

# **DIGITAL DESIGN & COMPUTER ARCHITECTURE (23EC1202)**

## **Active Learning Methods (ALM's) - CO-1**

### **Instructions:**

1. Each CO consists of two ALMs (ALM-1&2).
2. Each ALM is evaluated for 12.5 marks, contributing to a total of 25 marks for each CO ( $12.5 + 12.5 = 25$  marks).
3. We kindly request that faculty members take on the responsibility of conducting of ALM's in their allotted Lab/Theory hours and then promptly notifying the students to upload the soft copies (PDF File) of these assessments into LMS system.
4. Please make sure to complete these tasks on time and follow the guidelines provided above.

**\*\*\* Note: Please guide the students to merge the scanned PDFs of ALM-1 and ALM-2 and upload them to the LMS as a single file.**

### **ALM-1: (Last Date of Submission is 03.02.2025) – One minute Paper**

1. Explore the applications of digital systems.

### **Guidelines:**

- a) The faculty can act as an observer and divide the class into groups of 8-10 members.
- b) Assign each batch of students with different area of application.
- c) Allow five minutes of time for preparation.
- d) Ask them to record their final conclusions on a paper and upload the scanned copy of the same into LMS.
- e) Conduct the activity in the Theory/lab hours before the given deadline.

### **ALM-2: (Last Date of Submission is 03.02.2025) – Sketch & Drawing**

2. Design the function  $F(A,B,C)=\sum m(1,4,5,7)$  using 4X1 MUX considering “A” as Input line and B, C as selection lines.
3. Design a Full Adder circuit utilizing an appropriate decoder and OR gates.

### **Guidelines:**

- a) Ask students to take out a blank sheet of paper, pose the question.
- b) Give them **five minutes to each question** to respond and they need to record their responses on paper.
- c) Ask the students to upload the scanned copy of the same into LMS.
- d) Conduct the activity in the Theory/lab hours before the given deadline.