



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2011/2012

INSTITUTIONAL BASED PROGRAMME (IBP) – DECEMBER SESSION

EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE

SBC 575: ADVANCED LABORATORY TECHNIQUES

DATE: THURSDAY, 3RD MAY 2012

TIME: 9.00 A.M – 12.00 NOON

INSTRUCTIONS:

Section A: Answer ALL the Questions (5 marks each)

- Q.1) Discuss silica as an adsorbent for thin layer chromatography.
- Q.2) Describe five ligands used in affinity chromatography.
- Q.3) Explain the principle and procedure of radioimmunoassay.
- Q.4) Explain the principle and procedure of the glucose electrode.
- Q.5) Outline the component parts of a gas chromatographic system.
- Q.6) what is liquid chromatography?
- Q.7) Describe the principle of scintillation detectors of radiation.
- Q.8) Briefly explain the uses of High Performance Liquid Chromatography.

Section B: Answer Any THREE Questions (20 marks each)

Q.9) Describe the principle and procedure of gel filtration chromatography.

Q.10) Explain the purification of lactate dehydrogenase from a cell homogenate.

Q.11) Explain the use of restriction endonucleases to carry out gene mapping using the southern blotting technique.

Q.12) Identify the component parts of a High Performance Liquid Chromatographic (HPLC) system and state the functions of each.

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