

**W1-2-60-1-6**

**JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY**

# **UNIVERSITY EXAMINATIONS 2014/2015**

**FIRST YEAR FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF COMMERCE**

**HBC 2106 : FUNDAMENTALS OF COMPUTER SYSTEMS**

**DATE: AUGUST 2014 TIME: 2 HOURS**

**INSTRUCTIONS: ANSWER QUESTION ONE AND ANY OTHER TWO QUESTIONS**

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**QUESTION ONE**

1. Define the term computer [2 marks]
2. Explain the role of computer based systems in the effective running of the business entrepreneurship of the modern world. [5 marks]
3. List any four features of the world wide web which you would use to convince a panel of decision makers to consider investing in its connection with a view of improving the marketing department of a company. [4 marks]
4. Explain using any three supportive facts why a company may choose a graphic interaction based interact system. [3 marks]
5. Explain how you would achieve the following in Ms Windows [6 marks]
6. Create a folder
7. Create a user account
8. Safely remove a flash disk
9. You are the most computer literate person in four organizations . A new computer application is to be purchased for use in your department. Your boss seeks your view before making the purchase. Outline any five important aspects you would raise for consideration . [5 marks]
10. Describe mainframe computer, its history and the environment in which it operates. [5 marks]

**QUESTION TWO**

1. What is the decimal equivalent of
   1. O.1001
   2. 0.1111
   3. 101.010 [4 marks]
   4. -0.1001
2. What is the binary equivalent of
3. 0.1875
4. 0.35
5. 7.1625 [4marks]
6. -0.1875
7. Convert the following binary into hexadecimals
8. 10101001
9. 110011111
10. 111000101100 [3 marks]

(d) Convert the following hexagonal numbers into binary

(i) 5BA

(b) 2FI

(c) 3DE

(iv) A662

(e) Convert the following binary numbers to ocral . [2 marks]

**QUESTION THREE**

1. (i) Explain the term operates systems [2 marks]

(ii) What is the role of an operations system? [8 marks]

1. (i) What are system utilities? [8 marks]

(ii) List the main functions of utilities. Use examples. [8 marks]

**QUESTION FOUR**

1. Differentiate between optimal mark reader (OMR) and Magnetic Ink character recognition (MICR) [4 marks]
2. What are the advantages of Laser printers as compared with dot-matrix printers. [4 marks]
3. Give the description of the following as used on the windows screen.

(i) Task bar

(ii) Internet explorer

(iii) Control panel

1. Recycle bin
2. Computers
3. What is topology? Use diagrams to explain any four topologies you know of [7 marks]

**QUESTION FIVE**

1. Define the term computer virus and state any know cure for their infections. [6 marks]
2. State any four symptoms of a computer which would suggest that your computer is infected with a virus. [4 marks]
3. Apart from protecting your computer from virus, describe any three other ways of ensuring your organizational data is secure. [4 marks]
4. Explain why it is beneficial for an organization to purchase a ready make software than have one produced for the m by internal programmer. [6 marks]