



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF ENGINEERING AND TECHNOLOGY

**UNIVERSITY EXAMINATION FOR THE DEGREE IN SCIENCE IN
CONSTRUCTION MANAGEMENT**

2ND YEAR 2ND SEMESTER 2024/2025 ACADEMIC YEAR

CENTRE: MAIN CAMPUS

COURSE CODE: TCB 1210

COURSE TITLE: WORKSHOP TECHNOLOGY II

EXAM VENUE:

STREAM: BSc. CONSTRUCTION MGT

DATE: 14/04/2025

EXAM SESSION: 15-17.00 PM

DURATION: 2 HOURS

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 the origin of the term plumbing (2 Marks)
- b) List any FOUR basic plumbing tools and their functions (4 Marks)
- c) Explain pressure classification of PVC pipes (4 Marks)
- d) Distinguish between welding and soldering (6 Marks)
- e) List any FOUR types of pipe fittings used in water supply systems (4 Marks)

QUESTION TWO

- a) List any FOUR types of pipes used in water supply systems and state any ONE advantage for each type listed. (8 Marks)
- b) With the aid of a neat sketch, distinguish between direct and indirect cold water supply system (7 Marks)

QUESTION THREE

- a) State any FIVE safety procedures in arc welding. (5 Marks)
- b) With the aid of a neat arc welding circuit, explain the principle of arc welding (10 Marks)

QUESTION FOUR

- a) State any FIVE safety procedures in Oxy-Acetylene gas welding. (5 Marks)
- b) Explain how you can set the following flame types in Oxy-Acetylene gas welding
 - i. Neutral flame
 - ii. Carburizing
 - iii. Oxidizing.(6 Marks)
- c) With the aid of neat sketches show any TWO types of welded joints (4 Marks)

QUESTION FIVE

- a) With the aid of a neat sketch distinguish between direct and indirect domestic hot water supply system (10 Marks)
- b) State FIVE common defects in hot water systems. (5 Marks)

