



# **TECHNICAL UNIVERSITY OF MOMBASA**

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

FACULTY OF ENGINEERING AND TECHNOLOGY

## **UNIVERSITY EXAMINATION FOR:**

DIPLOMA IN BUILDING AND CIVIL ENGINEERING

EBC 2101: WORKSHOP TECHNOLOGY AND PRACTICE 1

## **END OF SEMESTER EXAMINATIONS**

**Series:** APRIL 2019

**Time 2 hours**

### **Instructions to candidates**

You should have the following for this examination

- Answer booklet
- Examination pass
- Student ID

This paper consists FIVE questions. Answer THREE questions

**DO NOT WRITE ON THE QUESTION PAPER**

Paper 2

**QUESTION ONE**

a) State any FOUR main causes of accidents in workshops (6 marks)

b) Name TWO tools used for the following tasks

i. Marking

ii. Measuring length

iii. Measuring angles

iv. Cutting pipes

(4marks)

c) With the aid of sketches, illustrate FOUR types of pipe joints (methods of joining pipes)

(10marks)

**QUESTION TWO**

a) Sketch and label the parts of an indirect cold-water supply system (8marks)

b) State TWO disadvantages of indirect cold-water supply system (4marks)

c) Explain the importance of traps in sanitary appliances (4marks)

d) Sketch any TWO ordinary traps used in sanitary appliances (4marks)

**QUESTION THREE**

a) Explain the importance of workman compensation act (6 marks)

b) Sketch and state the use of any FOUR pipe fittings (10marks)

c) Differentiate separate drainage system from combined drainage system (4 marks)

#### **QUESTION FOUR**

- a) With the aid of a sketch describe the indirect hot water system (8 marks)
- b) Outline FOUR ways in which water seals in traps can be lost (8 marks)
- c) Differentiate welding from brazing (4 marks)

#### **QUESTION FIVE**

- a) Explain the procedure of bending steel pipe using hydraulic machine (8 marks)
- b) Outline ONE method of joining PVC pipes (4 marks)
- c) State FOUR situations that require the use of a manhole in a drainage system (8 marks)