



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

DEPARTMENT OF BUILDING & CIVIL ENGINEERING

DIPLOMA IN BUILDING & CIVIL ENGINEERING

EBC 2104: WORKSHOP TECHNOLOGY & PRACTICE I

SPECIAL/SUPPLEMENTARY EXAMINATION

SERIES: JUNE 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 **THREE** printed pages

Question One

- a) State the difference between a tool and equipment **(4 marks)**
- b) Name TWO types of equipments that you may find in a carpentry and Joinery workshop stating the use of each. **(4 marks)**
- c) Name THREE woodwork planes and THREE masonry leveling tools commonly used. **(12 marks)**

Question Two

- a) With the aid of sketches, show the following joints: **(10 marks)**
- (i) Tee halving
 - (ii) Corner halving
 - (iii) Cross halving
 - (iv) Dovetail tee halving
 - (v) Bareface dovetail tee halving
- b) State the uses of the following chisels: **(8 marks)**
- (i) Bevel edged
 - (ii) Firmer
 - (iii) Paring
 - (iv) Mortise
- c) Name TWO types of gauges used in wood work **(2 marks)**

Question Three

- a) State the differences between masonry and brickwork **(2 marks)**
- b) With the aid of sketches, show the following bonds in FOUR courses: **(12 marks)**
- (i) English
 - (ii) Flemish
 - (iii) Stretcher
 - (iv) Header
- c) Sketch and state the uses of a plumb rule and Bat and Closer Gauge **(6 marks)**

Question Four

- a) State the uses of the following fittings use in scaffolding: **(12 marks)**
- (i) Putlog coupler
 - (ii) Swivel coupler
 - (iii) Reveal pin
 - (iv) Base plate
- b) With the aid of sketches, differentiate between a putlog and independent scaffold **(12 marks)**

Question Five

- a) Name FOUR wood adhesives in common use. **(8 marks)**
- b) Name FIVE types of cramping tools used in woodwork stating where each may be used **(10 marks)**
- c) State the difference between a bevel and a mitre square **(2 marks)**