MAR ATHANASIUS COLLEGE OF ENGINEERING, KOTHAMANGALAM – 686 666.

(GOVERNMENT AIDED AUTONOMOUS ENGINEERING COLLEGE)

DEPARTMENT OF MECHANICAL ENGINEERING

SECOND SESSIONAL EXAMINATION, APRIL 2025

S2 EEE A BATCH

B24ES1T05A - BASIC CIVIL AND MECHANICAL ENGINEERING (A)

Time –45 min **Max: 20 Marks**

PART-A

Answer All Questions.

1.	What is slip in a belt drive? Why does it occur?	**CO 5**	**4 Marks**
2.	Describe the layout of a hydel power plant with a brief explanation of each component.	**CO 6**	**4 Marks**

PART - B

Answer All Questions.

3a.	Classify and explain different types of gears.	**CO 5**	**4 Marks**
3b.	Derive the expression for calculating the length of belt for a cross belt drive.	**CO 5**	**8 Marks**

Vision

Mentoring to Ensure Excellence

Mission

To facilitate comprehensive and integrated development of students by providing quality education that encourages sustainable practices.

To mould disciplined and socially committed engineers capable of assuming professional leadership upholding national integrity.