



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: AUGUST 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

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

Briefly describe FOUR sources of drinking water supply in common use. **(20 marks)**

### Question Two

- a) State the uses of the following tools:
- (i) Hacksaw
  - (ii) Reamer
  - (iii) Diestock
  - (iv) Pipe wrench
  - (v) Wheel cutter
- (10 marks)**
- b) (i) State FOUR areas where sheet metal may be used in a building. **(8 marks)**
- (ii) Name TWO types of joints that may be used in pipework **(2 marks)**

### Question Three

- a) Sketch the following fittings in pipe work:
- (i) Return bend
  - (ii) Female and male elbow
  - (iii) Hexagonal nipple
  - (iv) Reducing socket
- (10 marks)**
- b) Sketch a mallet and state TWO areas where it may be used. Name THREE types in common use. **(10 marks)**

### Question Four

- a) Name FIVE types of materials which may be used in the manufacture of pipes. **(10 marks)**
- b) Give the names of FIVE joints usually used in jointing pipes **(10 marks)**

### Question Five

- a) State where each of the following would be used: **(12 marks)**
- (i) Bid tap
  - (ii) Pillar tap
  - (iii) Gate valve
- b) Give TWO examples of the following metals:
- (i) Ferrous
  - (ii) Non ferrous
- (8 marks)**