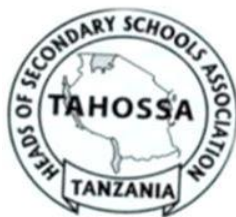


**THE UNITED REPUBLIC OF TANZANIA
TANZANIA HEADS OF SECONDARY SCHOOLS ASSOCIATION
(TAHOSSA)**



**BARIADI TOWN COUNCIL
FORM FOUR TAHOSSA JOINT EXAMINATION
INFORMATION AND COMPUTER STUDIES1**

036

Time : 3 Hours

MARKING SCHEME

September:2022

SECTION A (15 Marks)

1mark @

Answer **all** questions in this section

1. For each of the following items (i) – (x), choose the most correct answer among the given alternatives and write its letter beside the item number in the answer booklet provided.
- (i) Producing publications that are attractive with creative layouts and graphics like newspapers, cards, pamphlets and pictures need special software, the following are examples of Desktop publishers except?
- A. Adode In design
B. Adobe PageMaker
C. Apple page2
D. Open Office writer **D**
- (ii) The teacher grouped form four students to discuss advantages of modern ways of information dissemination over traditional ways what kind of source of information the student used during discussion.....
- A. Primary
B. Secondary
C. Direct
D. Indirect **A**
- (iii) A headmaster was scheduling school daily routine on a computer suddenly the power went off and after reopen his computer did not find his work, as ICT expert what handling measure was the headmaster to use
- A. Voltage Stabilizer
B. Uninterruptible power supply
C. Surge protect
D. Socket **B**
- (iv) What has been done at cell address C1

	A	B	C
1	S/N	REGIONS	NUMBER OF EMPLOYEES

- A. Cell merge
B. Italicized text
C. Wrap text
D. Underlined text **C**

- (v) An editing tool that help a user to find words of phrases with similar meaning or opposite meaning to text selected is called
 A. Spelling and grammar checker
 B. Autocorrect
 C. Autocompelte
D. Thesaurus **D**
- (vi) Which of the following is not among the field data type used in creation of Microsoft database
 A. OLE Object
 B. Date/time
 C. Format
D. Memo **C**
- (vii) A template that is used to set fonts, colors, bullets footers and action buttons for the other slides in presentation is known as
 A. New slide
 B. Slide Master
 C. Slide layout
D. Hyperlink **B**
- (viii) is a method of transmitting the information on the web.
 A. Hypertext transfer protocol (HTTP)
 B. Transmission and Control Protocol/Internet Protocol (TCP/IP)
 C. File Transfer Protocol (FTP)
D. Internet Protocol (IP) **A**
- (ix) Form four students have prepared three songs for graduation each song need storage space of 800 Mbs which storage device would be suitable to keep their songs for graduation?
 A. CD R
 B. DVD R
 C. 2 GB flash
D. CD RW **B**
- (x) Computers connected to communication networks, such as the Internet, are particularly vulnerable to electronic attack because so many people have access to them, what a security measure may be used to protect these computers.
 A. Passwords
 B. Approved users
 C. Encryption
D. Firewalls **D**

2. Match the following terms in **List A** to their corresponding description of field properties in **list B** by writing the letter of the correct option in beside the item number in your answer sheet.

LIST A	LIST B
i. Format	A. For number and currency specifies the number of decimal places
ii. Validation rule	B. A message tha appears once the validation rule is violated
iii. Indexed	C. This is a value that appears automatically in the datasheet/form if nothing is entered by the user to change it.
iv. Default value	D. Facilitates the organization of records for easy search.
v. Input mask	E. Determines how information appears on the screen when printed
	F. Allows the user to set the number of characters in a field instead of the default 50
	G. Logical expression that restricts the values to be entered in a field.

	H. Automatically formats the field entry into specified format
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Answers

(5marks)= 1mark@

LIST A	(i)	(ii)	(iii)	(iv)	(v)
LIST B	E	G	D	C	H

SECTION B (75 Marks)

Answer **all** questions from this section

3. The following are steps for page setup to enhance printing processes of worksheet. Study the steps carefully and arrange them in a correct order beginning with the first step to the last step and write the letter of each step in your answer sheet.

- A. Click on margins tab to change margins
- B. When you finish click ok
- C. Click page setup

- D. Click file on the menu bar

(5 marks)= 1mark@

- E. Click on page tab to make changes of a page such as scaling and printing orientation

Answers

Steps	1 st	2 nd	3 rd	4 th	5 th
Letter	D	C	E	A	B

4. Suppose you have been asked to type an essay to explain the importance of Information on the society on Microsoft word processor.

