



# TECHNICAL UNIVERSITY OF MOMBASA

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FACULTY OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF MECHANICAL & AUTOMOTIVE ENGINEERING

**UNIVERSITY EXAMINATION FOR:**

DIPLOMA IN MECHANICAL ENGINEERING

EPL2304 : PLANT MAINTENANCE & WORKS SERVICES DRAWING II

END OF SEMESTER EXAMINATION

**SERIES:** APRIL 2016

**TIME:** 2 HOURS

**DATE:** Pick Date Apr 2016

## Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of Choose No questions. Attempt Choose instruction.

**Do not write on the question paper.**

**PAPER ONE**

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## Question ONE

(a) Draw a two-Line ring main diagram of compressed air supply system to following pneumatic units.

[9Marks]

(b) Draw an electrical wiring circuit for a domestic consumer premises.

[6Marks]

(c) Draw a typical layout of a double acting, two stage reciprocating compressor.

[5Marks]

## Question TWO

(a) Draw Lay out plan for a sugar manufacturing process and indicate all the services for the process .

### **Question THREE**

- (a) Draw a hydraulic system circuit using

### **Question FOUR**

- (a) Draw a hydraulic system circuit using graphical symbols representation to incorporate the following.

[5Marks]

- (b) Draw a one-line diagram of a sodium Zeolite water treatment system.

[5Marks]

### **Question FIVE**

- (a) Draw a one –line diagram of Hot and Cold water system for a Multi storey building.

[10Marks]

- (a) Draw a plant layout for cement manufacturing using the WET process to include:

- All the services
- Product line
- Colour coding

[20 marks]