



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF BUILDING & CIVIL ENGINEERING

UNIVERSITY EXAMINATION FOR:

DIPLOMA IN BUILDING AND CIVIL ENGINEERING

(INSTITUTION BASED EXAMINATION)

EBC 2201: WORKSHOP TECHNOLOGY AND PRACTICE II

SERIES: MARCH 2017

TIME: 2 HOURS

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

-Pocket calculator

This paper consists of **FIVE** questions. Attempt any **THREE** questions

Do not write on the question paper

Mobile Phones are NOT allowed inside the examination room

QUESTION ONE

- (a) Name five tools and equipment commonly used in sharpening? (5 Marks)
- (b) Outline how a hand scraper is sharpened (4 Marks)
- (c) Outline the process of whetting the plane iron (11 Marks)

QUESTION TWO

- (a) Explain what an adhesive or a glue is (2 Marks)

- (b) Explain the following terms as used in glue works;
- i. Shelf life
 - ii. Pot life
 - iii. Assemble time
- (6 Marks)

- (c) Explain how the following glues are prepared
- i. Animal glue
 - ii. Casein glue
 - iii. Starch glue
- (12 Marks)

QUESTION THREE

- (a) Define scaffolding (2 Marks)
- (b) Sketch label the following types of scaffolding
- i. Dependent scaffolding
 - ii. Independent scaffolding
- (16 Marks)
- (c) Outline the use of scaffolding in construction (2 Marks)

QUESTION FOUR

- (a) Outline five precaution to be observed when using power tools (5 Marks)
- (b) Accident in working place are caused explain. (5 Marks)
- (c) Outline ten precaution to be observed so as to avoid accidents. (10 Marks)

QUESTION FIVE

- (a) Give six classes of carpentry hand tools as per their uses (6 Marks)
- (b) Outline the three miscellaneous tools (3 Marks)
- (c) Sketch the appropriate joints used when making
- i. Door frame (4 Marks)
 - ii. Roof truss (4 Marks)
- (d) Explain what are fixing in wood work and give two types of fixings (3 Marks)