



# TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF PURE & APPLIED SCIENCES

**UNIVERSITY EXAMINATION FOR:**

**DIPLOMA IN ANALYTICAL CHEMISTRY**

**DAC 15S**

ACH 2105 : LABORATORY SAFETY AND ETHICS

**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 **FIVE** questions. Attempt question ONE (Compulsory) and any other TWO questions.

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

## Question ONE

- |  |         |
|--|---------|
| (a) State four precautions that should be taken against explosions   | 4 Marks |
| (b) State five roles of a safety officer in an organization  | 5 Marks |
| (c) State two hazards associated with volatile liquids and three precautions that should be taken against these hazards. | 5 Marks |
| (d) List four purposes using dressings on wounds   | 4 Marks |
| (e) Distinguish carcinogen from cryogen and give three examples for each   | 8 Marks |
| (f) Define the expression fire triangle and state its significance   | 4 Marks |

## Question TWO

- |  |         |
|--|---------|
| (a) State eight factors that influence selection of material for floors of buildings | 8 Marks |
| (b) List seven general precautions that can be taken against chemical hazards.       | 7 Marks |

### Question THREE

- (a) Name three classes of chemical substances that attack glass and give two examples for each. 9 Marks
- (b) Name the four parts covered by the scope of first aid 4 Marks
- (c) Define the following
- i. Emetic 1 Mark
  - ii. Antidote 1 Mark

### Question FOUR

- (a) (i) Draw a labeled diagram of the apparatus used in vacuum filtration 6 Marks
- (ii) State the function of each of any five components of this apparatus 5 Marks
- (b) Identify two components of the apparatus that are not shown in your diagram 2 Marks
- (c) Name two other uses of vacuum 2 Marks

### Question FIVE

- (a) List five purposes of using bandages in first aid 5 Marks
- (b) Name five liquids / solutions stocked in first aid box and one use for each. 10 Marks