

## FORM 3

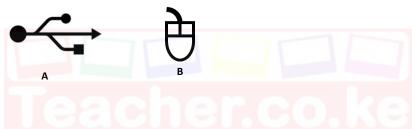
## **COMPUTER STUDIES**

## **MARKING SCHEME**

1. Name three major components of a computer system.

 $(3\times1=3 \text{ marks})$ 

- Computer Hardware
- Computer Software
- Computer Livewire
- 2. John saw the following symbols at the back of his system unit. What do the symbols represent?  $(2\times1=2\text{mks})$



- A Universal Serial Bus Port
- B PS/2 Mouse port
- 3. How to improve teaching using computers.

 $(3\times1=3 \text{ marks})$ 

- Use of information
- E learning
- Downloading content on internet
- Using digital educational resources e.g. digital screens, projectors etc.
- 4. Human computer interfaces.

 $(3\times2=6 \text{ marks})$ 

a. Command line interface

User types commands to perform a task

b. Menu driven

Provides user with a list of commands to choose from



c. Graphical user interface

Have a rectangular application frame consisting of windows icons menu and pointer

- 5. System software's is used by the computer to perform various operations to provide resources to the user while application software's is used by the user to perform specific tasks (2 only) Disc partitioning is dividing a disc into several parts while disc scanning is checking whether a disc has logical and physical errors (2 only)
- 6. Give two ways of proofreading

 $(2\times1=2 \text{ marks})$ 

- Autocorrect
- Autocomplete
- Thesaurus
- Spelling/grammar checker.
- 7. What are DBMS (1 mark)

A software that manages data that is logically related

 $(2\times1=2 \text{ marks})$ 

- b) Give two examples of DBMS.
  - Microsoft access
  - SQL server
  - MySQL
  - Oracle
- 8 i) four database objects.  $(4\times1/2=2 \text{ marks})$ 
  - a) Forms
  - b) Reports
  - c) Tables
  - d) Queries
  - e) Macros
  - f) Modules

Advantages of database management systems

 $(3\times1=3 \text{ marks})$ 

a) Reduces redundancy

- b) Flexible
- c) Enhance data integrity
- d) Reduces labor intensive
- e) Enable easy sharing of files
- f) Enhance data security
- 9. Two special purpose memories found either found inside or outside the microprocessor  $(3\times1=3 \text{ marks})$ 
  - a) Cache Memory: Cache Memory is a special group of fast memory chips located inside or close to the CPU chip to speed up processing.
  - b) Buffers: Temporary holding places built in some input and output devices so as to relieve the CPU some burden of storing all the data during processing.
  - c) Registers: Temporary holding locations within the CPU that are used to store instructions and pieces of data being processed by the CPU
- 10. Describe three facilities or ways of ensuring proper ventilation in a computer laboratory.  $(2\times1=2 \text{ marks})$
- a) Large & enough windows and doors
- b) Installing fans
- c) Installing air conditioning system
- d) Avoid overcrowding of either machines or people in the room
- 11. Advantages of USB

 $(2\times1=2 \text{ marks})$ 

- a) Easy to use
- b) Easy to maintain
- c) Can be used by a range of devices
- d) Fast input
- e) Hard to damage the computer
- 12. (a) Define the data integrity

(1 mark)

The accuracy and correctness of data



- a) Accuracy
- b)Timeliness
- c)relevance
- 13. List down two uses of UPSs in a computer laboratory.

 $(3\times1=3 \text{ marks})$ 

- a) Regulating voltage entering into computing devices
- b) Storing energy for use by devices in case of power failure
- c) Notify the user in case of power failure.
- 14. Warm booting.  $(1\times1=1 \text{ mark})$

Warm Booting: This is the process of restarting a computer which was initially on.

15. Differentiate between copy and cut

 $(2\times1=2 \text{ marks})$ 

Copy refer to moving text while leaving a copy

Cut refers to moving text without leaving a copy. Removing text completely



## **SECTION B (Answer only five questions from this section)**

16. (a) Explain two page orientations.

