Introduction to computer systems (BBIT 111) (MISC 116) (CISY 101) (DBIT 120) (DCIS 101) 1st trimester 2016

**KENYA METHODIST UNIVERSITY**

**END OF 1'***st '***TRIMESTER 2016 (FT) EXAMINATION**

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| **SCHOOL** |  | : | SCIENCE & TECHNOLOGY | |
| **DEPARTMENT** | | | : | COMPUTING AND INFORMATION SCIENCE |
| **UNIT CODE** |  | : | '***BBIT 111*** | |
| **UNIT TITLE** |  | : | '***INTRODUCTION TO BUSINESS INFORMATION*** | |
|  |  |  |  | SYSTEMS |
| **TIME** |  |  | : | 2 HOURS |

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**INSTRUCTIONS**

* **Answer question One and any other Two from section B**

**Section A**

**Question 1**

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| (a) Define the following terms as they apply to business information technology: | (5mks) |

* Computer
* System
* Data
* Information
* Data processing

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| (b) Information systems offer a set of capabilities that can be exploited to achieve business results. Briefly explain six of them. | | | | | | | | | | | | | |  |  | (6mks) |
| (c) Enlist and explain five major components of information systems as applied in business information technology. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | (5mks) |
| (d) State and explain two principal technologies that underlie I.S. | | | | | | | | | | | | | | | | (4mks) |
| (e) Why are the components of all information systems described as interdependent? Briefly explain. | | | | | | | | | | | | | | | | (3mks) |

(f) What is the difference between data entry and data input? (2mks)

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| (g) What are the principal challenges our information society poses to organizations? Briefly relate each of them to a possible response with information systems. | (5mks) |

**Section B**

**Question 2**

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| (a) What is the difference between the product and the process innovation? | (2mks) |

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| (b) What is virtual memory? Why is it called "virtual?" what capabilities does it offer in a computer? | (4mks) |

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| (c) What is a web browser? How does it function in the Internet? What are the user Interface elements which are incorporated in a web browser? State at least two. |  |  |  |  |  |  |  |  | (4mks) |  |

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| (d) Information security is a fundamental factor in preventing organizational data and information lose. State and explain four major elements of information protection as a means of safeguarding business operations. | | |  |  |  |  | (8mks) |  |
| (e) What are the comparative strengths of spreadsheet and database management software? |  |  |  |  |  |  |  | (2mks) |

**Question 3**

* Name the principal areas of business applications for the following:
* Minicomputers
* Mainframes

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| * supercomputers |  |  |  | (3mks) |

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| (b) What are the three principal ethical issues of information systems? Give a brief example of each of these issues arising from the use of information systems. | (6mks) |

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| (c) What is the function of an expert system? Give three examples of advice such systems can realistically offer. To whom would they offer this advice? | (4mks) |  |

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| (d) Explain the following as they have been used in the Internet: |  | (4mks) |
|  | (i) WWW | |
|  | (ii) Web page | |
|  | (iii) Hyperlinks | |
|  | (iv) URI | |

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| (e) What is the role of the main memory, and how does it relate to the processor? |  |  |  |  |  |  |  |  |  | (3mks) |  |

**Question 4**

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| (a) What is meant by downsizing of computer systems and why are many corporations resorting to downsizing? Explain. |  |  |  | (4mks) |

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| (b) What major internal and external changes are taking place with which organizations embracing IT have to deal with? State and explain five of them. | (5mks) |  |

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| (c) Using a diagram, briefly describe the four principal network topologies and discuss their reliability. | (8mks) |

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| (d) What are the principal uses of the Internet? Briefly explain. |  | (3mks) |

**Question 5**

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| * i) What is Client/Server computing and what are its principal advantages? | |  |
| ii) What is the role of the client? What is the role of the server? |  |  |

(6mks)

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| * With relevant examples, briefly explain four roles of I.S in business re-engineering. |  |  |  |  |  |  |  |  | (6mks) |
| * Discuss in detail the major components of the CPU. | | | | | | | | | (5mks) |

* What is a network protocol? Why do we need protocol? (3mks)

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