



(Knowledge for Development)

KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS 2016/2017 ACADEMIC YEAR

SECOND YEAR SECOND SEMESTER SPECIAL/SUPPLEMENTARY EXAMINATION

FOR THE DEGREE OF BACHELOR OF SCIENCE IN BIOLOGY

COURSE CODE: SBL 221
COURSE TITLE: BASICS OF LABORATORY PRACTICE AND SAFETY

DATE: 20/09/2017

TIME: 11:30 – 1:30 P.M

INSTRUCTIONS TO CANDIDATES

Answer Question one (1) and any other two (2) Questions. Question one is compulsory and carries 30 marks, the other Questions carry 20 marks each.

TIME: 3 Hours

This paper consists of 2 printed pages. Please Turn Over



KIBU observes ZERO tolerance to examination cheating

- Q1 (i) Define the following :
- a) laboratory
 - b) laboratory quality
 - c) Quality management system
 - d) Quality control
 - e) Quality assurance (5 marks)
- (ii) State and explain the importance of laboratories. (5 marks)
- (iii) Distinguish between
- a. Cabinet and suit laboratory
 - b. Open and closed laboratories
 - c. Interstitial space and service corridor
 - d. Physical and Ergonomic hazards
 - e. Class C and D fires (5 marks)
- (iv) Explain the essential requirements of a Biological Sciences laboratory. (5 marks)
- (v) Compare and contrast Biosafety Level 3 (BSL3) and Biosafety Level 4 (BSL4) laboratories. (5 marks)
- (vi) State factors addressed by Quality Management System (5 marks)
- Q2 As a Scientist in charge of Microbiology laboratory. You have received sputum samples from a patient allegedly suffering from Tuberculosis. Describe the biosafety level containment laboratory you will use to handle the sample (20 marks)
- Q3 Discuss good laboratory practices (GLP). (20 marks)
- Q4 Discuss International Institutions and Organisations involved in quality assessment and accreditation of laboratories. (20 marks)
- Q5 Describe (a) Fire triangle (5 marks)
(b) Fire code (5 marks)
(c) Classification of fires (10 marks)