



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