should be written on A4 Paper on one side only. Write your Enrollment number on the top right corner of all the pages.
6. Add a template page and provide details regarding your Name, Enrollment number, Programme name, Course code and Title. Assignments without duly filled in template will not be accepted.
7. Assignments should be handwritten only. Typed or Printed or Photocopied assignments will not be accepted.
8. All assignments (with enrolment number marked on the top right hand corner on all pages) should be put in an envelope with superscription *"B.Sc. Mathematics – Assignments – IV Semester"*
9. **Send all assignments of the Fourth semester in one envelope** and send to ***<u>The Director, Directorate of Distance Education, Annamalai University, Annamalai Nagar – 608 002, Tamil Nadu</u>*** by Registered Post

<u>Dates to Remember</u>

Last date for submission of Assignments of Fourth Semester   : 15.04.2023

Last Date for submission with late fee ` 300/-   : 29.04.2023

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Dr. R. SINGARAVEL
Director

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B.Sc. Mathematics
Assignment Questions

PART-I TAMIL-IV

2410 –தாள்- தமிழ் இலக்கிய வரலாறு -I

1. முச்சங்கங்கள் பற்றியக் கருத்துக்களை விளக்கு
2. பத்துப்பாட்டில் அமைந்த ஆற்றுப்படை நூல்கள் பற்றி எடுத்துரைக்க
3. சங்க இலக்கியத்தின் தனித்தன்மையைச் சுட்டுக
4. சிறுகதையின் தோற்றம் வளர்ச்சி குறித்து கட்டுரைக்க
5. சமணர்கள் தமிழுக்குச் செய்த தொண்டினை மதிப்பிடுக

PART-II ENGLISH-IV

2420 - ENGLISH THROUGH LITERATURE IV: FICTION

Write in about 250 words on the following topics:

1. The Character of Pip
2. The Novels of Charles Dickens
3. The theme of Revenge in Great Expectations
4. Critical Appreciation of "Possession"
5. Common Errors in the use of English

Part-III

010E2430- Classical Algebra and Trigonometry

1. Show that $\log\sqrt{12} = 1 + \left(\frac{1}{2} + \frac{1}{3}\right)\frac{1}{4} + \left(\frac{1}{4} + \frac{1}{5}\right)\frac{1}{4^2} + \left(\frac{1}{6} + \frac{1}{7}\right)\frac{1}{4^3} + \cdots$

2. Examine if the following equations are consistent and if, so solve $x + y + z = 6, x + 2y - 2z = -3, 2x + 3y + z = 11$.

3. Solve $x^4 - 10x^3 + 26x^2 - 10x + 1 = 0$.

4. Prove that $\sin^5\theta \cos^2\theta = \frac{1}{2^6}(\sin 7\theta - 3\sin 5\theta + \sin 3\theta + 5\sin\theta)$.

5. If $\tan(A + iB) = x + iy$. Prove that
   (i) $x^2 + y^2 + 2x\cot 2A = 1$ and
   (ii) $x^2 + y^2 - 2y\cot h\, 2B + 1 = 0$

010E2440- Internet and Java Programming

1. Write about nested if control statements with suitable example

2. Describe the creation and maintance of website

3. Specify the importance of exception handling

4. Explain the concepts of Multithreading with suitable example.

5. Write short notes on AWT controls.