 $(2\times1=2 \text{ marks})$ 

- a)Landscape: Width of the document page is longer than height
- b) Portrait: Height of the document page is longer than the width
- b) Suggest the importance of the following features in the document preparation.

 $(2\times2=4 \text{ marks})$ 

- a) Thesaurus used to find synonyms, autonyms or related word
- b)Spelling –checking for such common typing mistake as repeated words, irregular capitalization, and sentence structure such as very long sentence.

(c)Differentiate between superscript and subscript

 $(2\times2=4 \text{ marks})$ 

In superscript the typed character appears above the normal text line whereas subscript the typed character appears below the normal text line.

(d)List three files used in mail merging

 $(3\times2=6 \text{ marks})$ 

- Primary file/main document
- Secondary file/data source
- Merged file
- (e)Distinguish between the term dropped cap and in margin cap as used in word processing (2×2=4 marks)
  - a) Dropped cap the initial letter is made to occupy space in a number of lines below it
  - b) In margin the initial letter occupies space on the left margin.

(f)List four advantages of word processors

 $(4\times1=4 \text{ marks})$ 

- a) They allow the user to create a file, save it, and retrieve it as many times as possible
- b) They have editing tools such as spelling checker, thesaurus, and auto correct features
- c) Predefined features for generating headers, footers, indexes, foot notes, and references
- d) Ability to import text, tables, graphics from other programs
- e) They have Ability to use templates to quickly create a document

- f) They have superior paragraph formatting features such as alignment, paragraph indenting, line spacing and tab stop among others.
- g) They have Mail merge features that combine a single correspondence with many addresses
- h) Ability to protect a document using passwords
- i) Have Word wrap feature which enables a text to automatically start in a new line when the right margin is reached and word cannot fit within the space left
- g). Text formatting features

 $(2\times2=4 \text{ marks})$ 

Paragraph formatting features

 $(2 \times 1 = 2)$ 

- a) Drop cap
- b) Indent
- c) Justify





17. a) Characters – Smallest unit of data representation eg letter, number or symbol  $(4\times1=4)$ 

Field – A collection of related characters

Record – A collection of related fields

Table – A collection of related records

c) Primary key is a unique key that identifies records in a table while foreign key is a primary key in another table.  $(1\times2=2)$ 

c)  $(5 \times 1 = 5)$ 

(i). Format.

The Format property specifies how (the way) data is displayed in a field & printed.

Number & Currency fields provide predefined display formats. They include Currency, Fixed, General, Percent, Scientific, General data, Medium date, Medium time.

(ii). Input Mask.

Let's you define a pre-formatted pattern for the entry of data into a Date or a Text field.

The data in that field must conform to a pattern.

(iii). Required

It controls the entry of important fields.

When this option is set to YES, an entry must be made within that field, i.e., it ensures that the field is not left blank.

(iv). Validation Rule.

It allows you to create an expression or a formula that will test data when being entered into the field.

(v). Validation Text.

Defines an error message that will be displayed when the validation rule is violated/broken.

- d) Data types  $(5 \times 1 = 5)$
- a) Currency
- b) Date/Time



c)	Text/Short text			
d)	Number			
e)	Calculated			
f)	f) Database Models $(2\times2=4)$			
	a)	Relational		
	b)	Hierarchical		
	c)	Network		
	d)	Flat file		
	e)	Object Oriented		
f) A Select query is a query that asks a question about the data stored in your tables and returns				
a result set in the form of a datasheet—without changing the data				
An action query is a query that copies or makes changes to or moves many records in just one				
operation.				
$(2 \times 1 = 2)$				
g) Types of relationships (3×1=3)				
a) One to one				
b) One to Many				
c) Many to Many				
h) a) Which of the two tables is likely to be the parent table			(1mark)	
Table A because it has employee information				
b) It is advisable to 'enforce referential integrity' when creating a relationships. (1 mark)				
Yes - To ensure all records entered in the related table exist in the primary table				
c) What would make the relationship between the tables fail to work? (2			$(2 \times 1 = 2)$	
marks)				
The data type for the same field in two tables is not similar				
d) Which field in both tables is most appropriate for creating relationship? (1 mark)				
Employee number				