

**NOVEMBER 2018**  
**Q & A**



**ATEC**  
**LEVEL I**



©The National Board of Accountants and Auditors, November 2018

# Contents

<b>Questions</b>	<b>Page</b>
T.01 – Book-keeping and Accounts.....	1
T.02 – Elements of Business Mathematics and Statistics .....	7
T.03 – Introduction to Information and Communication Technology	12
T.04 – Business Communication Skills .....	18
<b>Suggested Answers</b>	<b>Page</b>
T.01 – Book-keeping and Accounts.....	25
T.02 – Elements of Business Mathematics and Statistics .....	31
T.03 – Introduction to Information and Communication Technology	37
T.04 – Business Communication Skills .....	44



**EXAMINATION** : **ACCOUNTING TECHNICIAN LEVEL I**  
**SUBJECT** : **BOOK-KEEPING AND ACCOUNTS**  
**CODE** : **T.01**  
**EXAMINATION DATE** : **TUESDAY, 30<sup>TH</sup> OCTOBER 2018**  
**TIME ALLOWED** : **THREE HOURS (9:00 A.M. – 12:00 NOON)**

---

**GENERAL INSTRUCTIONS**

1. There are **FOUR** questions in this paper.
  2. Answer **ALL FOUR** questions.
  3. Marks are shown at the end of each question.
  4. Show all your workings in your answer book(s).
  5. This question paper comprises **6** printed pages.
-

## QUESTION 1

(a) For each of the questions given below, choose the most correct answer among the four given alternatives. Indicate your answer by writing the appropriate letter **A**, **B**, **C** or **D** in your answer booklet.

(i) Small items like, pencils, pens, files, etc. are written off within a year according to which of the following concepts;

- A. Materiality
- B. Consistency
- C. Conservatism
- D. Realisation

(ii) A trader provided the following information.

	<b>TZS.000</b>
Cost of sales	70,000
Expenses	8,000
Profit for the year	14,000

What was the revenue from sales?

- A. TZS.48,000,000
- B. TZS.62,000,000
- C. TZS.84,000,000
- D. TZS.92,000,000

(iii) The accounting equation can be written as:

- A. Assets – liabilities – opening capital + drawings = profit
- B. Assets + profit – drawings – liabilities = closing capital
- C. Assets – liabilities – drawings = opening capital + profit
- D. Opening capital + profit – drawings – liabilities = assets

(iv) The accounting clerk of Nasibu, a sole proprietorship posted the transportation expenses of TZS.750,000 correctly in the cash account but incorrectly posted TZS.570,000 in the transportation expenses account. This was discovered after preparing a trial balance which did not balance. What are the correct entries to correct this error?

- A. Debit: Suspense Account by TZS.180,000; Credit: Transportation expenses Account by TZS.180,000.
- B. Debit: Transportation expenses account by TZS.180,000; Credit Cash Account by TZS.180,000.
- C. Debit: Cash Account by TZS.180,000; Credit Transportation expenses account by TZS.180,000.
- D. Debit: Transportation Expenses Account by TZS.180,000; Credit Suspense Account by TZS.180,000.

- (v) A ledger is called a book of:
- A. Primary entry
  - B. Secondary entry
  - C. Final entry
  - D. Original entry
- (vi) A company's trial balance failed to agree, the totals being
- |        |                 |
|--------|-----------------|
| Debit  | TZS.815,602,000 |
| Credit | TZS.808,420,000 |

Which of the following errors could fully account for the difference?

- A. The omission from the trial balance of the prepayments asset account of TZS.7,182,000
  - B. Discount allowed of TZS.3,591,000 debited to the discount received account, in error
  - C. No entries made in the records for cash purchases totaling TZS.7,182,000
  - D. Bank overdraft of TZS.3,591,000 was included in the trial balance as a debit
- (vii) Which of the following users make predictions and provide advices on the attractiveness of investing in a business?
- A. Investors
  - B. Financial analysts
  - C. Bank
  - D. Employees
- (viii) Which of the following is not a valid reason for the cash book balance and the bank statement balance failing to agree?
- A. Timing differences
  - B. Bank charges
  - C. Error
  - D. Cash receipts total posted to payables ledger control account
- (ix) During the year TZS.5,000,000 rent was received. At the beginning of the year the tenant owed, TZS.1,000,000 and at the end of the year the tenant owed TZS.500,000.
- The figure of rent received in the statement of income for the year was:
- A. TZS.4,000,000
  - B. TZS.4,500,000
  - C. TZS.5,000,000
  - D. TZS.5,500,000

- (x) An allowance for receivables is an example of which of the following concept?
- A. Accruals
  - B. Consistency
  - C. Materiality
  - D. Prudence

(20 marks)

- (b) For each of the following statements, state whether the statement is true or false. Indicate your answer by writing “**TRUE**” for the correct statement and “**FALSE**” for the incorrect statement in your answer booklet.

- (i) The process of transferring the debit and credit information from the journal to individual accounts in the general ledger is called journalizing.
- (ii) If total debits equal total credits in the trial balance, then all balances are correct.
- (iii) An error of omission would occur if a transaction is completely overlooked in the books.
- (iv) The receipt of an invoice for rent payable by the business is represented by the entries: Debit rent, credit landlord.
- (v) Closing inventory balance is always included in the initial trial balance.

(10 marks)

- (c) Given the following items, you are required to pair each item from **LIST A** with the statement from **LIST B** appropriately. In pairing the items, write the letter from list **B** against the corresponding roman number in list **A** in your answer booklet.

**List A**

- i Drawings
- ii Sales journal
- iii An asset
- iv Error of commission
- v Standing order

**List B**

- A. Clerical error at the time of recording or posting of transactions.
- B. Is a document issued by the receiver of money to the payer in acknowledgement of the payment.
- C. An instruction to a bank by an account holder to make regular fixed payments to a particular person or organization.
- D. Results from failure to record transaction.



- E. The withdrawal of cash and goods by the owner of the business for his/her personal use.
- F. Statement prepared with a view to ensure accuracy of the two balances.
- G. A resource controlled by an entity as a result of past event and from which future economic benefits or services potential will flow to the entity.
- H. An alternative name for sales day book.

**(10 marks)**

**(Total : 40 marks)**

## QUESTION 2

(a) Distinguish the following pairs:

- (i) 'Going concern' and 'business entity' **(2 marks)**
- (ii) 'Sales journal' and 'journal proper' **(2 marks)**
- (iii) 'Sales ledger' and 'error of commission' **(2 marks)**
- (iv) 'Petty cash imprest system' and 'non-imprest system' **(2 marks)**

(b) Explain why does a business firm prepare a bank reconciliation statement?

**(2 marks)**

(c) The following are the information of Mrs Kiyondo Co. Ltd for the month of December 2017:

	<b>TZS.</b>
(i) Bank overdraft as per the cash book	245,900
(ii) Interest debited by the bank on 26 <sup>th</sup> December, 2017 but no advice received	27,870
(iii) Cheque issued before 31 <sup>st</sup> December, 2017 but not yet presented to bank	66,000
(iv) Transport subsidy received from the government directly by the bank on 28 <sup>th</sup> December 2017 but not advised to the company	42,500
(v) Draft deposited in the bank, but not credited till 31 <sup>st</sup> December 2017	13,500
(vi) Bills of collection credited by the bank till 31 <sup>st</sup> December 2017 but no advice received by the company	83,600
(vii) Amount wrongly debited to company account by the bank for which no details are available	7,400

### REQUIRED:

Prepare a bank reconciliation statement as at 31<sup>st</sup> December 2017.

