



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

DEPARTMENT OF BUILDING & CIVIL ENGINEERING

DIPLOMA IN BUILDING & CIVIL ENGINEERING

EBC 2101: WORKSHOP TECHNOLOGY & PRACTICE I

**END OF SEMESTER EXAMINATION**

**SERIES: APRIL 2015**

**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

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

Sketch the following tools and state their uses:

- (i) Hacksaw
  - (ii) Rasp
  - (iii) File
  - (iv) Mallet
  - (v) Reamer
- (20 marks)**

### Question Two

- a) Name FOUR sources of water in common use **(8 marks)**
- b) Name TWO methods of water supply in domestic buildings **(2 marks)**
- c) Sketch TWO types of hacksaws in common use **(10 marks)**

### Question Three

- a) Sketch the following pipe fittings:
  - (i) Hexagonal nipple
  - (ii) Return bend
  - (iii) Female and male elbow

**(6 marks)**
- b) State FOUR areas where sheet metal may be used in a building **(8 marks)**
- c) (i) Name THREE types of materials used in the manufacture of pipes **(3 marks)**  
(ii) Name THREE types of joints used in pipework **(3 marks)**

### Question Four

- a) List the names of FIVE fittings that may be used in pipework **(10 marks)**
- b) State the use of each of the following tools used in plumbing:
  - (i) Mallet
  - (ii) Diestock
  - (iii) Pipe wrench
  - (iv) Reamer
  - (v) Auger

**(10 marks)**

### Question Five

- a) List typical examples of defects that are usually found on the following tools: **(6 marks)**
  - (i) File
  - (ii) Hammer
  - (iii) Cold chisel

- b) State FOUR examples of plumbing tools generally classified as power tools (4 marks)**
- c) Name FIVE bench equipments and state the use of each (10 marks)**