



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF PURE & APPLIED SCIENCES

UNIVERSITY EXAMINATION FOR:

DIPLOMA IN ANALYTICAL CHEMISTRY

DAC 14S

ACH 2211: PHOTOGRAPHY AND CRYOGENIC TECHNIQUES

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) Outline the procedures of carrying out film development in a darkroom. (12 marks)
- (b) Explain the three chief enemies of a camera. (9 marks)
- (c) Describe three types of developing papers. (9 marks)

Question TWO

- (a) Explain the following type of lenses used in photography.
 - (i) Meniscus lens. (5 marks)
 - (ii) Achromatic lens. (3 marks)
 - (iii) Wide angle lens. (4 marks)
- (b) Explain two ways of correcting coma lens defect. (3 marks)

Question THREE

- (a) State eight points of how one can take care of a lens. (8marks)
- (b) (i) Define cryogenic liquids. (3marks)
- (ii) List four inert gases that can form cryogenic liquids. (4marks)

Question FOUR

Discuss the following groups of hazards of cryogenic liquids.

- (i) Extreme cold. (5marks)
- (ii) Asphyxiation. (6marks)
- (iii) Toxicity. (4marks)

Question FIVE

Discuss briefly the following types of film.

- (i) Panchromatic (8marks)
- (ii) Hyper panchromatic (7marks)