Name :
Roll No:

MAR ATHANASIUS COLLEGE OF ENGINEERING, KOTHAMANGALAM – 686 666

DEPARTMENT OF MECHANICAL ENGINEERING
FIRST SESSIONAL EXAMINATION AUGUST 2026
S5 MA
B24ME3T05 INDUSTRIAL & SYSTEMS ENGINEERING

Time – 1.5 Hours **Max: 40 Marks**

PART-A (4 x 3 = 12 Marks)
Answer All Questions

1. Define Industrial Engineering and state its primary objectives. **[CO1]**
2. What are the roles of line supervisors in production? **[CO1]**
3. State the advantages of fixed-position layout. **[CO1]**
4. What are human factors in design? **[CO1]**

PART-B
Answer all questions

5. Discuss the different types of production systems (job, batch, mass and flow production) with merits, demerits and applications. **[CO 1] 14 Marks**

6. Explain the objectives of product development. Discuss the quality and cost considerations involved in product design.

[CO 1] 14 Marks

VISION
Mentoring to Ensure Excellence

MISSION
- To facilitate comprehensive and integrated devlopement of students by providing quality education that encourages sustainable practices
- To mould disciplined and socailly committed engineers capable of assuming professional leadership upholding national integrity