



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF ENGINEERING AND TECHNOLOGY

UNIVERSITY EXAMINATIONS FOR THE DEGREE IN SCIENCE IN CONSTRUCTION  
MANAGEMENT

2<sup>ND</sup> YEAR 2<sup>ND</sup> SEMESTER 2022 ACADEMIC YEAR

CENTRE: MAIN CAMPUS

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COURSE CODE: TCB 1209

COURSE TITLE: WORKSHOP TECHNOLOGY I

EXAM VENUE: STREAM: BSc CONSTRUCTION MGT

DATE: ../12/2022 EXAM SESSION:

DURATION: 2 HOURS

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### Instructions

1. Answer question 1 (Compulsory) and ANY other two questions
2. Candidates are advised not to write on question paper
3. Candidates must hand in their answer booklets to the invigilator while in the examination room

## QUESTION ONE

- a) Explain any SIX safety requirements in a workshop containing both hand and power tools  
(6 Marks)
- b) Define the following classes of fires and explain their extinguishing agent
- i. Class A
  - ii. Class B
  - iii. Class C
- (6 Marks)
- c) In reference to setting out exercise, sketch a detailed corner profile  
(8 Marks)

## QUESTION TWO

- a) Draw two consecutive courses for corner joints of one brick wall with the following bonds:
- i. Flemish and
  - ii. English bond .
- ( 10 Marks)
- b) With the aid neat sketches, distinguish between Rubble stone walling and Ashler stone walling.  
( 5 Marks)

## QUESTION THREE

- a) State any FIVE properties of good mortar  
(5 Marks)
- b) Distinguish between pointing and jointing and state ONE advantage of each.  
(4 Marks)
- c) State any THREE plastering failures and explain their causes.  
( 6 Marks)

## QUESTION FOUR

- a) Using a free hand sketch, draw the following joints
- i. Stopped housing joint
  - ii. Tongued and grooved joint
- ( 6 Marks)
- b) State the functions of the following hand tools used in general carpentry work
- i. Sash Cramp
  - ii. Cross-pein hammer
  - iii. Rasps
  - iv. Hand drill
- (6 Marks)
- c) State any THREE advantages of screws over nails in wood assembly.  
( 3 Marks)