



TECHNICAL UNIVERSITY OF MOMBASA

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.

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)