



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

DEPARTMENT OF BUILDING & CIVIL ENGINEERING
CERTIFICATE IN BUILDING & CIVIL ENGINEERING (CTI 13S)

EBC 1101: WORKSHOP TECHNOLOGY & PRACTICE I

SPECIAL/SUPPLEMENTARY EXAMINATION

SERIES: JULY 2014

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

Maximum marks for each part of a question are as shown
This paper consists of **TWO** printed pages

Question One

- a) State the use of the following tools:
(i) Pipewrench
(ii) Hacksaw
(iii) Diestock
(iv) Mandril
(v) Reamer **(10 marks)**
- b) Name FIVE types of materials used in the manufacture of pipes. **(10 marks)**

Question Two

- a) Name FOUR machines that are used in plumbing works. **(12 marks)**
- b) State FOUR sources of drinking water. **(8 marks)**

Question Three

- a) State FOUR areas where sheet metal may be used in a building. **(8 marks)**
- b) Name FOUR sources of energy used for heating water in a building. **(12 marks)**

Question Four

- a) State ONE situation where each of the following type of taps may be used:
(i) Bid tap
(ii) Pillar tap
(iii) Gale valve **(12 marks)**
- b) Name TWO ferrous and non-ferrous metals used in plumbing. **(8 marks)**

Question Five

- a) Name FOUR types of joints used in pipework. **(8 marks)**
- b) Sketch the following pipe fittings:
(i) Hexagonal nipple
(ii) Return bend
(iii) Reduced socket
(iv) Unequal tee **(12 marks)**