

**CHUKA UNIVERSITY**  
**COSC 105 – INTRODUCTION TO COMPUTER APPLICATIONS IN BUSSINESS**  
**Campuses: Main, Embu & Tharaka University College**

**STREAM:**

**TIME:** 2 HOURS

**DAY:**

**DATE:**

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**INSTRUCTIONS:**

1. Answer THREE questions in all. Question one is compulsory.
2. Start each question on a new page.
3. Electronic calculators MUST not be used

**QUESTION ONE (30 marks)**

- (a) “A continuing stream of information technology (IT) innovations from internet to wireless networks to Digital phones is continuing to transform the Business World”. Using two appropriate examples justify the statement. (4 marks)
- (b) Discuss four differences between RAM and Hard Disk of a computer system. (4 marks)
- (c) Discuss the importance of computerization to any ideal Business platform in details (4 marks)
- (d) List four things that a hacker can do on a compromised/hacked computer. (4 marks)
- (e) Briefly describe the “90/10” rule in computer security. (4 marks)
- (f) “A company which refuses to engage with its customers using social media will fail within five years.” Using appropriate examples, discuss the extent to which you either agree or disagree with this statement. (4 marks)
- (g) List and describe at least three health risks that arise from the use of computers. (3 marks)
- (h) Find the binary equivalent of the following decimal number. (3 marks)

$477.875_{10}$

**SECTION B: Answer TWO question from this section**

**QUESTION TWO (20 marks)**

- (a) “An operating system is an interface between a user and the computer system.” Do you agree with the statement? Explain the functions performed by an operating system. (4 marks)
- (b) Explain the Role Big Data is playing in shaping and changing in the Business world (4 marks)
- (c) Discuss Reporting alternatives as information product provided by MIS to Managers? (6 marks)
- (d) Explain the following terms:
  - (i) Computer network (2 marks)
  - (ii) Information security (2 marks)
  - (iii) Computer software (2 marks)

**QUESTION THREE (20 marks)**

- (a) What is the difference between a domain name and an IP address? (4 marks)
- (b) State and explain four uses of the internet as requirement for starting an SME (4 marks)
- (c) What is a network topology? With a suitable diagram, describe any two types of network topologies. (5 marks)
- (d) The introduction of new or enhanced business information systems to the workplace often involves changes to employees working practices.
  - (i) What objections might employees have to the changes brought about by new or enhanced business information systems? (4 marks)
  - (ii) How might the Organization manage the change to new staff working practices when introducing a new or enhanced business information system? (3 marks)

**QUESTION FOUR (20 marks)**

- (a) Describe why a word processing application is important to an organization and state any two word processing software application you would recommend for use. (2 marks)
- (b) Discuss various methods/ways /techniques an organization can put in place to protect its systems (4 marks)
- (c) Excel functions are predefined formulas. Explain the basic parts of an excel function. Illustrate your answer by writing the functions for calculating the average and the total given the data in the following cells: C1, C2, C3, C4, and C5. (4 marks)
- (d) Discuss the five business models of E-commerce in detail. (10 marks)

**QUESTION FIVE (20 marks)**

- (a) You hear a member of the Board of your financial organization, while in discussion with major customers, say that “*Mobile computing renders all traditional IS/IT obsolete*”. Discuss and justify the extent to which you agree or disagree with the above statement. (7 marks)
- (b) Describe four types of printers. (4 marks)
- (c) Data may be corrupted by hackers, viruses or machine malfunction.
- (i) List two software methods of preventing unauthorized access to data. (2 marks)
  - (ii) Give one physical method of preventing unauthorized access to data. (1 mark)
- (d) Perform the following number conversions:
- (i)  $2670_{10}$  to hexadecimal. (3 marks)
  - (ii)  $234_8$  to binary. (3 marks)