**(10 marks)**

**(Total: 20 marks)**

### QUESTION 3

1. Classify the following accounts under either the Real, Nominal or Personal type of account:
- (i) Drawings
  - (ii) Cash
  - (iii) Capital
  - (iv) Machinery
  - (v) Bank
  - (vi) Depreciation
- (b) Explain the meaning of 'accounting cycle'. (2 marks)
- (c) Explain the stages that are involved in the accounting cycle. (12 marks)
- (Total : 20 marks)**

### QUESTION 4

You are provided with the following transactions of Barikieli Bayo who is a sole proprietor that operates a wholesale shop in the outskirts of Dar es Salaam City:

Date	Transaction
1/12/2016	He deposited some of his own funds amounted to TZS.8,900,000 in a business bank account to start this business.
5/12/2016	He took his personal motor cycle valued at TZS.11,000,000 and introduced it to the business to be used solely for business purposes.
7/12/2016	He took TZS.3,000,000 from the business bank account and used TZS.2,500,000 to buy furniture, the remaining amount was put in a cash till to assist in cash transactions.
13/12/2016	He bought goods worth TZS.3,000,000 from Bakanja Traders paying TZS.2,000,000 by cheque and the balance to be paid later on.
15/12/2016	He sold goods for TZS.1,200,000 receiving the amount in cash
18/12/2016	He paid TZS.250,000 cash for cleaning expenses
21/12/2016	He sold goods for TZS.850,000 on credit to Nasibu Mwiula
23/12/2016	He paid Bakanja Traders TZS.500,000 by cheque as part of the debt payment
27/12/2016	He paid TZS.140,000 in cash for motorcycle repairs
31/12/2016	He paid TZS.600,000 by cheque for carriage outwards

#### REQUIRED:

- (a) Post the transactions in their respective Accounts and bring down the balances at the end of the month on 31<sup>st</sup> December 2016. (14 marks)
- (b) Prepare the trial balance as at 31<sup>st</sup> December 2016. (6 marks)
- (Total : 20 marks)**

**EXAMINATION** : **ACCOUNTING TECHNICIAN LEVEL I**  
**SUBJECT** : **ELEMENTS OF BUSINESS MATHEMATICS  
AND STATISTICS**  
**CODE** : **T.02**  
**EXAMINATION DATE** : **WEDNESDAY, 31<sup>ST</sup> OCTOBER 2018**  
**TIME ALLOWED** : **THREE HOURS (2:00 P.M. – 5:00 P.M.)**

---

**GENERAL INSTRUCTIONS**

1. There are **FOUR** questions in this paper.
2. Answer **ALL FOUR** questions.
3. Marks are shown at the end of each question.
4. You may use simple calculator.
5. Mathematical tables and graph papers will be provided where needed.
6. Show clearly all your workings for each answer in your answer book(s).
7. This question paper comprises **5** printed pages.

## QUESTION 1

- (a) For each of the questions given below, choose the most correct answer among the four given alternatives. Indicate your answer by writing the appropriate letter **A**, **B**, **C** or **D** in your answer booklet.
- (i) Which of these is not a method of data collection?  
A. Interview  
B. Experiment  
C. Questionnaire  
D. Observation
- (ii) Which of the following terms best describes data that were originally collected at an earlier time by a different person for a different purpose?  
A. Secondary data  
B. Primary data  
C. Experimental data  
D. Unprocessed data
- (iii) When each number of a population has no equal chance of being selected, this is called:  
A. systematic sampling method  
B. probability sampling method  
C. a random selection  
D. non-probability sampling
- (iv) A poultry farmer collects 500 eggs every day. Each egg is sold for 200 shillings. The amount of money that the farmer will get per week (7 days) if all the eggs are sold is:  
A. TZS.700,000  
B. TZS.140,000  
C. TZS.350,000  
D. TZS.1,000,000
- (v) In the expression  $2(3x + 4) - (8x - 2) = 10$ , the value of  $x$  is:  
A. 2  
B. 0  
C. -2  
D. -4
- (vi) If a jug of milk has a capacity of  $2\frac{2}{5}$  litres and the capacity of a cup is  $\frac{3}{10}$  of a litre, the number of cups that a jug can hold is:  
A. 8  
B. 6  
C. 1  
D. 5

- (vii) The area of a circle whose diameter is 10 is:  
A. 50  
B. 78.55  
C. 314.2  
D. 15.7
- (viii) When 5 is added to an integer 'n', the result is greater than 7. The smallest possible value of 'n' is:  
A. 7  
B. 5  
C. -2  
D. 2
- (ix) If there are 15 students in the class and only 5 books, then each book has to be shared by 3 students. The number of ways in which this can happen is:  
A. 75  
B. 225  
C. 45  
D. 15
- (x) In probability a set of all possible outcomes of an experiment is called:  
A. random experiment  
B. sample space  
C. independ variables  
D. mutually exclusive event

**(20 marks)**

- (b) Given the following items, you are required to pair each item from **LIST A** with the statement from **LIST B** appropriately. In pairing the items with statements, write the letter from list **B** against the corresponding roman number in list **A** in your answer booklet.

**LIST A**

- (i) Matrix  
(ii) Equal matrices  
(iii) Square matrix  
(iv) Null matrix  
(v) Upper triangular matrix

**LIST B**

- A. A square matrix all of whose elements above the leading diagonal are zero  
B. A matrix having elements zero

- C. A square matrix all of whose elements, except those in the leading diagonal, are zero
- D. A square matrix all of whose elements below the leading diagonal are zero
- E. Same number of rows and columns
- F. A set of  $mn$  numbers arranged in an array of  $m$  rows and  $n$  columns
- G. A singular matrix if its determinant is zero

**(10 marks)**

(c) For each of the following statements, state whether the statement is true or false. Indicate your answer by writing “**TRUE**” for the correct statement and “**FALSE**” for the incorrect statement in your answer booklet.

- (i) The modal class is not necessarily the one with the highest frequency
- (ii) Any number when raised to the power of zero (0) is always one
- (iii) The minimum value of a function can be found when the gradient or slope is either negative or positive
- (iv) It is possible for the probability of occurrence of an event to be negative
- (v) There is no logarithm of a negative number.

**(10 marks)**

**(Total : 40 marks)**

## QUESTION 2

(a) A car carries a mass of 1.1 tonnes. It carries a driver and a passenger whose masses are 80kg, 480g and 67kg, 842g respectively.

**REQUIRED:**

Find the total mass of the car and its occupants in hectogram. **(5 marks)**

(b) Anna, Sarah and Teresa shared TZS.60,000 among themselves. Anna got TZS.10,000 less than Teresa and Sarah got TZS.5,000 more than Anna.

