



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

DEPARTMENT OF BUILDING & CIVIL ENGINEERING
CERTIFICATE IN BUILDING & CIVIL ENGINEERING (CT I 12S)

EBC 1127: WORKSHOP TECHNOLOGY

SPECIAL/SUPPLEMENTARY EXAMINATION
SERIES: FEBRUARY 2013
TIME: 2 HOURS

Instructions to Candidates:

You should have the following for this examination

- *Answer Booklet*
- *Scientific Calculator*

This paper consists of **FIVE** questions.

Answer question **ONE (COMPULSORY)** and any other **TWO** questions

Maximum marks for each part of a question are as shown

This paper consists of **THREE** printed pages

Question One (Compulsory)

- a) (i) Show by sketches, the difference between a hacksaw and a handsaw. **(6 marks)**
(ii) Briefly state the difference between the terms carpentry and joinery. **(4 marks)**
- b) (i) With the aid of neat sketches, show the following tools; a wooded float and a steel float stating the use of each. **(6 marks)**
(ii) Define the terms brickwork and masonry. **(4 marks)**
- c) List the names of **FIVE** fittings that may be used in pipe work **(10 marks)**

Question Two

- a) Briefly describe **TWO** types of hand fire extinguishers that may be used in a workshop. **(6 marks)**
- b) Sketch a beveledged chisel and label all its parts. **(4 marks)**
- c) Name **FIVE** bench equipments and state the use of each. **(10 marks)**

Question Three

- a) Name **FIVE** types of tools used in masonry stating the use of each. **(10 marks)**
- b) With the aid of sketches, show the following bonds in **FOUR** courses:
(i) English
(ii) Flemish **(10 marks)**

Question Four

- a) State the use of each of the following tools:
(i) Reamer
(ii) Diestock
(iii) Mallet
(iv) Pipewrench
(v) Hacksaw
(vi) Mandril **(6 marks)**
- b) State **FOUR** examples of plumbing tools classified as power tools. **(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)**
- d) With the aid of neat sketches, differentiate between a reamer and a mandril. **(4 marks)**

Question Five

a) Describe the following scaffolding fittings:

- (i) Swivel coupler
- (ii) Double coupler
- (iii) Base plate
- (iv) Reveal pin
- (v) Putlog coupler

(10 marks)

b) With the aid of sketches, show **FIVE** types of widening joints used in woodwork.

(10 marks)