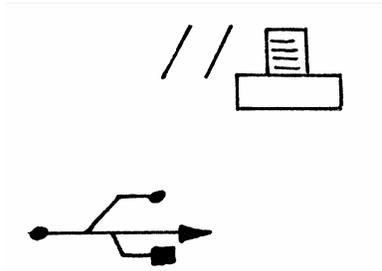


**451 / 1**  
**COMPUTER STUDIES**  
**THEORY**  
**MARKING SCHEME.**  
**SECTION A. ( 40 MKS)**

1. - Input devices  
 - Output devices  
 - Processing devices  
 - Storage devices  
 - Connecting devices *(Each 1/2 mk x 5 = 2 1/2 mks)\*Tso\**
2. This is the preparing of a disk to store information / data ( 1mk) *\*Tso\**
3. a) *( 1mk)\*Tso\**



4. Start button- this is on the extreme left end with a word start together with a Microsoft logo. It is used to access programs as well as shut down the computer.  
 Task Manager – this is the middle part of the bar which displays any task / program that is running  
 System tray- this is the right most part which bears the system clock  
*(1 mk)\*Tso\**  
*(Each well explained 1 mk x 3 = 3mks)\*Tso\**

5. LCD – Liquid crystal display  
 EL – Electro Luminescent  
 Gas – plasma  
 TFT – Thin film transistor  
*(Any 3 each 1 mk x 3 = 3mks)\*Tso\**

6. a) Real data type is a number with a fractional part / a decimal part while an integer is a whole number without a fractional part *(well explained 2 mks).*
7. b) A source code is the program code written in a certain programming language which is yet to be compiled / translated, whereas an object code is the binary translation achieved after compiling a source code. *(well explained 2 mks) \*Tso\**

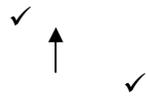
8. - Straight changeover  
 - Parallel changeover  
 - Phased changeover *( Each 1 mk x 3 = 3mks) \*Tso\**

9. - Number of people / users it can support at a given time  
 - Number of tasks / activities it can run at a given time  
 - The kind of interface it presents to the user  
*(Well explained, each 1 mk x 3 = 3mks)\*Tso\**

10. i) Automatic carry over to the next line of a word that does not fit at the end of a line hence avoiding breaking up of words
- ii) A feature used to enlarge the first letter of a paragraph so that it drops to cover 2 to more lines in the paragraph. *(Well explained, each 1 mk x 2 = 2mks)\*Tso\**

11.

2	45✓	1
2	22	0
2	11	1
2	5	1
2	2	0
2	1	1



Hence  $45_{10} \longrightarrow 101101_2$  ( 1 ½ mks)

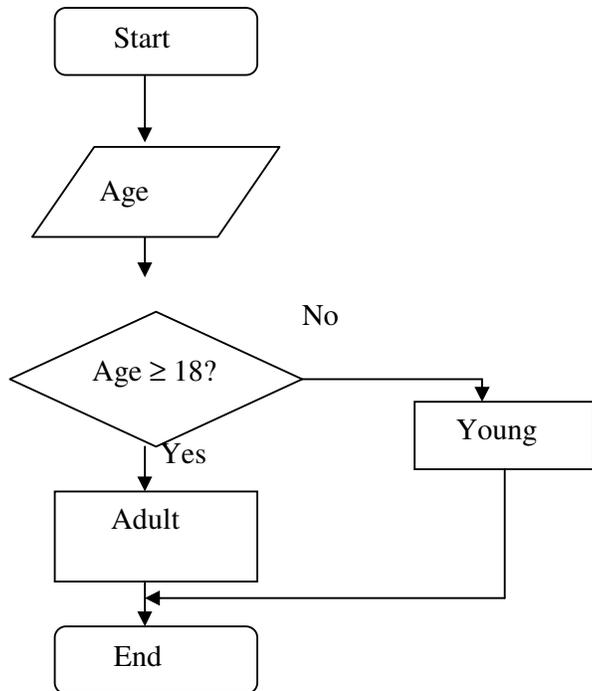
*\*Tso\**

12. a) A formular is constituted / constructed by the user while a function is a ready to use formular that comes with the program . *(Well explained 1 mks) \*Tso\**  
 b) It counts the number of occurrences of the word “Eggs” in the range A10 to E10. *(Well explained 2 mks) \*Tso\**
- c) This is a key which explains the colour used in charts what it means. (Clear explanation 1mk) *\*Tso\**
13. a) -Flat files  
 - Hierarchical model  
 - Network model  
 - Relational model  
 - Object oriented model. *( Each ½ mk x 4 = 2mks) \*Tso\**  
 b) Format- determines the order information appears on the screen / printed.  
 Default value- a value that appears automatically in the datasheet or form if nothing is entered by the user. *(Each well explained 1 x 2 = 2mks) \*Tso\**
14. a) Adobe Page Maker  
 - Corel Draw  
 - Microsoft Publisher  
 - Ventura *(Each ¼ x 4 = 2mks) \*Tso\**  
 b) A paste board is a large blank area where you place text and any graphical objects for the purpose of rearranging them neatly before placing them on the printable area.  
 A printable area looks like a page surrounded by margins found on the pasteboard. Any text or object found / placed here will be printed out. *(Well explained each 1 mk x 2 = 2mks) \*Tso\**
15. - .edu – Educational institutional  
 - .org- Non – profit making organization  
 - .gov- Government institution  
 -.co- Commercial institution. *(Each ½ mk x 4 = 2mks) \*Tso\**
16. A set of rules that govern how two computers can send and receive data on the network. *(Well explained 1mk) \*Tso\**