- a) Describe any two(2) basic input devices to use in writing an essay (2 marks)

(i) **Keyboard-** is an input device used to get letters, punctuation and symbols in computer system

(ii) **Mouse-** used to control cursor on monitors and commanding programs to run and abort

- b) Explain any four (4) functions of input devices (6 marks)

(i) **Accept data from the user into computer system**

(ii) **Accept commands from the user into computer system**

(iii) **Accept user response into computer system like do you want to save changes? A user may issue Yes or No**

(iv) **Accept programs from the user into computer system**

- c) Differentiate impact printer from non-impact printer (2 marks)

Impact printer- is a type of print which print by striking/hammering on paper through the pins shielded on a print head; **while**

Non-impact printer- is the type of printer which print without striking a paper use heat and pressure (No direct contact between print head and a paper)

5. (a) Assume a teacher at your school want to surf on internet materials for information and computer studies on Electric mail system.

- (i) List any four (4) search engine will enable a teacher to accomplish his/her task (2 marks)

- **Google** (www.google.com)
- **Yahoo** (www.yahoo.com)
- **Msn** (www.msn.com)

- **Hotmail** (www.hotmail.com)

(ii) List four (4) things required by a teacher to connect internet. (2 marks)

(a)Computing devices. Example Computer , Tablets , PAD

(b)Connection devices example Telephone, Cable, DSL or Wireless , Modem

(c) Browser Software example Internet Explorer (IE), Mozilla Firefox, Safari Google Chrome and Opera.

(d)Internet Service Provider (ISP).Is a company that offers its customers access to the Internet. Internet access is provided via modems (Telephone line) ,Cable or Wireless. Examples (ISP): Vodacom, Airtel, Tigo, Zantel, TTCL ,Sasatel and Halotel .

(b) Explain four services provided by the internet to Tanzania society (6 marks)

- **Electronic mail**
- **Newsgroup**
- **Chat/Instant Messaging**
- **Online Forums**
- **Video/Audio Conferencing**

6. A spreadsheet was set up to compare passenger costs for five airlines.

	A	B	C	D	E
1	Flight id	Distance (km)	Number of passengers	Total revenue (\$)	Cost per passenger (\$)
2	AA 151	3 000	240	60 000	250
3	AT 304	2 000	320	80 000	250
4	BR 106	1 500	150	45 000	300
5	CD 221	8 000	400	360 000	900
6	EX 115	6 000	280	140 000	500
7				Average cost:	

(a) What formula must be in E2 to calculate the cost per passenger. (1mark)

$$= D2/C2$$

(b) Cell E7 is to contain the average passenger cost. What formula would need to be placed in this cell? (2marks)

$$= \text{AVERAGE}(E2:E6) \text{ OR}$$

$$= \text{SUM}(E2:E6)/5 \text{ OR}$$

$$= (E2 + E3 + E4 + E5 + E6)/5$$

(c) It was decided to add two new columns (F and G) to find out if the airline made a **profit** or **loss** on each flight. The costs per flight are calculated by multiplying Distance (**km**) by 1/10th of the Number of passengers.

(i) What formulas must be in column F? (2marks)

	F
1	Flight costs (\$)
2	= B2 * C2/10
3	= B3 * C3/10
4	= B4 * C4/10
5	= B5 * C5/10
6	= B6 * C6/10

(ii) The formula = IF (F2 > D2, "Loss", "Profit") was added to cell G2. What would be output? (3marks)

Output would be : Loss

(iii) What formula would be in G5 after replication down from G2? (2marks)

= IF (F5 > D5, "Loss", "Profit")

7. An airport has a number of hotels nearby. A database has been set up to give customers information to allow them to select a hotel.

Hotel Ref	Name of hotel	No. of stars	No. of rooms	Hotel parking	Price per person (\$)	Distance from airport (km)
H41	The Grand	3	45	Y	65	11
K22	Sleepy Inn	2	15	N	45	10
N15	Britannia	5	140	Y	150	4
L44	Beach Hotel	4	62	N	85	8
H30	Sea View	3	38	N	60	4
H21	Pyramid	3	25	N	70	5
N21	Superior	5	120	Y	200	2
K14	Travellers	2	15	N	45	10

(a) How many records are shown in the database? (1mark)

There are: Eight (8) records

(b) Which field in each record must be unique? (1mark)

Hotel Ref

(c) The following search condition was typed in: (3 marks)

(No. of stars > 3) OR (Hotel parking = Y) Using **Hotel Ref** only, which records would be found?

H41, N15, L44, N21 (-1 for each error or omission)

(d) Write down the search condition to find which hotels were less than 10 km from the airport and charged under \$100 per person. (3 marks)

(Distance from airport (km) < 10) AND (Price per person (\$) < 100)

(e) The database was sorted into descending order using **No. of rooms**.

Using **Hotel Ref** only, write down the sorted order of records. (2 marks)

N15, N21, L44, H41, H30, H21, K22, K14 (last 2 in any order)

8. (a) Explain four (4) advantages of Desktop Publishers over word processors (6 marks)

- Every item on a page is contained in a frame and can be edited and formatted independently.
- Master pages are used to set a common layout which may be repeated on several pages e.g. logo, page number etc.
- Publication can be printed in a form suitable for commercial printing e.g. using colour separations.
- Wide range of templates is available eg. Brochures, booklets, posters, business cards etc

(b) Give four (4) examples of Publications designed using Desktop Publishing Software (4 Marks)

▪ **Newsletter**

A newsletter is a periodically distributed publication generally with one main topic that is of interest to its subscribers (e.g. institutions, business firm, government agency etc.)

