



MURANG'A UNIVERSITY COLLEGE
(A constituent college of Jomo Kenyatta University of Agriculture and Technology)

SCHOOL OF PURE AND APPLIED SCIENCES

UNIVERSITY EXAMINATIONS 2015/2016 ACADEMIC YEAR
END OF TERM EXAMINATIONS
AS/BIO/CHEM/13D
UNIT CODE ASB/ASC 1206: LABORATORY PRACTICE

STAGE TWO EXAMS

DATE: 16TH NOVEMBER 2015

Time: 2Hours

ANSWER ALL QUESTIONS IN BOTH SECTIONS

SECTION A

1. Outline the preparation of 500cm³ 100ppm Calcium Carbonate with respect to Calcium
Ca=40, C=12, O=16 (4marks)
2. Outline the preparation of 2M HNO₃ using the following information %purity =70, S.G
=1.42, N=14, O=16, H=1 (4marks)
- 3a). Define the term first aid (1mark)
- b) State the aims of first aid (3marks)
4. Differentiate the **TWO** types of glasses used to make various glass wares (4marks)
5. i) Define sterilization (1mark)
- ii) Describe the following types of stores a) main b) central c) dispensing (3 marks)
6. Give **FOUR** classes of wounds and their causes (4marks)
7. State **FOUR** sources of laboratory water (4marks)

8. Differentiate between the **TWO** construction patterns of laboratory benches (4marks)

9. Describe how a very thin capillary tube can be made from a glass tube of a larger diameter (4marks)

10. Outline the preparation of 125cm³ of 0.25M Sodium Carbonate
Na=23, C=12, O=16 (4marks)

SECTION B

11. a) Outline the first aid treatment for each of the following

i) A student who has swallowed about 5cm³ of bench Nitric acids (4marks)

ii) An alkali splash in the eye (4marks)

b) Differentiate between the following

i) A burn and scald

ii) An aperients and an emetic (4marks)

c) Explain the use of the following store documents

i) Debit note

ii) Credit note

iii) Invoice

iv) Inventory (4 marks)

12a) Describe the cleaning of glass wares with a stubborn stain (4mark)

b) Describe the main stages involved in water treatment for drinking and other domestic uses (10marks)

c) Describe the process involved in joining two glass tubes of unequal diameters (4marks)

d) Explain **FOUR** disposal methods used to dispose an accident victims (2marks)

13(a) Explain the preparation of treatment of water through the:

i) De ionization process

ii) Ion exchange resin process (10 marks)

c) Explain **FOUR** common water pollutants (4 marks)

d) Describe the purchasing process of a centrifuge machine to be used in the laboratory

(6 marks)