

NYAMIRA NORTH DISTRICT JOINT EVALUATION TEST – 2010

451/ 1

COMPUTER STUDIES

PAPER 1

MARKING SCHEME.

1. - Disk formatting is the process of preparing a new disk for use by imprinting empty sections and tracks on the surface of the disk. *1 x 1 = mk*
2. **Computer booting process**
- During this process, the computer checks whether all its components are functioning correctly and whether they are available for use. The information about the status of each device is displayed on the screen and in case of any fault or missing of one of the devices the process is altered. *1 x 3 = 3mks*
3. **Back ups** –for recovery of lost documents. *1 x 1 = mk*
Passwords – to restrict authorised access. *1 x 1 = mk*
4. **Dry running** – this is going through the program code on the paper before entering the code in the program editor window. Checking for errors.
5. **POST** – used in retail stores to input and output data at the point where sales are transacted e.g at the supermarket checkout counter.
In retail stores goods are identified by means of bar codes. For each item a record is stored in a secondary storage medium containing the item number, item name or description, quantity in stock and the price.
6. a) **Authenticity** – this is the genuineness, validity and legitimacy of software.
(b) - Writing their own programs (in house developed programs)
- buying software (standard software)
7. a) Transcription errors –
Transposition error –
(b) **Ways in which data may lose integrity**
- If the data is not accurate
- If it is not relevant
- If it is not verifiable
- If the data or information or data is not available when needed.
8. - **Data series** – a group of related data such as numbers in a row a column of the selected area of the worksheet
Legend – this is the key that explains what each colour or pattern of the data represents.
9. (a) **Network interface card** – it is used to create a physical link between the computer and the transmission media in computers
(ii) **Network protocol** – set up rules used to govern communication between different computers in the network.
(b) hub -
Switch –
10. **Job replacement** – a situation where by certain job disappear in an organization but reappear in another form before requiring more and high manpower while
Job displacement – the process of replacement of manpower with computerized machines.
11. $7 + (-4)$
Binary equivalent of $4_{(10)} = 0100_{(2)}$
 $7_{(10)} = 0111_{(2)}$
00000100 to ones complement
= 1111011
 $\underline{\quad\quad\quad + 1}$
11111100
0000111 +

11111100

100000011

$$\text{Overflow} = (1 \times 2^0) + 1 \times 2^1 = 3$$

12. -used to keep patients records accounting and in inventory control.
- used to control life support mechenes in the ICU
- By use of an expert system i.e to diagnose illness more accurate in the absence of human experts.
13. Responsibilities of a web designer
- Putting the companies advertisements in the internet
- Designing a website using various software
14. Blind –
- Development of braille keyboards or engraved keyboards
- Installing computers with talking software.
Without hands
- Use of voice activated commands
- Installing computers with powerful multimedia system and speech recognizing devices
15. - When limited amount of information is required from a large number of people
- When there is a large number of people involved in the system.
- When confidential information is required
- When the people you want to acquire information from are vastly dispersed

SECTION B

16. Pseudo code
Start ✓1
Print "Enter member name, share ✓1 and deposit" ✓1
Input "Name, share, deposit" ✓1
If share > 150,000 then
 interest = 0.1 x shares

