



**TECHNICAL UNIVERSITY OF MOMBASA**

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**FACULTY OF ENGINEERING AND TECHNOLOGY IN CONJUNCTION WITH KENYA  
INSTITUTE OF HIGHWAYS AND BUILDING TECHNOLOGY (KIHBT)**

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

UNIVERSITY EXAMINATION FOR:

HIGHER DIPLOMA IN BUILDING ECONOMICS

EBE 3109: SITE ORGANIZATION AND ADMINISTRATION I A

END OF SEMESTER EXAMINATIONS  
SERIES: OCTOBER 2016

**TIME: 2 HOURS**

**Instruction to candidates**

You should have the following for this examination

- Answer booklet
- Pocket Calculator

This paper consist of five question.

Answer any three questions of the five questions

All question carry equal marks

Maximum marks for each part of a question are as shown

This paper consist of two printed pages

### QUESTION 1.

a) List five roles of each of the following parties as pertains to site safety, health and welfare:-

- (i) Safety officer/manager
  - (ii) Site supervisors
  - (iii) Safety committees
  - (iv) Safety representatives
- (20 marks)

### QUESTION 2

a) Highlight the Three main objectives of an effective site safety management system (3 marks)

b) Briefly describe the term “site tidiness” citing any five steps followed in achieving it (7 marks)

c) Outline Five causes of accidents resulting from excavation work (5 marks)

d) By use of a sketches show the safety precautions suitable to prevent the causes of accidents mentioned in (c) above. (5 marks)

### QUESTION 3.

a) Outline the precautions that should be taken before anyone is allowed in a deep trench or an excavation (7marks)

b) Highlight five safety precautions a worker is supposed to take to avoid danger/accident from underground services (5 marks)

c) Outline Eightways in which a tower scaffold may cause accidents when in use (8 marks)

### QUESTION 4

a) Defferentiate the following terms:-

- i) Independent scaffold
  - ii)Putlog scaffold
- (2 marks)

b) Briefly explain four factors that/which affect safe use of a crane on site. (8 marks)

c) Highlight Ten basic considerations made when selecting, using and maintaining portable hand tools in a construction site (10 marks)

**QUESTION 5.**

- a) Discuss five vital considerations which act as a general guide for a standard sanitary facility installation in a construction site (10 marks)
- b) When an accident occurs on a construction site and someone gets injured, how would you help him/her? (4 marks)
- c) Briefly explain any Three safety precautions used in preventing collapse of deep excavations in a new building project (6 marks)