KASNEB

DICT LEVEL I

INTRODUCTION TO COMPUTING

PILOT PAPER

September 2015.

Time Allowed: 3 hours.

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

QUESTION ONE

- (a) Highlight four reasons for changing from a manual processing system to a computerised processing system. (4 marks)
- (b) Explain the impact of ICT on the following:
 - (i) People with disability.

(2 marks)

(ii) Working hours.

(2 marks)

(iii) Learning.

(2 marks)

(iv) Supermarkets.

(2 marks)

- (c) Outline the circuitry technology for each of the following generations of computers:
 - (i) First generation.

(1 mark)

(ii) Third generation.

(1 mark)

(iii) Fifth generation.

(1 mark)

(d) (i) List down three examples of automated data input devices.

(3 marks)

(ii) Identify two devices that can be used both as input and output devices.

(2 marks)

(Total: 20 marks)

QUESTION TWO

(a) (i) Define the term "batch processing".

(2 marks)

- (ii) Propose two reasons why you would recommend batch processing despite the current technological advancement in ICT.

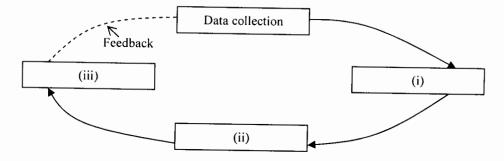
 (4 marks)
- (b) Explain five component of an information system.

(5 marks)

(c) Differentiate between "system software" and "application software".

(4 marks)

(d) The figure below shows a diagrammatical representation of the data processing cycle:



Required:

(i) Identify the stages labelled (i) to (iii) on the diagram.

(3 marks)

(ii) Highlight two activities undertaken during the process of data collection.

(2 marks)

(Total: 20 marks)

QUESTION THREE

(a) Distinguish between "removable" and "fixed" storage.

(4 marks)

(b) Suggest five causes of computerised information systems failure.

(5 marks)

(c) Outline three disadvantages of serial file organisation method.

(6 marks)

(d) The figure below shows the management hierarchy in an organisation:



Required:

(i) Identify the kind of information system suitable, for each category of managers above.

(3 marks)

(ii) Suggest the function of information system for the operational managers category.

(2 marks)

(Total: 20 marks)

QUESTION FOUR

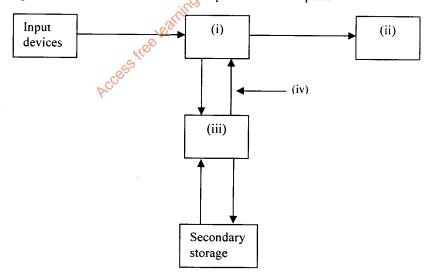
- (a) Mwanzo Company intends to recruit the following personnel through an advertisement:
 - (i) Computer technician.
 - (ii) Systems analyst.

Required:

Suggest three responsibilities of each personnel they might include in the advertisement.

(6 marks)

(b) The figure below shows the electronic components of a computer:



Required:

Identify the parts labelled (i) to (iv) on the above diagram.

(4 marks)

TD11 Pilot Paper Page 2 Out of 3

(c)	Describe the following computing terms:		
	(i)	Data pad.	(2 marks)
	(ii)	Miniaturisation.	(2 marks)
	(iii)	Mobile computing.	(2 marks)
	(iv)	Cloud computing.	(2 marks)
	(v)	Digital migration.	(2 marks) (Total: 20 marks)
QUE (a)		N FIVE light five factors to be considered before acquiring a computer or hardware accessories.	(5 marks)
(b)	Explain four security risks which should be considered when processing computer files.		(8 marks)
(c)	(i)	Outline five factors to consider in selecting secondary storage media.	(5 marks)
	(ii)	Explain the role of an information centre in a computing environment.	(2 marks) (Total: 20 marks)
		Jisiing this wabsite www.teakcsapastpagets.co	