**SECTION B ( 60MKS)**

*(Question 16 and any other 3 questions)*

17. a)



- Correct symbols 3 mks
- Correct use of arrows 1 mk
- Correct labeling 4 mks
- Total 8 mks\**Tso*\***

b) Looping executes the same block of code( module) again and again until a certain condition is fulfilled,while selection execution of a statement(s) depends on a condition that returns true or false ( yes / No) *(well explained 2mks)*

- c)
- i) Documentation
  - ii) Testing and Debugging
  - iii) Program Design
  - iv) Implementation
- (Each 1/2 x 4 = 2mks) \**Tso*\*

- d)
- Assemblers
  - Compilers
  - Interpretors
- (Each 1 x 3= 3mks) \**Tso*\*

17. a)
- i) Satellite ( 1mk)
  - ii) A – satellite in space  
B- Downlink  
C- Uplink  
D- Receiving earth station
  - iii) -Eliminates the need to keep on moving the parabolic dish in a bid to track the line of sight.
    - It offers a large constant line of sight to earth stations
    - The satellites transmits the signal to many recipient earth stations forming a point-to multipoint transmission.

*(Each well outlined 1 mk x 3 = 3mks) \*Tso\**

- b)
- LAN
  - MAN
  - WAN

*(Well explained, each 1 mk x 3 = 3mks) \*Tso\**

- c)
- i) A hub also called a concentrator connects computers on a network enabling the relay of signals from one computer to another on the same network.
  - ii) A switch forwards a packet directly to the address node ( a data terminal equipment e.g. work station) without broad casting.
- (Each 2mk x 2 = 4mks)\*Tso\**

18. a) - Pointing

- Clicking
- Double clicking
- Drag and drop

*( Any 3 each 1 mk x 3 = 3mks) \*Tso\**

b)	<b>Group</b>	<b>Example</b>
	Function Keys	F1, F5
	Number Keys	1, 9
	Alphabet Keys	A, Z
	Special Keys	Esc, Enter
	Screen Keys	Pg up, scroll lock
	Numeric key pad	NumLock, 1

*(Any 1 group 1mk x 4 = 4mks)\*Tso\**

- d) i) Enter – Used to execute commands  
 - Used to move the cursor/ insertion point to the next line
- ii) Shift - Used to access the uppercase characters.  
 - Used together with direction keys to select/ highlight characters or cells
- iii) Tab – Used to move the cursor/ insertion point to tab points( settings) / from field to field
- iv) Escape – Used to quit/ exit certain operations *(Each 2mk x 2 = 4mks) \*Tso\**

19. a) i) Transforming of raw facts to finished and wanted information( *2mks well explained) \*Tso\**  
 b) Stages through which data passes before it becomes the finished and wanted information and in the form wanted. *(2mks well explained) \*Tso\**

- ii) - Misreading  
 - Transposition *(well described each 2 mks x 2 = 4mks) \*Tso\**

- iii) Manual data processing.  
 Mechanical data processing  
 Electronic data processing *(Each 1 mk x 3 = 3mks) \*Tso\**

- iv) A logical file is a type of file viewed in terms of what data items it contains and details of what processing operations may be performed on the data items, while a physical file is one that is viewed in terms of how data is stored on a storage media and how the processing operations are made possible. *(Well outlined 4 mks\*Tso\*).*

20. a) The process of producing publications like cards, newspaper etc by designing their text and graphic layout, then inserting those text and graphics, editing them, formatting them and printing using a special software. *(Well explained 2mks)\*Tso\**

- b) i) Used to scroll the page or to preview and test hyperlinks  
 ii) Draws either vertical or horizontal lines  
 iii) Trims imported graphics to remove unwanted parts. *(Each 2 mk x 3 = 6mks)\*Tso\**

- c) - page margins  
 - Column guides  
 - Paste board guides *(Each 1 mk x 3 = 3mks)\*Tso\**

- d) i) Select the text you want to kern  
 ii) From Type menu, click Expert kerning  
 iii) In the dialog box, click the appropriate slider button to make the text tighter or looser.  
 iv) Click OK to apply. *(Each 1 mk x 4 = 4 mks) \*Tso\**