

KASNEB

DICT LEVEL I

INTRODUCTION TO COMPUTING

TUESDAY: 17 November 2015.

Time Allowed: 3 hours.

Answer ALL questions. Marks allocated to each question are shown at the end of the question.

QUESTION ONE

- (a) Citing an example in each case, describe the following types of computer software:
- (i) General purpose application software. (2 marks)
 - (ii) Special purpose application software. (2 marks)
 - (iii) Bespoke application software. (2 marks)
- (b) Outline seven computer hardware components that are often inside the computer case. (7 marks)
- (c) (i) Explain the term "computer storage device". (3 marks)
- (ii) Citing suitable examples, differentiate the two types of computer storage devices. (4 marks)
- (Total: 20 marks)**

QUESTION TWO

- (a) Describe four operations which are performed by a computer to enable it carry out various data processing activities. (8 marks)
- (b) Analyse five components of data hierarchy. (10 marks)
- (c) Distinguish between "fixed length records" and "variable length records" in the context of computer files. (2 marks)
- (Total: 20 marks)**

QUESTION THREE

- (a) Describe three types of information used for decision-making in a business organisation. (6 marks)
- (b) There are advantages and disadvantages of working from home for both the employer and employee.
- Required:**
Summarise two advantages and two disadvantages of working from home on the part of:
- (i) Employee. (4 marks)
 - (ii) Employer. (4 marks)
- (c) Examine six sources of risk to data and information in an information system. (6 marks)
- (Total: 20 marks)**

QUESTION FOUR

- (a) Identify five negative impacts of information systems on society. (5 marks)
- (b) (i) Explain the term "transaction processing". (4 marks)
- (ii) Outline five examples of transaction processing systems. (5 marks)
- (c) Describe six activities that could be taken in order to maintain information systems' integrity. (6 marks)
- (Total: 20 marks)**

QUESTION FIVE

- (a) Explain six components of an information system. (6 marks)
- (b) Distinguish between "analogue computer" and "digital computer". (4 marks)
- (c) Identify six limitations of flat file systems that precipitated the development of database management systems. (6 marks)
- (d) Using a clearly labelled diagram, illustrate the fundamental components of a computer system. (4 marks)

(Total: 20 marks)

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