



MACHAKOS UNIVERSITY

University Examinations for 2016/2017

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

SECOND YEAR SECOND SEMESTER EXAMINATION FOR CERTIFICATE IN
ELECTRICAL AND ELECTRONICS ENGINEERING

EPC 218: ESTIMATING AND TENDERING

DATE: 2/6/2017

TIME: 2:00 – 4:00 PM

INSTRUCTIONS

This paper consists of FIVE Questions. Answer Question ONE and ANY OTHER TWO questions.

SECTION A (COMPULSORY) (30 MARKS)

1. a) State and explain THREE sources of Law (9 marks)
- b) State and Explain any FIVE essentials of a valid contract. (15 marks)
- b) State and explain the cosine law of illumination (6 marks)

SECTION B: ANSWER ANY TWO QUESTIONS

2. a) A corridor is to be lit by four lamps spaced 10 m and suspended at a height of 5m above the centre line of floor. If each lamp gives 200cd in all directions below the horizontal, find the illumination at the point on the floor mid way between the 2nd and 3rd lamp
- b) State and explain ANY FIVE differences between CRIME and CIVIL WRONG. (10 marks)

- c) Define the following terms
- i) Tender
 - ii) Tender document (4 marks)
3. a) Define the following types of law
- i) Physical
 - ii) Social
 - iii) Moral
 - iv) State laws (8 marks)
- b) Explain four types of tenders indicating their advantages and disadvantages (12)
4. State and Explain ANY FIVE types of contract. (20 marks)
5. a) State two factors one may consider when deciding whether to buy an engineering Equipment. (2 marks)
- b) State and Explain Any THREE sources of law. (6 marks)
- c) With reference to TORT Outline Four elements necessary in determining the liability for negligence (12 marks)