**REQUIRED:**

How much each of them received? **(5 marks)**

(c) A farmer borrowed TZS.255,000 from a bank for  $2\frac{1}{2}$  years. The bank charged a simple interest of  $5\frac{1}{4}\%$  per annum:

**REQUIRED:**

How much was required to be paid in total? **(5 marks)**

(d) Find the annual sinking fund payment required to accumulate TZS.14,000,000 in 12 years at 8% annual interest **(5 marks)**

**(Total : 20 marks)**

### QUESTION 3

- (a) Paulina made an initial deposit of TZS.100,000 into a savings account at a local community bank which offers a 3% yearly simple interest rate. If she makes no withdrawals or deposits in the next 10 years:

**REQUIRED:**

How much is the account worth? **(5 marks)**

- (b) A machine which cost TZS.15 million is estimated to provide 3,000 hours of service during its life, after which it will have zero salvage value. The machine is used for 1200 hours during first year:

**REQUIRED:**

Calculate the depreciation charge during first year. **(5 marks)**

- (c) Consider the sequence 3, 8, 13, 18, 23, 28 .....

(i) Is it arithmetic or geometric?

(ii) Find a formula for  $a_n$  and use it to find  $a_{101}$  and the 101<sup>st</sup> term in the sequence. **(5 marks)**

- (d) Solve the equation:

$$\log_3 [\log_2 (2x-1)] = 2$$

**(5 marks)**

**(Total : 20 marks)**

### QUESTION 4

1. Find the sum of all natural numbers from 100 to 300:

(i) Which are exactly divisible by 4. **(3 marks)**

(ii) Excluding those which are divisible by 4. **(3 marks)**

- (b) Find the value of n and x in the following equations

$$C(n, x) = 56 \text{ and } P(n, x) = 336 \quad \textbf{(4 marks)}$$

- (c) Calculate the standard deviation of the individual data: 1, 2, 3, 4 and 5. **(4 marks)**

- (d) List and explain at least 4 properties of standard deviation which are used to interpret analysed statistical data. **(2 marks)**

- (e) Find the rate of interest compounded semi annually at which TZS.1,500,000 will grow to TZS.2,000,000 in 10 years. **(4 marks)**

**(Total : 20 marks)**



**EXAMINATION** : **ACCOUNTING TECHNICIAN LEVEL I**

**SUBJECT** : **INTRODUCTION TO INFORMATION AND COMMUNICATION TECHNOLOGY**

**CODE** : **T.03**

**EXAMINATION DATE** : **THURSDAY, 1<sup>ST</sup> NOVEMBER 2018**

**TIME ALLOWED** : **THREE HOURS (9:00 A.M. – 12:00 NOON)**

---

### **GENERAL INSTRUCTIONS**

1. There are **FOUR** questions in this paper.
  2. Answer **ALL** questions.
  3. Marks are shown at the end of each question.
  4. In marking candidate's answer script, examiners will take into account clarity of exposition, logic arguments, paper arrangement and presentation of answers together with the use of relevant examples.
  5. This question paper comprises **6** printed pages.
-



## QUESTION 1

- (a) For each of the questions given below, choose the most correct answer among the four given alternatives. Indicate your answer by writing the appropriate letter **A**, **B**, **C** or **D** in your answer booklet.
- (i) Which one among the following is not considered as the benefit of integrated accounting systems?
- A. Simple to understand because it is less complex than the interlocking system of accounting.
  - B. It eliminates duplication of records that leads to being more cost effective.
  - C. It saves the accountant's time and efforts since it only allows producing reports and carrying out reconciliation of the statement of profit or loss.
  - D. All information is saved on one database so it provides a holistic picture of the accounting system.
- (ii) All of the following are true about "Sort" as a tool of Database Management Systems (DBMS) except one:
- A. Sorting enables to organize and re-order data (across multiple fields).
  - B. This helps in proper visualisation and understanding of data, leading to quality decisions.
  - C. This function allows having better record search or query efficiency.
  - D. Data can be sorted by text (A to Z or Z to A), numbers (smallest to largest or largest to smallest), and dates and times (oldest to newest and newest to oldest) in one or more ways.
- (iii) A kilobit per second (Kbps) equals how many bits per second?
- A. 1 billion
  - B. 1 thousand
  - C. 1 million
  - D. 1 hundred
- (iv) One among the following methods of communication allows transaction to take place in both directions, but only in one direction at a time.
- A. Simplex
  - B. Half-duplex
  - C. Four wire circuit
  - D. Full duplex
- (v) Which tool does support website content of a company to be accessed by end-users?
- A. Web client/server
  - B. Web server
  - C. Web e-mail
  - D. Web browser

- (vi) This device refers to a small hardware device that joins multiple computers together within one LAN.
- A. Network Interface Card
  - B. Router
  - C. Switch
  - D. Bridge
- (vii) The following refers to the largest community in classification of e-commerce.
- A. Business to Business (B to B)
  - B. Business to Consumer (B to C)
  - C. Business to Government (B to G)
  - D. Government to Government (G to G)
- (viii) Buy-side e-commerce is different from sell-side e-commerce as it involves:
- A. any electronically mediated communication between an organization and its stakeholders.
  - B. an organization using electronic media to sell direct to its customers.
  - C. an organization using electronic media to purchase from its suppliers.
  - D. the use of electronic communications for all business processes.
- (ix) The sharpness and clarity of images displayed on the monitor is known as:
- A. pixels
  - B. resolution
  - C. display
  - D. elements
- (x) Computer virus cannot infect files that are saved in:
- A. flash disk
  - B. hard drive
  - C. memory card
  - D. CD-ROMs
- (xi) Microsoft Word feature of automatically moving the text to the next line when it reaches the right edge of the screen is called:
- A. enter
  - B. page down
  - C. return
  - D. word wrap
- (xii) Database Management System (DBMS) acts as an interface between two components of a database system, which are:
- A. database and SQL
  - B. data and database
  - C. database application and database
  - D. database and user

- (xiii) Which of the following statement is not correct?
- A. Computer is capable of processing only digital signal.
  - B. Computer is capable of analyzing both quantitative and qualitative data.
  - C. Appropriate software is required for processing the data.
  - D. The first commercial available microprocessor was the Intel 4004.
- (xiv) Which of the following is not an output device?
- A. Plotter
  - B. Flat screen
  - C. Scanner
  - D. Touch screen
- (xv) What is Hypertext Transfer Protocol (HTTP)?
- A. The protocol to copy files between computers.
  - B. The protocol used to transfer webpage to a browser.
  - C. The database protocol for hypertext.
  - D. The protocol that limits access to company data.

**(30 marks)**

- (b) For each of the following statements, state whether the statement is true or false. Indicate your answer by writing **“TRUE”** for the correct statement and **“FALSE”** for the incorrect statement in your answer booklet.
- (i) Word processing and desktop publishing are examples of applications software.
  - (ii) An online commercial site such as Amazon.com is an example of an e-commerce database application.
  - (iii) An enterprise resource planning application is an example of data mining database application.
  - (iv) Monitor is the software that is used to print soft copy.
  - (v) In database, data is stored in spreadsheets which have rows and columns.

