



# TECHNICAL UNIVERSITY OF MOMBASA

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FACULTY OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF MEDICAL ENGINEERING

**UNIVERSITY EXAMINATION FOR:**

DIPLOMA IN MEDICAL ENGINEERING (DME 115 Y1 S2)

**EHL 2106 : REFRIGERATION AND AIR CONDITIONING II**

END OF SEMESTER EXAMINATION

**SERIES: APRIL 2016**

**TIME: 2 HOURS**

**DATE:** Pick Date Select Month Pick Year

## Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **FOUR** questions. Attempt any **THREE** questions.

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

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## QUESTION ONE

(a) Tabulate to show any FIVE uses of refrigeration and air conditioning in different fields

(10Marks)

(b) Aided by sketches describe a humidification and dehumidification in an air conditioning unit.

(10Marks)

## QUESTION TWO

(a). List 6 sources of noise in an air conditioning unit.

(6Marks)

(b). Describe 5 methods of noise reduction in an air conditioning unit.

(10Marks)

(c). Sketch and label a Plenum unit.

(4Marks)

### QUESTION THREE

(a). List 7 types of Filters in an air conditioning unit.

(7Marks)

(b). Describe the operation of any THREE of these Filters (in (a) above).

(9Marks)

(c) Define the following terminologies:

i) Refrigerant Recovery

ii) Refrigerant Recycling

(4Marks)

### QUESTION FOUR

Explain the procedure to **Recharge either** a refrigeration or an air conditioning unit after repair.

(20Marks)

### QUESTION FIVE

(a) List any 6 types of air conditioning units

(6Marks)

(b) Describe any FOUR types of “Airs” in air conditioning unit.

(8Marks)

(c) Sketch to show THREE flame types of an Oxy-Acetylene torch.

(6Marks)