



TECHNICAL UNIVERSITY OF MOMBASA  
**Faculty of Engineering &  
Technology**

DEPARTMENT OF BUILDING & CIVIL ENGINEERING  
CERTIFICATE IN BUILDING & CIVIL ENGINEERING (CBCE)

EBC 1101: WORKSHOP TECHNOLOGY I

END OF SEMESTER EXAMINATION

**SERIES:** DECEMBER 2014  
**TIME ALLOWED:** 2 HOURS

**Instructions to Candidates:**

You should have the following for this examination

- *Answer Booklet*

This paper consists of **FIVE** questions. Answer any **THREE** questions of the **FIVE** questions

All questions carry equal marks

Maximum marks for each part of a question are as shown

Use neat, large and well labeled diagrams where required  
This paper consists of **TWO** printed pages

### Question One

- a) State the use of each of the following tools:  
(i) Reamer  
(ii) Diestock  
(iii) Mallet  
(iv) Hacksaw  
(v) Mandril **(10 marks)**
- b) Name FOUR examples of power tools used in plumbing. **(4 marks)**
- c) List typical examples of defects that are usually found on the following tools:  
(i) Cold chisel  
(ii) Hammer  
(iii) File **(6 marks)**

### Question Two

- a) List the names of FIVE joints which may be used in jointing pipes. **(10 marks)**
- b) Sketch a mallet and state where it may be used. Name THREE types in common use. **(10 marks)**

### Question Three

- a) Briefly describe FOUR sources of drinking water supply in common use. **(12 marks)**
- b) Name THREE types of taps used in plumbing and state where each may be used. **(8 marks)**

### Question Four

- a) State FOUR uses of sheet metal in a building. **(8 marks)**
- b) Name FOUR water heating appliances in a building. **(12 marks)**

### Question Five

Sketch the following fittings used in pipe work:

- (i) Return Bend  
(ii) Reducing socket  
(iii) Hexagonal nipple  
(iv) Male and female elbow  
(v) Unequal tee **(20 marks)**