**(10 marks)**

**(Total: 40 marks)**

## **QUESTION 2**

- (a) Discuss the impact of computers in accounting profession. **(3 marks)**
- (b) Describe any three advantages of mobile commerce over traditional e-commerce. **(3 marks)**
- (c) Explain the importance of Electronic Data Interchange (EDI) in e-commerce. **(3 marks)**

- (d) With examples differentiate between B2B, B2C, C2B and C2C e-commerce models. **(8 marks)**
- (e) Discuss what does the Tanzania Cybercrime Act 2015 say about the following practices:
- (i) Intellectual property rights violation using computer systems.
- (ii) Data espionage. **(3 marks)**
- (Total : 20 marks)**

### QUESTION 3

- (a) A school has decided to extend its computer laboratory. The Head Master uses software to help him work out the cost. His first attempt is given below:

	A	B	C	D	E	F
1.	Item to be brought	Unit cost (TZS.)	No. to buy	Total cost before discount (TZS.)	Discount	Total cost after discount (TZS.)
2.	Computer	420,000	30	12,600,000	10%	11,340,000
3.	PC monitor	85,000	30	2,550,000	10%	2,295,000
4.	Laser printer	240,000	2	480,000	0	432,000
5.	Colour printer	350,000	1	350,000	0	315,000
6.	Electronic whiteboard	62,000	2	124,000	5%	111,600
7.	Network points	125,000	30	3,750,000	15%	3,375,000
8.	Software licences	140,000	30	4,200,000	20%	3,780,000
9.						
10.					<b>TOTAL</b>	<b>21,648,600</b>

#### REQUIRED:

- (i) State which type of software has been used. **(2 marks)**
- (ii) Write the formulas which would be contained in the following cells:
- (a) D2: \_\_\_\_\_
- (b) F2: \_\_\_\_\_
- (c) F10: \_\_\_\_\_
- (6 marks)**
- (iii) Mention the type of data in the highlighted cell C3. **(2 marks)**
- (iv) Mention three advantages that the Headmaster is getting for using this software package for his work, rather than using a calculator and paper. **(4 marks)**

- (b) Differentiate between the following concepts:
- (i) Volatile and non-volatile memory
  - (ii) System software and application software
  - (iii) Data and information

**(6 marks)**  
**(Total : 20 marks)**

#### QUESTION 4

- (a) Structured Query Language (SQL) is the most popular language used to request information. However, in some cases Query By Example (QBE) is used as substitute. A query tool involves raising questions or queries on fields contained in various tables of the database management system.

**REQUIRED:**

- (i) Explain what is a SQL and how does it differ from QBE. **(4 marks)**
  - (ii) What are the basic tasks that could be performed by a query tool? **(5 marks)**
- (b) State five general technological limitations of e-commerce. **(5 marks)**
- (c) Explain the differences between *Wearable computers* (wearable devices) and *Embedded computers*. **(2 marks)**
- (d) A router translates information from one network to another. They have replaced the hubs and switches that are capable of performing basic functions.

**REQUIRED:**

- What are the four basic characteristics of a router? **(4 marks)**  
**(Total : 20 marks)**



**EXAMINATION** : **ACCOUNTING TECHNICIAN LEVEL I**  
**SUBJECT** : **BUSINESS COMMUNICATION SKILLS**  
**CODE** : **T.04**  
**EXAMINATION DATE** : **FRIDAY, 2<sup>ND</sup> NOVEMBER 2018**  
**TIME ALLOWED** : **THREE HOURS (9:00 A.M. – 12:00 NOON)**

---

### **GENERAL INSTRUCTIONS**

1. There are **SIX** questions in this paper.
  2. Answer **ALL** questions.
  3. Read carefully the instructions shown on each question.
  4. Answers should be clearly and neatly written.
  5. Marks are shown at the end of each question.
  6. This question paper comprises **7** printed pages.
-

## QUESTION 1

### (a) COMPREHENSION

**Read the passage below and then answer the questions after it.**

As you move up the ladder in society, numerous occasions arise when you will be asked to speak on some important areas or subjects. Public speaking is both an art and a science. There are social occasions, such as wedding receptions, facilitations, award ceremonies, and even memorial services, where you have to speak in public. In your professional life, there will be conferences, seminars, workshops, presentations, where you may be an invited speaker. All these speeches require a lot of preparations and acquisition of public speaking skills. Some experts point out that “most people fear public speaking more than death itself”.

A good speaker knows how to arouse the interest of the audience and sustain it. You must try and find out about the audience. You should know their level, and what they want to know from you. Find out also about the background of the audience, and the time you are allocated to talk to them. Accordingly, you decide on how much you want to speak and what you want to speak.

The first impression created by you as a speaker is very important. So your dress and body language have to be appropriate. When you reach the podium, you must stand in front of the microphone with confidence, smile at the audience and salute them.

Your voice must be such that it is audible to all the members of the audience and people should not have to crane their necks to see you and strain their eyes to hear your voice. You must articulate the words clearly and not speak with an artificial accent or speak in a sluggish manner or slur words together. Your tone, pitch and intonation should be appropriate.

As a public speaker, you must have a sense of humour. But the humour should not be misdirected and it should not hurt anyone. If possible, tell a couple of jokes that will put the audience in a positive frame of mind. Also make effective use of relevant facts and figures and incidents from the world around you. If you are speaking in a foreign country, you should draw upon the news, traditions and culture of that country in order to arouse the interest of the people and relate to the audience. Always try to speak in positive terms about the visiting nation, city or in academic institution.

#### **REQUIRED:**

- (i) Suggest the suitable title for the passage. **(1 mark)**
- (ii) Summarize the passage above in not more than 150 words. **(9 marks)**

(b) **With supporting correct sentences, state one use of each of the following punctuation marks:**

- (i) Apostrophe
- (ii) Semicolon
- (iii) Ellipsis
- (iv) Quotation mark
- (v) Colon

**(10 marks)**  
**(Total : 20 marks)**

## QUESTION 2

(a) **Correct the following sentences:**

- (i) Where was your argument leading to?
- (ii) I wish he would get off of the phone.
- (iii) They are responsible for aircraft safety in the air, the hangars, and the runways.
- (iv) Company's directors must become aware and sensitive to their customers' concerns.
- (v) This is a project into which you can sink your teeth. **(5 marks)**

(b) **Using the words in brackets, complete the text below with the appropriate tenses:**

- (i) Where should I (put) ..... the empty bottles.
- (ii) I (hear) ..... the song last night.
- (iii) The horse was (ride) ..... by the young girl.
- (iv) He had already (see) ..... it.
- (v) Has she ever (buy) ..... you lunch? **(5 marks)**

(c) **Change the following sentences into passive voice:**

- (i) The secretary typed the letter
- (ii) He washes his clothes everyday
- (iii) My mother is cooking some potatoes
- (iv) He cut the tree yesterday
- (v) He has taken my book **(5 marks)**



(d) **Find the mistakes in the following sentences and correct them accordingly:**

- (i) although joseph worked hard but he was not promoted
- (ii) majuto has been a leader supervisor caretaker and spokesman of the company for a long time
- (iii) the japanese big two beautiful cars arrived yesterday
- (iv) his wife ate the food and then swallowed it
- (v) how young is his eldest son

**(5 marks)**  
**(Total : 20 marks)**

### QUESTION 3

(a) For each of the following statements, state whether the statement is true or false. Indicate your answer by writing “**TRUE**” for the correct statement and “**FALSE**” for the incorrect statement in your answer booklet.

