

EMBU UNIVERSITY COLLEGE

(A CONSTITUENT COLLEGE OF THE UNIVERSITY OF NAIROBI)

TRIMESTER EXAMINATIONS 2013/2014

SECOND YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE AND BACHELOR OF SCIENCE IN BIOLOGY

SBL 202: LABORATORY TECHNIQUES

DATE: AUGUST 11, 2014

TIME: 2.00 - 4.00PM

INSTRUCTIONS:

Answer ANY TEN Questions (7 Marks each)

- 1. Suppose you are provided with two large rooms for a biology lab in a school. Describe the arrangement you would make to accommodate the necessary features.
- 2. Distinguish between wet heat and dry heat sterilization.
- 3. Explain the use of centrifuges in a biology laboratory.
- 4. Explain the working principle of a colorimeter.
- 5. Outline the drawbacks of inoculation without safety cabinets.
- 6. Describe the various processes of preserving plant specimens.
- 7. Outline the methods used in sampling aquatic and terrestrial invertebrates.
- 8. List the types of microtomes, stating the disadvantages of each.
- 9. Outline the methods of collecting weather data.
- 10. Describe four (4) common microscopes used in a biology laboratory.
- 11. Outline the techniques of slide fixation.
- 12. List the main animal and plant phyla.