## Dear Students,

The prerequisite for this semester's Engineering Mathematics syllabus relies heavily on your prior knowledge of differentiation and integration techniques.

# **Assignment Requirements:**

You are required to solve 25 questions on differentiation and integration, focusing on the following areas:

## **Differentiation:**

- 1. Solve **10 problems** on product rule, quotient rule, and chain rule involving trigonometric functions and algebraic expressions.
- 2. Solve **5 problems** on implicit differentiation.

# **Integration:**

- 1. Solve **5 problems** involving trigonometric functions and algebraic expressions.
- 2. Solve 5 problems on integration by parts using the DI technique specifically.

Please note, there are numerous resources online and on YouTube for these topics. Each student must solve unique problems; solving identical problems will result in an automatic score of zero. This assignment will contribute to your continuous assessment (CA) and to the foundational differentiation and integration test.

#### **Submission Guidelines:**

- Complete all work neatly on A4-sized paper.
- Ensure **your name**, **registration number**, **and department** are clearly stated on the assignment.

## **Additional Instructions:**

You are expected to thoroughly learn and understand these techniques. A test of 10 questions on the topics above will be conducted on the first day of class.

# **Submission Deadline:**

Wednesday at 1:30 PM. No proxy submissions will be accepted.

Kindest regards,

Leonard Yommie Sesay.