



MACHAKOS UNIVERSITY COLLEGE

(A Constituent College of Kenyatta University)
University Examinations for 2014/2015 Academic Year

SCHOOL OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

**Second Semester Examination for Bachelor of Science in
Civil Engineering**

ECU 108-INTRODUCTION TO PROFESIONAL ENGINEERING

Date : 9/4/2015

Time: 11:00am – 1:00pm

Instructions

Answer Question One and Any Other Two

QUESTION ONE

Q1 (a). Briefly describe the purpose of the following professional organisation:-

- (i). IEK
- (ii). EBK
- (iii). ISO
- (iv). FIDIC
- (v). Institution of Civil Engineers (10 marks)

(b) Outline **Two** branches of civil engineering and **Two** types of engineering other than civil engineering (10marks)

(c). Discuss the civil engineer and the society (10 marks)

QUESTION TWO

Q.2 (a).Outline the criteria upon which the engineer decides to use machine or a plant (2 marks)

- (b)Describe **Two** earth moving machines (8 marks)
- (c)Outline Five types of construction (10marks)

QUESTION THREE

Q3 (a) Discuss five Things that necessitate teaching engineers to be taught management.

(7 ½ marks)

(b).Briefly describe the three levels management (12 ½ marks)

QUESTION FOUR

Q4.(a). Discuss (i) Integrity

(ii)Gentrification (6 marks)

(b) Briefly describe phases of construction from initiation of a project to tendering (12 marks)

(c).Differentiate civil engineering profession from mechanical profession (2 marks)