



27

EMBU UNIVERSITY COLLEGE
(A CONSTITUENT COLLEGE OF THE UNIVERSITY OF NAIROBI)

FIRST SEMESTER EXAMINATIONS 2013/2014

FIRST YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN
AGRIBUSINESS MANAGEMENT, AGRICULTURE, MANAGEMENT OF AGRO-
ECOSYSTEM AND ENVIRONMENT, HORTICULTURE AND AGRICULTURAL
EXTENSION AND EDUCATION

AEB 106: INTRODUCTION TO COMPUTERS AND INFORMATION SYSTEMS

DATE: DECEMBER 6, 2013

TIME: 11.00 – 1.09PM

INSTRUCTIONS:

Answer Question ONE and ANY Other TWO Questions.

QUESTION 1

- a) Explain the following terms: [5 Marks]
- Multiprocessing
 - Multiprogramming
 - Information
 - Byte
 - Process
- b) Explain any **three** factors that have hindered wide adoption of Information and Communications Technologies (ICT) in Kenyan Agricultural Sector [6 Marks]
- c) Explain the difference between a computer worm and a computer virus [4 Marks]
- d) List any **five** advantages of computers over human beings [5 Marks]
- e) Compare and contrast computer main memory and secondary memory [5 Marks]
- f) Computer software is classified into system software and application software. Discuss any **two** types of system software [5 Marks]

- g) Explain the **two** most famous approaches for accessing files in a computer system [5 Marks]
- h) Convert the following as stated: [5 Marks]
- 2057_8 into decimal number system
 - $1AF_{16}$ into decimal number system

QUESTION 2

- a) IT is a source of opportunity and advantage but also uncertainty & risk in an organization. Critically discuss this statement [10 Marks]
- b) Explain any **two** functions of operating systems. Additionally, give any **two** types of computer operating systems. [5 Marks]

QUESTION 3

- a) In your own words, discuss any **five** challenges faced when introducing and organizing Information Technology within a given organization [10 Marks]
- b) Using a well-labeled diagram, show the main components of a computer system and how they are organized within a computer [5 Marks]

QUESTION 4

- a) Computer networks have become a common occurrence in most organizations today. Describe any **five** advantages of having computer networks in organizations [10 Marks]
- b) Computers are currently being used in various sectors of the economy including tax collection by government bodies. Discuss any **five** effects of Electronic Filing on the Tax Industry [5 Marks]

QUESTION 5

- a) With aid of diagrams, discuss any **two** network topologies [5 Marks]
- b) Explain any **five** factors used to decide the network topology to adopt when connecting computers [10 Marks]

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