MAR ATHANASIUS COLLEGE OF ENGINEERING, KOTHAMANGALAM – 686 666.
(GOVERNMENT AIDED AUTONOMOUS ENGINEERING COLLEGE)

DEPARTMENT OF MECHANICAL ENGINEERING

SECOND SESSIONAL EXAMINATION, APRIL 2026
S2 CIVIL A & B BATCHES

B24ES1T04: BASIC MECHANICAL ENGINEERING

Time –45 Minutes **Max: 20 Marks**

PART-A

Answer All Questions.

1	Discuss the different types of belts used for power transmission with figures.	**CO5**	**4 Marks**
2	Discuss the use of idlers and take-up pulley for a belt conveyor with figure.	**CO5**	**4 Marks**

PART - B

3	a. Write the advantages of gear drive.	**CO5**	**4 Marks**
	b. Discuss with figure: (i) Helical Gear (ii) Bevel Gear (iii) Worm Gear. Write down one application for each gear. When do we choose a herringbone over helical gear?	**CO5**	**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