- (i) Behaviour and speech are forms of communication.
  - (ii) The tone is not important in communication.
  - (iii) If a speaker mispronounces a word, I immediately correct him/her.
  - (iv) Non-verbal communication is more used than verbal communication.
  - (v) Intrapersonal communication is communication between two or more people.
- (5 marks)**

(b) Given the following items, you are required to pair each item from **LIST A** with the item from **LIST B** appropriately. In pairing the items, write the roman number from list **A** against the corresponding letter in list **B** in your answer booklet.

#### **LIST A**

- (i) If he comes .....
- (ii) Had he seen me .....
- (iii) He came to school .....
- (iv) Once they arrive .....
- (v) No sooner had he entered the hall .....

## **LIST B**

- A. Than all people stood up.
- B. Do you know that the big football teams in Tanzania are Simba and Yanga?
- C. Although his sickness notwithstanding.
- D. Did you see your brother?
- E. He would have dashed away.
- F. He will be beaten by his enemies.
- G. Tell them to stay in the lounge until I come back.
- H. That tree is very tall.

**(5 marks)**

**(Total: 10 marks)**

## **QUESTION 4**

- (a) Define “sales letters”. **(3 marks)**
  - (b) Briefly explain four objectives of sales letter. **(12 marks)**
- (Total : 15 marks)**

## **QUESTION 5**

- (a)
    - (i) Define “listening”.
    - (ii) Concisely, explain the four sub-processes of listening comprehension which aid in distinguishing listening from hearing. **(5 marks)**
  - (b) Briefly, illustrate the five common types of reading and the kind of information ought to be gained in each type. **(5 marks)**
  - (c) Briefly, evaluate any five common types of advertisement and illustrate the situation(s) in which each category can prove effectiveness. **(5 marks)**
- (Total : 15 marks)**

## QUESTION 6

- (a) Read the following passage and answer the questions given below by choosing the most correct answer among the four given alternatives. Indicate your answer by writing the appropriate letter **A**, **B**, **C** or **D** in your answer booklet.

Development in mobile phone industry technology and networking has been a blessing to mankind but as time goes on it now turns to be a curse to human beings. These mobile phones and networking are now used in various crimes such as credit card frauds, cyber pornography, sale of illegal articles such as narcotics, weapons and wildlife, online gambling, intellectual property crimes such as software piracy, copyright infringement, trademarks violations and theft of computer source code. Other cybercrimes are email spoofing, phishing, trojan attacks, forgery, defamation, cyber stalking and cyber terrorism.

These crimes committed through mobile phones industry are known as cybercrimes. Cybercrime or computer crime, refers to any crime that involves a computer and a network. A computer may be used in committing crimes. That is, cybercrime is a crime involving computers or digital devices, in which a computer can be either a target of the crime, a tool of the crime or a tool containing evidence of the crime. This type of crime can be targeted to various victims such as the government, different organizations, government ministries, big and small businessmen and women, irrespective of the size of their businesses and sometimes the victims can be innocent individuals.

Cybercrimes can be difficult to control or prevent as the attackers are most of the time faceless. The attacker can be your roommate or someone living next door, your neighbour or a person in a different geographical location or continent (Effiong 2013). All these can target their victim regardless where they live provided they have an access to computers and networking. These cybercrimes are committed in areas we live, country, continent and the world in general. The attackers are everywhere in this world of new technology (Madauda 2017).

- (i) Cyber-crimes are committed by;
- A. Faceless people
  - B. People who live far away from us
  - C. People who are not easily identified
  - D. People who use computers and smart phones frequently
- (ii) Why smart phones have been a blessing and a curse to their users?
- A. They are used in many crimes
  - B. They serve, at the same time may be misused
  - C. Criminals use them to target their victims
  - D. They are helpful to business men and used by faceless people to attack others.

- (iii) How can you help people who own smart phones and computers from being attacked by cybercriminals?
  - A. To put a password in their electronic gadgets
  - B. To abstain from connecting them to networking
  - C. To report the incidences to the nearest police stations
  - D. To disconnect their gadgets from networking after using them.
  
- (iv) Who are the targets of cybercriminals?
  - A. Anyone who is using a smart phone or computer connected to internet
  - B. Government officials and great business men and women
  - C. Stalkers, people holding high positions in the government and big businessmen
  - D. Neighbours, people who use smart phones and computers most of the time
- (v) Why cybercriminals target our smart phones more than our computers nowadays?
  - A. Our smart phones are more vulnerable to the cyber criminals
  - B. Smart phones have more personal information needed by the criminals
  - C. Computers have less personal and financial information than the smart phones
  - D. The smart phones are always carried by the users than computers so they are easily attacked

**(10 marks)**

- (b) Punctuate the following group of words:

public speaking is a powerful tool that can be used to motivate inform persuade translate entertain or influence others good public speakers have opportunities to change the ideas of listeners and affect the emotions of the audience some popular types of public speaking include motivational speaking business presentations customer service large group or mass communication and political speeches you must grab an audiences' attention immediately open with a startling statistic a story or an interesting quote an energetic delivery of the information helps and includes movement hand gestures facial expressions, emotions and variety in vocal tones and speeds

**(10 marks)**

**(Total : 20 marks)**



**SUGGESTED SOLUTIONS**  
**T.01 – BOOKKEEPING AND ACCOUNTS**  
**NOVEMBER 2018**

**ANSWER 1**

(a)

- |        |   |
|--------|---|
| (i)    | A |
| (ii)   | D |
| (iii)  | A |
| (iv)   | D |
| (v)    | C |
| (vi)   | D |
| (vii)  | B |
| (viii) | D |
| (ix)   | B |
| (x)    | D |

(b)

- |       |       |
|-------|-------|
| (i)   | FALSE |
| (ii)  | FALSE |
| (iii) | TRUE  |
| (iv)  | TRUE  |
| (v)   | FALSE |

(c)

- |       |   |
|-------|---|
| (i)   | E |
| (ii)  | H |
| (iii) | G |
| (iv)  | A |
| (v)   | C |

**ANSWER 2**

**Distinguish the following pairs:**

(a) (i) Going concern and business entity

Going Concern Assumption – As per this assumption, the business will exist for a long period and transactions are recorded from this point of view. There is neither the intention nor the necessity to wind up the business in the foreseeable future.

Accounting Entity Assumption – According to this assumption, business is treated as a unit or entity apart from its owners, creditors and others. In other words, the proprietor of a business concern is always considered to be separate and distinct from the business which he controls. All the business transactions are recorded in the books of accounts from the view point of the business.

- (ii) Sales journal and journal proper  
The sales Journal is used to record all credit sales of goods dealt with by the trader in his business. Cash sales, cash and credit sales of assets are not entered in this book. The entries in the sales book are on the basis of the invoices issued to the customers with the net amount of sale WHILE Journal proper is used for making the original record of such transactions for which no special journal has been kept in the business.
- (iii) Sales ledger and error of commission  
Sales ledger is a ledger that keep individual credit customer accounts while Error of commission is error that arises due to wrong recording, wrong posting, wrong costing, wrong balancing, wrong carrying forward etc. error of commission may be classified as error of recording and error of posting.
- (vi) Imprest System and Non-imprest system  
Petty cash imprest system is a system where initially the petty cashier is given a fixed amount of cash and subsequently the amount of expenses is reimbursed while non-imprest system is the system which does not follow imprest system. The amount which is reimbursed and the timing of reimbursement are decided by people operating the system.