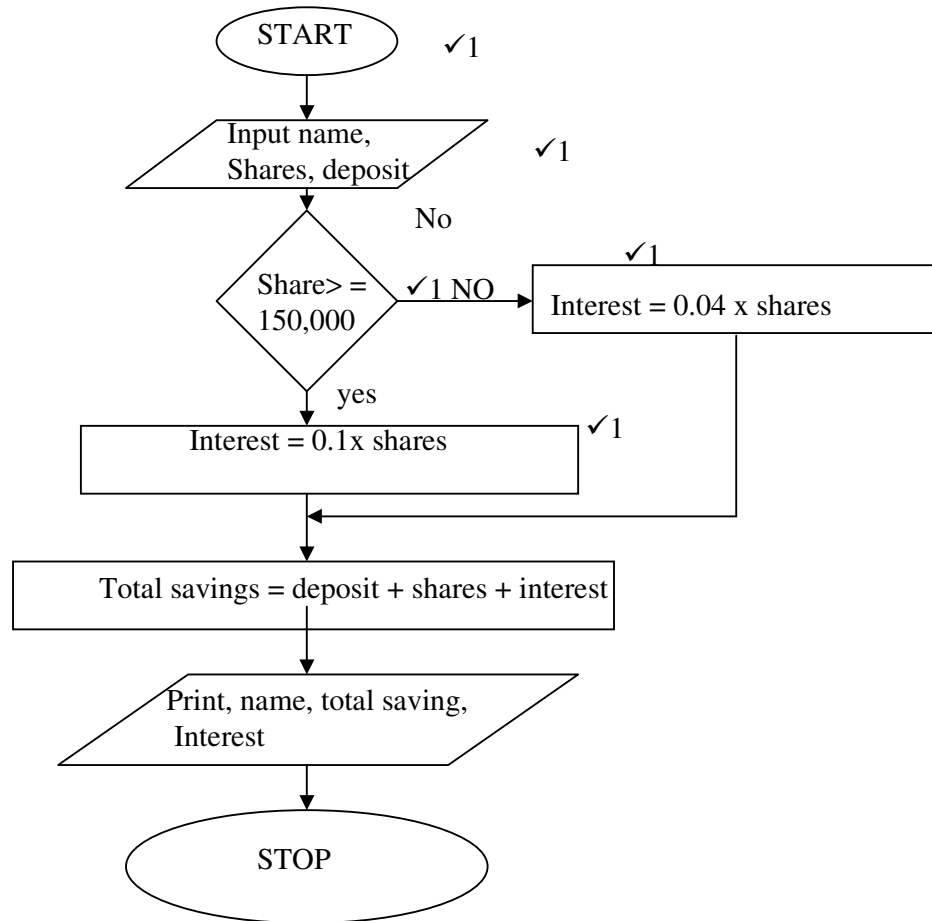
 ELSE

 interest = 0.04 x shares

END IF

Total savings = Deposit + Shares + Interest (1mk)
Print name, total savings, interest ✓1mk
stop ✓1

FLOW CHART



17. **Logical file** – this is a view of a file terms of its contents and pressing activities to be carried upon them
Physical – a file is viewed in terms of actual arrangement of the content on the storage media.
- (b) This is the use of computer software for illegal purposes.
- (c) Trespass - tapping
- eavesdropping - sabotage
- hacking - fraud
- piracy - alteration
- (d) (i) – Name
- date of birth
- ID number
- Residence
- Address
- Phone number
- Salary details
- Medical status
- (ii) – Avoid welcoming strangers into the computer room
- Use personal identification documents
- Reinforce weak access point e.g doors and windows
- Use file accessing electronic files.
- Use of data erenation

- Installing security alarms at strategic access points to alert security personnel in case of a break in
- (e) Search engine – a program that searches documents by specifying key words and return a list of the documents where the keywords were found. E.g Google, yahoo, hotmail, bing
- (f) Advantages
 - It has a wide range of information concerning the issues
 - It is a store house for all types of information presented in the form of text documents, sound and video
- Disadvantages
 - needs careful planning for the search
 - there is waste of time through ink or useless materials.

- (f) – E – commercial / e – Business
 - electronic presentation
 - advertisements
- 18.
 - for assistance when enquiries are needed
 - for security purposes
 - for cash deposits
 - for servicing of machines
 - (b) Advantages of using ATM cards
 - It is secure
 - It allows for personal enquiries
 - It is convenient since services are available to customers at any time.
 - (c) What is virtual reality

This is a condition in which a person becomes psychologically immersed in an artificial environment generated by a computer
 - (d) Training in areas like medicine, military education etc
 - entertainment
 - exploring of landscapes
 - simulation
 - study of human anatomy
 - (e) This is the computer technology used to direct aircraft to follow the shortest path between two locations.
- 19. **File** – a collection of related data given a unique name for easy access, manipulation and storage on a backing storage.
Folder – a named storage location where related files can be stored
Storage media – Where data can be stored. It may be fixed storage or removable storage
 - (b) – The cost of the O/S
 - Documentation available
 - User friendliness of the OS
 - type of computer in terms of size and make
 - hardware configuration of the computer e.g memory capacity, processor, speed and hard disk capacity.
 - The number of users it can support.
 - (c) **Defragmentation** – this is the rearranging of scattered related files/folders closer to each other on the surface of a storage.
 - Partitioning** – this is dividing of a large physical file into more than an logical partitions
 - (d) Methods used to detect input errors
 - validation
 - verification
 - (e) **Attenuation** – this is the decrease in magnitude and energy as a signal progressively moves along transmission media

Band width capacity – this is the maximum amount of data that a transmission media can carry at any one time

Repeater – this is a device when receives a signals from one segment of a network, cleans it to remove any distortion, boosts it and then stands it to another segment.

(f) **Advantages of GUI over command line**

- It is user friendly
- Faster to work with as it works relies no the user clicking icons by the use of pointing devices.
- Easy to use by even those who are unskilled.

20. a) - Graphic design
- page layout
 - Printing

(b) Graphic design – editing and creating of complex text and graphical objects

Page layout design – design of pages

Printing – of publication

(i) – Date /time

- number
- memo
- text
- ole
- currency
- yes/no

(b)

	A	B	C	D
1	SCHOOL SUPPORT STAFF DETAILS			
2	NAMES	AGE	DESIGNATION	STATU
3	Tom	29	Cook	Married
4	Wycliff	32	Bursar	Single
5	Oscar	28	Watchman	Single
6	Mary	33	Librarian	Married
7	Lilian	30	Secretary	Single
8	Robina	27	Typist	Married
9	Anne	30	Matron	Single

= max (B3: B9)

NB Follow through student markings on this question

(c) A chart wizard is a step by step procedure of designing spreadsheet charts.