

# TECHNICAL UNIVERSITY OF MOMBASA

# Faculty of Engineering & Technology

DEPARTMENT OF BUILDING & CIVIL ENGINEERING

DIPLOMA IN BUILDING & CIVIL ENGINEERING (DBCE)

EBC 2101: WORKSHOP TECHNOLOGY I

END OF SEMESTER EXAMINATION SERIES: APRIL 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 of the **FIVE** questions All questions carry equal marks

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

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- **a)** State the uses of the following tools:
  - (i) Reamer
  - (ii) Hacksaw
  - (iii) Diestock
  - **(iv)** Pipe wrench

(v) Wheel cutter (10 marks)

**b)** (i) State FOUR areas where sheet metal may be used in building.

(8 marks)

(ii) Name TWO types of joints that may be used in steel pipework.

(2 marks)

# **Question Two**

a) Name FIVE types of materials used in the manufacture of pipes.

(10 marks)

- b) With the aid of sketches, show the following types of clips used when fixing pipes.
  - (i) Single spacing clip
  - (ii) Double spacing clip

(10 marks)

# **Question Three**

**a)** Sketch the following fittings used in pipework.

(6 marks)

- (i) Return bend
- (ii) Female and male elbow
- (iii) Hexagonal nipple

**b)** State the disadvantages of cutting pipes with a wheel cutter.

(4 marks)

c) Sketch a mallet and state TWO areas where it may be used. Name THREE types in common use.

(10 marks)

# **Question Four**

State THREE methods that may be used when jointing pipes and name any THREE supporting fittings.

(20 marks)

# **Question Five**

Briefly describe THREE sources of drinking water supply in common use.

(20 marks)