



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2010/2011

INSTITUTE OF OPEN, DISTANCE AND E-LEARNING

SECOND SEMESTER EXAMINATION FOR THE DEGREE OF MASTER OF SCIENCE

SCH 553: MICROCOMPUTER AND ELECTRONIC MEASUREMENTS

DATE: Wednesday 6th July, 2011

TIME: 9.00 a.m. – 12.00 p.m.

INSTRUCTIONS

Answer ALL questions and show all the workings where necessary.

1. a) What is chemistry concerned with? [3 marks]
 b) Why should an analytical chemist be bothered with connecting a computer to an analytical instruments? [2 marks]
 c) Explain computer interactions with analytical instruments. [8 marks]
2. Write short notes about microcomputers. [15 marks]
3. A group of KU ODeL analytical chemist was invited by a community from Marsabit, to sensitize them on how to live with a healthy body, especially in this era of HIV and AIDS. Explain the preparations the group would need to make and the precautions they would need to take in order to leave the community happy and with evidence based decisions or solutions. [10 marks]
4. Explain giving examples what a machine is? With the help of examples, discuss the necessity of connecting different types of machines? [12 marks]
5. Differentiate between converters and interfaces, and give two examples of each. [6 marks]
6. Discuss signal to noise ratio reduction techniques. [10 marks]
7. Computer and electronic measurements have transformed analytical chemistry. Briefly explain this statement. [4 marks]

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