▪ **Business**

cards

Business cards are cards bearing business information about a company or individual

▪ **Calendar**

A calendar is a system of organizing days for social, religious, commercial, or administrative purposes

- **Banner**

A banner is a flag or other piece of cloth bearing a symbol, logo, slogan or other message to be displayed so that the stakeholder concerned with the message is informed

9. (a) describe a multimedia system (2 marks)

- **A multimedia system is a system capable of processing multimedia data and applications which include generation, representation, storage, transmission, search and retrieval and delivery of multimedia information.**

(c) Explain four (4) features of multimedia system (8 marks)

- **Very High Processing Power:** to deal with large data processing and real time delivery of media. As the multimedia involves more than one media element, including high-resolution graphics, high quality motion video, and one needs a faster processor for better performance.
- **Multimedia Capable File System:** To deliver real-time media example Video /Audio Streaming.
- **Data Representations/File Formats that support multimedia:** Data representations/file formats should be easy to handle yet allow for compression/decompression in real-time. Examples of such formats include MP3, MP4 etc.
- **Efficient and High Input/Output (I/O):** Input and output to the file subsystem needs to be efficient and fast. Need to allow for real-time recording as well as playback of data.

10. (a) Rock-ICT has set up a website as shown below:

The screenshot shows a website for 'ROCK - ICT'. The navigation bar includes 'Home', 'Sales', 'Basket', 'Checkout', and 'Payment'. The 'Payment' page is selected. Below the navigation bar, there is a section titled 'Choose your payment method:' with two radio buttons: 'credit card' (selected) and 'debit card'. At the bottom, there is a hyperlink 'click here to go to CD website'. Labels (i), (ii), and (iii) point to the website container, the radio button, and the hyperlink respectively.

(i) Give the names of the three parts that have been labeled (i, ii, iii):

(3 marks)

(i) **Webpage**

(ii) **Radio button**

(iii) **Hyperlink NOT link**

(ii) How does the website recognize the user's buying preferences as soon as they visit the website?

(1 mark)

Reference to cookies OR Description of cookie

(iii) Hacking is one security issue associated with the Internet and emails. State two other security issues.

(2 marks)

Any two from:

– **Phishing**

– **Pharming**

– **Viruses**

– **(Key logging and spyware) are malware**

Note :For Rationale: Fishing and Farming not acceptable

(b) Write the output for following html codes

(4marks)

```
<html>
<title>Registration page</title>
<body>
<h1>Students Arriving Registration Form Version 3.2</h1>
<form>
Name: <input type="text" name="name"><br>
E-mail: <input type="text" name="email"><br>
<p>Arriving on:
<Select Name="Arrival Day">
<Option Value="1">Saturday</Option>
<Option Value="2">Sunday</Option>
<Option Value="3">Monday</Option>
<Option Value="4">Tuesday</Option>
<input type="submit">
</form>
</body>
</html>
```

OUTPUT OF HTML CODES

Students Arriving Registration Form Version 3.2

Name:

E-mail:

Arriving on:

SECTION C (10 Marks)

Answer **one (1)** question from this section

11. One among the factors to consider when buying a computer is operating system, its compatibility and friendness to the user. Explain four types of operating systems. **(10 marks)**

- **Real-time operating systems**-Are used to control machinery, scientific instruments such calculators and industrial systems. In this Operating system a user does not have much control over the functions performed by RTOS
- **Single user, single task operating systems:** Allow one user to do one thing at a time. example of single user single task operating system is the operating system used by personal digital assistants (PDAs).
- **Single user, multi-tasking operating systems :**Allow angle user to simultaneously run multiple applicatios on their computer. This is the type of operating system found on most personal desktop and laptop computers
- **Multi-user operating system systems:** Allow multiple users to simultaneously use the resource on a single computer.

12.The accessibility of Information and Communication Technology tools has affected the system of information security. Describe any four(4) measures to protect information **(10 marks)**

- **BACKUP**-Storing backup copies of software and data and having backup computer and communication capabilities are important basic safeguards because the data can then be restored if it was altered or destroyed by a computer crime or accident

- **ENCRYPTION**-This to protect confidential information is encryption. Computer users can scramble information to prevent unauthorized users from accessing it. Authorized users can unscramble the information when needed by using a secret code called a key
- **APPROVED USERS**- This help prevent abuse and misuse of computer data is to limit the use of computers and data files to approved persons. Security software can verify the identity of computer users and limit their privileges to use, view, and alter files.
- **FIREWALLS**-Computers connected to communication networks, such as the Internet, are particularly vulnerable to electronic attack because so many people have access to them. These computers can be protected by using firewall computers or software placed between the networked computers and the network.