(b) Why does business firm prepare a bank reconciliation statement

Reasons for preparing Bank reconciliation statement:

- Detection of errors – it corrects errors or wrong recording of entries either by bank or business entity.
- Delays in collection revealed – comparison of bank book with passbook reveals delays if any in the collection of cheques, bills, etc. as a result unnecessary delays are avoided and all the bills sent to bank for collection are kept track of.
- Completion of cash book – some business entries like direct payment by banks on standing orders. Dishonoured cheques, are collected only in the bank statement. Preparation of bank reconciliation statement helps to complete the cash book.

(c)

**Mrs Kiyondo Co. Ltd**  
**Bank Reconciliation Statement as on 31.12.2017**

<b>TZS.</b>		
Bank Overdraft as per the Cash Book		245,900
Add: Interest debited by the Bank advice	27,870	
Draft deposited in the Bank but not yet credited	13,500	
Amount wrongly debited by the Bank	<u>7,400</u>	<u>48,770</u>
		<b>294,670</b>
Less: Cheque issued but not presented to the Bank	66,000	
Transport subsidy directly received by Bank but not yet recorded in the Cash Book	42,500	
Bills for collection credited by the Bank, not recorded in the Cash Book	83,600	192,100
Bank Overdraft as per Pass Book (Dr.)		<b>102,570</b>

### ANSWER 3

- (a)
- (i) Personal Account    (ii) Real Account    (iii) Personal Account    (iv) Real Account  
(v) Real Account    (vi) Nominal Account
- (b) **An Accounting cycle:** The process in which accounting transactions pass through a cyclical process of journalising, ledger posting, drafting trial balance and preparing financial statement.
- (c) Stages involved in the accounting cycle
1. **Collection of source documents:** this is the starting point of the cycle and it involves the collection of source documents which are;
    - Receipts for cash paid or received
    - Sales and purchases invoices
    - Debit and credit notes for returns
    - Bank pay in slips and cheques
  2. **Books of original entry:** after collecting source documents, the next step is recording the information contained in source documents into books of original entries. These books include the cash book, sales and purchases day books, returns inwards and outwards day book and the general journal.
  3. **Posting to ledgers:** after opening the books of original entry, the next step is posting the information to the ledgers (accounts) using the double entry system. The ledgers include sales ledger, purchases ledger and general ledgers
  4. **Checking arithmetic accuracy of the ledgers:** this is by opening the trial balance showing the list of all accounts with debit and credit balance together with their totals. The motive behind opening a trial balance is to ensure that double entry was done correctly.
  5. **Determining profit or loss for the accounting period:** This is achieved by preparing the statement of comprehensive income.
  6. **Closing the financial position of the business:** this is by preparing the statement of financial position showing the assets, liabilities and capital structure of the business.

**ANSWER 4**

**(a) CASH BOOK**

		<b>TZS.'000'</b>	<b>TZS.'000'</b>			<b>TZS.'000'</b>	<b>TZS.'000'</b>
		<b>CASH</b>	<b>BANK</b>			<b>CASH</b>	<b>BANK</b>
1.12	Capital		8,900	7.12	Cash		3,000
7.12	Bank	3,000		7.12	Furniture	2,500	
15.12	Sales	1,200		18.12	Cleaning expenses	250	
				23.12	Bankanja Traders		500
				27.12	Motorcycle repairs	140	
				31.12	Carriage Outwards		600
				13.12	Bankanja Traders		2,000
					Balance c/d	<u>1,310</u>	<u>2,800</u>
		<u>4,200</u>	<u>8,900</u>			<u>4,200</u>	<u>8,900</u>
	Balance b/d	1,310	2,800				

<b>DR</b>		<b>CAPITAL A/C</b>		<b>CR</b>	
		<b>TZS.'000'</b>			<b>TZS.'000'</b>
31.1	Balance c/d	<u>19,900</u>		Bank	8,900
2				Motorcycle	<u>11,000</u>
		<u>19,900</u>		1.1.17 Balance b/d	<u>19,900</u>

<b>DR</b>		<b>MOTORCYCLE A/C</b>		<b>CR</b>	
		<b>TZS.'000'</b>			<b>TZS.'000'</b>
5.12.16	Capital	<u>11,000</u>		Balance c/d	11,000
		<u>11,000</u>			<u>11,000</u>
	Balance b/d	11,000			

<b>DR</b>		<b>FURNITURE A/C</b>		<b>CR</b>	
		<b>TZS.'000'</b>			<b>TZS.'000'</b>
	Bank	25,000		Balance c/d	25,000
		<u>25,000</u>			<u>25,000</u>
	Balance b/d	25,000			



<b>DR</b>		<b>NASIBU A/C</b>		<b>CR</b>	
		<b>TZS.'000'</b>			<b>TZS.'000'</b>
21.12	Sales	<u>850</u>		Balance c/d	850
		<u>850</u>			<u>850</u>
	Balance b/d	850			

<b>DR</b>		<b>CLEANING A/C</b>		<b>CR</b>	
		<b>TZS.'000'</b>			<b>TZS.'000'</b>
18.12	Cash	<u>250</u>		Balance c/d	250
		<u>250</u>			<u>250</u>
	Balance b/d	250			

<b>DR</b>		<b>CARRIAGE OUTWARDSA/C</b>		<b>CR</b>	
		<b>TZS.'000'</b>			<b>TZS.'000'</b>
31.12	Bank	<u>600</u>		Balance c/d	600
		<u>600</u>			<u>600</u>
	Balance b/d	600			

<b>DR</b>		<b>PURCHASE A/C</b>		<b>CR</b>	
		<b>TZS.'000'</b>			<b>TZS.'000'</b>
	Bakanja	<u>3,000</u>		Balance c/d	3,000
		<u>3,000</u>			<u>3,000</u>
	Balance b/d	3,000			

<b>DR</b>		<b>BAKANJA TRADERS A/C</b>		<b>CR</b>	
		<b>TZS.'000'</b>			<b>TZS.'000'</b>
	Bank	2,000		Purchases	<u>3,000</u>
	Bank	500			<u>850</u>
	Balance b/d	<u>500</u>			<u>3,000</u>
		<u>3,000</u>		Balance c/d	500

<b>DR</b>		<b>SALES A/C</b>		<b>CR</b>	
		<b>TZS.'000'</b>			<b>TZS.'000'</b>
31.12	Balance c/d	2,050	15.12 Cash		1,200
		<u>2,050</u>	21.12 Nasibu		<u>850</u>
			Balance c/d		2,050

<b>DR</b>		<b>MOTORCYCLE REPAIR A/C</b>		<b>CR</b>	
		<b>TZS.'000'</b>			<b>TZS.'000'</b>
27.12	Cash	<u>140</u>	Balance c/d		140
		<u>140</u>			<u>140</u>
	Balance b/d	140			

