



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF MEDICAL ENGINEERING

UNIVERSITY EXAMINATION FOR:

DIPLOMA IN MEDICAL ENGINEERING (DME 315 Y2 S2)

ECL 2203: OPERATING THEATRE EQUIPMENT

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) With the aid of a sketch describe the operating principle of an automatic change-over system of an operating theatre lamp.
(10Marks)
- (b) Using formulae where applicable explain the **THREE** factors that contribute to Surgical Cut.
(10Marks)

QUESTION TWO

Write a standard laboratory practical report you carried out during the course of your study on Operating Theatre Equipment on anti-static operating theatre floor

(20Marks)

QUESTION THREE

- (a) Sketch and label a Hartley spark gap of generator
(8Marks)
- (b) List the SIX minimum members of a surgical team
(6Marks)
- (c) Describe with the aid of sketches any TWO neutral plate configurations of RF surgical machine
(6Marks)

QUESTION FOUR

- (a) List any TEN special features that an operating theatre table has over and above a dental chair
(10Marks)
- (b) Describe any FIVE possible causes of surgical burns
(10Marks)

QUESTION FIVE

- (a) Write on operating theatre safety report under following topics
 - i) Staff
 - ii) Macro shock
 - iii) Micro shock

(12Marks)
- (b) Describe any FOUR factors that influence the coagulation K layer thickness
(8Marks)