MAR ATHANASIUS COLLEGE OF ENGINEERING, KOTHAMANGALAM

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

First Sessional Examination August 2026

EET 463- Illumination Technology

(S7_EA & EB)

Max. Marks 40 Time: 1 Hour 30 min

Answer all questions from Part A and Part B

PART A (5X3=15 Marks)

1. What are the different types of lighting schemes based on distribution of light?
2. State any four advantages of good illumination scheme.
3. A point light source of known intensity is placed at a given distance from a surface inclined at an angle. Apply the Inverse Square Law and Lambert's Cosine Law to determine the illumination, explaining each law.
4. Recall the features of a luxmeter.

PART B (2 X14=28 marks)

5. a. Summarize the features of LED and Mercury Vapour Lamp. (8 marks)
   b. Explain the factors affecting the lighting. (6 marks)
6. a. Four lamps 15m apart from each other, are arranged to illuminate a corridor. Each lamp is mounted at a height of 8m above the floor level. Each lamp gives 500 Cd in all directions below the horizontal. Find the illumination at the: (a) midway between second and third lamp, (b) under each lamp. (8 marks)
   b. Explain how mean spherical candle power of a symmetrical source of a light can be found out from the polar curve by means of a Rousseau's construction. (6 marks)

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