(b)

**BARIKIELI BAYO**  
**TRIAL BALANCE AS AT 31<sup>ST</sup> DECEMBER 2016**

<b>Details</b>	<b>DR TZS.'000'</b>	<b>CR TZS.'000'</b>
Purchases	3,000	
Cash A/C	1,310	
Bank A/C	2,800	
Capital		19,900
Motorcycle	11,000	
Furnitures	2,500	
Bakanja Traders		500
Sales		2,050
Motorcycle repairs	140	
Nasibu	850	
Cleaning	250	
Carriage Outwards	600	
<b>Total</b>	<b>22,450</b>	<b>22,450</b>



**SUGGESTED SOLUTIONS**  
**T.02 ELEMENTS OF BUSINESS MATHEMATICS & STATISTICS**  
**NOVEMBER 2018**

**ANSWER 1**

- (a) (i) B (vi) A  
(ii) A (vii) B  
(iii) D (viii) B  
(iv) A (ix) C  
(v) B (x) B
- (b) (i) F  
(ii) E  
(iii) G  
(iv) B  
(v) D
- (c) (i) FALSE  
(ii) TRUE  
(iii) FALSE  
(iv) FALSE  
(v) TRUE

**ANSWER 2**

- (a) Changing all units into kilograms we have: (or convert to any other unit)

$$1.1 \text{ tones} = 1.1 \times 1000\text{kgs} = 1100 \text{ kg}$$

$$80\text{kg } 480\text{g} = (80 + 480 \div 1000)\text{kg} = 80.48 \text{ kg}$$

$$67\text{kg } 842\text{g} = (67 + 842 \div 1000) \text{ kg} = 67.842 \text{ kg}$$

$$\text{Therefore } 1100\text{kg} + 80.48\text{kg} + 67.842 \text{ kg} = 1248.322 \text{ kg}$$

Also

$$1 \text{ kg} = 10 \text{ hectogram}$$

$$\text{Therefore } 1248.322 \text{ kg} = 1248.322 \times 10 \text{ hg} = \mathbf{12,483.22 \text{ hg}}$$

- (b) Let the amount given to Anna be denoted by 'x'; the amount given to Sara be denoted by 'y' and amount given to Therese be 'z'. Then:  $x + y + z = 60,000$  .... (1)

Also it is given that:

$$x = z - 10000 \dots\dots\dots (2)$$

$$\text{and } y = x + 5000 = z - 10000 + 5000 = z - 5000 \dots\dots (3)$$

Therefore: Substitute (2) and (3) in (1) we get:

$$.z - 10,000 + z - 5,000 + z = 60,000$$

$$3z = 75,000$$

$$z = 25,000$$

Thus Theresea receives 25,000/=

Also Anna gets  $25,000 - 10,000 = 15,000$ /=

And Sarah gets  $25,000 - 5,000 = 20,000$  =

- (c) Here  $P = 255,000$ /=,  $r = 5\frac{1}{4}\% = 5.25\%$ .  $t = 2.5$  years. We are required to find the total amount to be repaid in total. Being a simple interest issue:  $A = P(1 + rt)$ . That is

$$A = P(1 + rt)$$

$$A = 255,000(1 + 0.0525 \times 2.5)$$

$$A = \text{TZS } 288,468.75$$

- (d) Sinking fund  $.R = \frac{Ar}{(1+r)^{12} - 1}$  where  $A = 14,000,000$  is the amount accrued and  $r=8\%$  is the interest rate per year.

$$.R = \frac{Ar}{(1+r)^{12} - 1} = \frac{14,000,000 \times 8\%}{(1+8\%)^{12} - 1} = 737,730.30$$

### ANSWER 3

- (a) The problem uses a simple interest rate formula:

$$\text{Amount, } A = P(1 + rt)$$

Where  $P = \text{Principal} = \text{Tsh. } 100,000$

$$r = \text{interest rate} = 0.03$$

$$t = \text{time} = 10 \text{ years}$$

$$\begin{aligned} \text{Amount, } A &= 100,000 (1 + (0.03)(10)) \\ &= 100,000 \times 1.3 \end{aligned}$$

$$A = 130,000 \text{ Tsh.}$$

The account will worth Tsh.130,000

**Alternative Solution:**

Amount,  $A = I + P$  where  $I = Prt$

$$I = 100,000 \times 0.03 \times 10 = 30,000$$

$$A = 30,000 + 100,000$$

$$A = 130,000 \text{ Tsh}$$

The account will worth Tsh 130,000

- (b) To obtain the unit depletion charge;

$$= \frac{15,000,000}{3,000}$$

$$= 5,000 \text{ Tsh./hr}$$

Depreciation charge for 1<sup>st</sup> year, denoted by

$$D^1 = \text{Unit depletion charge} \times \text{working hours}$$

$$= 5,000 \times 1,200$$

$$= \underline{6,000,000} \text{ Tsh.}$$

- (c) (i) The sequence 3, 8, 13, 18, 23, 28, ... is arithmetic, since the common difference is 8  
 $- 3 = 13 - 8 = 18 - 13 = \dots = 5$ ;  $d = 5$   
(ii) The formula for  $a_n$  ;

$$a_n = a_1 + (n - 1)d$$

To find  $a_{101}$  , substitute  $n$  with 101,  $d$  with 5 and  $a_1$  with 3

$$a_{101} = 3 + (101 - 1) 5$$

$$= 3 + (100)5$$

$$= 3 + 500$$

$$a_{101} = \underline{503}$$

- (d) Recall; If  $\log_a N = X$  ;  $N = a^X$

$$\text{So that } \log_3 [\log_2 (2x - 1)] = 2 \Rightarrow \log_2 (2x - 1) = 3^2$$

$$\log_2 (2x - 1) = 9$$

$$2x - 1 = 2^9$$

$$\underline{x = 256.5}$$

## ANSWER 4

(a) Find the sum of all natural numbers from 100 to 300:

- (i) Which are exactly divisible by 4  
Sum which are exactly divisible by 4:

$$100 + 104 + 108 + \dots + 300$$

$$A_1 = 100, d = 4 \text{ and } a_n = 300$$

$$A_n = A_1 + (n - 1)d$$

$$300 = 100 + (n - 1)4$$

$$300 = 100 + 4n - 4$$

$$n = 51$$

$$S_n = n/2 (A_1 + A_n)$$

$$= 51/2 (100 + 300)$$

$$= 10200$$

$$\underline{S_{51} = 10200}$$

- (ii) Excluding those which are divisible by 4

Sum of all number from 100 to 300

$$A_n = A_1 + (n - 1)d$$

$$300 = 100 + (n - 1)1$$

$$300 = 100 + n - 1$$

$$n = 201$$

$$S_n = n/2(A_1 + A_n)$$

$$= 201/2(100 + 300) = 40,200$$

Sum of those which are exactly divisible by 4 is 10200

Sum of which exclude those which are divisible by 4 is

$$= 40200 - 10200$$

$$= 30,000$$

(b) Find the value of n and x in the following equations

$$C(n, x) = 56 \text{ and } P(n, x) = 336$$

$$C(n, x) = n!/(n - x)! x! = 56 \dots (i)$$

$$P(n, x) = n!/(n - x)! = 336 \dots (ii)$$

Divide ii by i

$$n!/(n-x)! \times (n-x)! x!/n! = 6$$

$$x! = 6 = 3!$$

$$x = 3$$

From (i)

