



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF BUILDING & CIVIL ENGINEERING

UNIVERSITY EXAMINATION FOR:

DEGREE

EAR 4106 : BUILDING TECHNOLOGY I

END OF SEMESTER EXAMINATION

SERIES: DECEMBER 2016

TIME: 2 HOURS

DATE: Pick Date Sep 2017

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

- Pocket calculator

This paper consists of **FIVE** questions. Attempt question ONE (Compulsory) and any other TWO questions. Question one carries 30 marks and the rest carries equal marks (20marks)

Do not write on the question paper.

Mobile phones are not allowed in the examination room.

Question ONE

- a. Name at least three types of foundations and explain when you would recommend the use of each. **(30 marks)**

Question TWO

- a. On a site where construction of a building is to be carried on, why is it necessary to conduct a geotechnical survey? **(10marks)**
- b. What is vegetable soil on a construction site and why must it be removed before construction starts. **(10marks)**

Question THREE

- a. What ingredients are used in preparation of concrete and explain what is meant by 1:2:4 mix. **(10 marks)**
- b. Why wouldn't you recommend the use of coral stones as load bearing material in construction of a three storey block of apartments. **(10marks)**

Question FOUR

- a. Name at least two factors you would consider when selecting a construction site and give reasons for those factors. **(10 marks)**
- b. Name at least three types of hardwood timber **(10marks)**

Question FIVE

- a. In a construction site what is the role of each of the following:
- | | |
|--------------------------|-----------------|
| Main contractor | (8marks) |
| Electrical subcontractor | (6marks) |
| Plumbing subcontractor | (6marks) |