

# **TECHNICAL UNIVERSITY OF MOMBASA**

# FACULTY OF ENGINEERING AND TECHNOLOGY

#### DEPARTMENT OF BUILDING & CIVIL ENGINEERING

## **UNIVERSITY EXAMINATION FOR:**

### BACHELOR OF TECHNOLOGY IN CIVIL ENGINEERING

#### (INSTITUTION BASED EXAMINATION)

# TMC 4211 : OCCUPATIONAL SAFETY AND HEALTH

#### ENGINEERING

#### END OF SEMESTER EXAMINATION

### **SERIES:** MARCH 2017

# TIME: 2 HOURS

#### **Instructions to Candidates**

You should have the following for this examination *-Answer Booklet, examination pass and student ID* This paper consists of five questions. Attempt question ONE (Compulsory) and any other TWO questions. **Do not write on the question paper.** 

#### **QUESTION ONE (COMPULSORY)**

- i) Define ergonomics. (5 Marks)
- ii) Outline the meaning of occupational safety and health. (5 Marks)
- iii) What is risk transfer? (5 Marks)
- iv) Discuss the procedure of risk assessment in the position of the workplace hazards and workplace accidents. (15 Marks)

#### Attempt any TWO questions QUESTION TWO

- a) Discuss the main dilemma in occupational safety and health. (12 Marks)
- b) Describe the outcome of the risk management process. (8 Marks)



#### **QUESTION THREE**

- a) What is safety management system in OHS? (10 Marks)
- b) Define safety management systems. (5 marks)
- c) Outline the five steps to be followed in risk management. (5 Marks)

#### **QUESTION FOUR**

- a) Outline the three imperatives for adopting a safety management system for a business. (3 Marks)
- b) Describe the implied moral obligation placed on an employer. (8 Marks)
- c) Describe the legislative requirements that are defined in just about every jurisdiction on how this is achieved. (9 Marks)

#### **QUESTION FIVE**

- a) What does P-D-C and ACT stand for? (5 Marks)
- b) A systems approach was introduced in the OHS ACT 2007 with demands. Enumerate them. (7 marks)
- c) A new authority to be managed by a national commission on occupational safety and health is expected to make some achievements. Enumerate them. (8 Marks)