$$n!/(n-3)! 3! = 56$$

$$n(n-1)(n-2)(n-3)! = 56 \times 3 \times 2 \times 1$$

$$n(n-1)(n-2) = 336 = 8.7.6$$

$$n = 8$$

- (c) Calculate the standard deviation of the individual data: 1, 2, 3, 4 and 5

x	$x - \bar{x}$	$(x - \bar{x})^2$
1	-2	4
2	-1	1
3	0	0
4	1	1
5	2	4
$\Sigma x = 15$		$\Sigma (x - \bar{x})^2 = 10$

$$\text{Arithmetic Mean} = \Sigma x/n = 15/5 = 3$$

$$\text{Variance} = \Sigma (x - \bar{x})^2 / N = 10/5 = 2$$

$$\text{Standard Dev.} = \text{Var} = 2 = 1.4142$$

- (d) List and explain at least 4 properties of standard deviation which are used to interpret analysed statistical data.
- (i) The lower the standard deviation, the less the spread of scores  
The low standard deviation means most of the scores are around the mean.
  - (ii) The higher the standard deviation, the more the spread of scores  
The high standard deviation means that scores are widely spread above and below the mean.
  - (iii) If the group mean is high and standard deviation is low, group performance is better.
  - (iv) If group mean is low and standard deviation is low, it indicates poor performance.

- (e) Find the rate of interest compounded semi-annually at which Tshs. 1,500,000 will grow to Tshs. 2,000,000 in 10 years.

$$P = 1,500,000$$

$$A_{10} = 2,000,000$$

$$A_n = P(1 + i/2)^{2n}$$

$$2,000,000 = 1,500,000 (1 + i/2)^{20}$$

$$(1 + i/2)^{20} = \underline{2,000,000}$$

$$1 + i/2 = (20/15) 0.05$$

$$i/2 = (20/15) 0.05 - 1$$

$$i/2 = 1.014488053 - 1$$

$$i/2 = 0.014488053$$

$$i = 0.028976105$$

$$r = i \times 100\%$$

$$r = 2.897610528$$

$$r = 2.90\%$$





**SUGGESTED SOLUTIONS**  
**T.03 – INTRODUCTION TO INFORMATION AND COMMUNICATION**  
**TECHNOLOGY**  
**NOVEMBER 2018**

**ANSWER 1**

- (a) (i) C (vi) C (xi) D  
(ii) C (vii) A (xii) C  
(iii) B (viii) C (xiii) A  
(iv) B (ix) B (xiv) C  
(v) D (x) D (xv) B
- (b) (i) TRUE  
(ii) TRUE  
(iii) FALSE  
(iv) FALSE  
(v) FALSE

**ANSWER 2**

- (a) Impact of computers in accounting profession:

Criteria	Positive Impacts	Negative Impacts
<b>Time</b>	Saves Time- Employees can perform tasks such as double-entry bookkeeping, filling out spreadsheets and creating financial reports faster using a computer. E.g When you need information quickly, this aspect of time can be a major advantage.	Set up time - On the other hand, computer use needs much set up time that leads to cost that you must consider. For example, a computerized accounting department can take a considerable amount of time to set up and implement, especially if need to spend time conducting both initial and on-going employee training. Finally, you need to consider the cost time lost if computer problems cause a system failure.
<b>Accuracy:</b>	The use of computer in the accounting department can lead to greater accuracy, especially when information are to be used in more than one location. They could only be entered once and used elsewhere accurately.	When initially entering information, a computer does not know if an employee transposes a number, misspells a name or forgets to input a receipt.

<b>Risk:</b>	Computerized systems often include built-in fraud detection features that could alert you in case of any unusually or suspicious employee activity.	However, computer systems do not come entirely without risks. Confidentiality and data integrity – two of the most critical – can significantly compromise your accounting system and put your entire company at risk if either should occur.
<b>Monetary Cost:</b>	Using computers may reduce number of employee and increase efficiency. E.g. You may find it possible to reduce the overall size of your accounting department and, with proper training and supervision, allow less-skilled employees to work within the department. This can save employee benefit costs. An efficient computer system can also reduce costs associated with end-of-the year accounting reports production.	Initial investments always are too high. While it may be relatively easy to plan for direct costs, the hidden and future costs can be difficult to plan. The price of equipment, upgrades, data storage and technical support can place a considerable strain on your budget.
<b>Suitable:</b>	Computer are suitable to all kinds of organisation. However, specialised accounting software to be used may differ but most of the time hardware remains similar.	Not all software are suitable to all types of organisation. This may demand having a specialised expert or consultant firm before deciding for the computer application for you accounting department.
<b>Attracts new customers:</b>	There's always the potential to bring in new customers. An optimized site is not just one that retains your current customer base, but it's also one that attracts new customers who come across your store and find it appealing.	When connected to the internet not all customers are good, some may bring more security risk. E.g. May try to hack or circulate malicious software for their own benefits.

- (b) Describe advantages of mobile commerce over traditional e-commerce.
- **Flexible Accessibility:** User can be accessible via mobile devices and at the same time be accessible online too through logging on to various mobile messengers and other networking platforms. On the other hand, the user may also choose not to be accessible by shutting down his mobile device, which at times can be a good thing.
  - **Easy Connectivity:** As long as the network signal is available, mobile devices can connect and do commerce transactions not only mobile to mobile but also mobile to other devices. No need for modem or WI-FI connectivity set up.
  - **Personalization:** Each mobile device is usually dedicated to a specific user so that it is personal. Users can do whatever they want with their handheld devices: modify the wallpaper, change view settings or modify contact information as you send emails or e-payments.
  - **Time Efficient:** Doing M-Commerce transactions do not require the users to plug anything like personal computer or wait for the laptop to load.
- (c) Explain the importance of Electronic Data Interchange (EDI) in e-commerce.
- EDI supports the use of electronic transactions throughout the business cycle that could lead to the significant savings in time and resources.
  - EDI reduces associated expenses of storage, printing, postage, mailing and recycling.
  - EDI transfer ensures real-time processing and eliminates times associated with manually sending, receiving and entering of orders.
  - EDI minimizes data entry errors, improves accounts payable/receivable times as processes become streamlined and can be used for forecasting.
  - EDI reduces the time it takes staff to manually create invoices and process purchase orders.
  - EDI eliminates paper trails and ensures paper usage is kept to a minimum.
- (d) With examples differentiate between B2B, B2C and C2C e-commerce models.
- **B2B stands for Business to Business (B2B)** – This type of e-commerce model suitable for the companies that sell products or services to another company, which is an intermediate buyer who then sells the product to consumers.
  - An example of B2B would be selling vehicle's components that some auto manufacturer will purchase in order to produce his own product. For instance, among the most well-known B2B websites is the Alibaba B2B Market place.
  - **B2B stands for Business to Consumer (B2C)** – B2C model are suitable for companies which sell products or services directly to consumers/ final users online.

One of the largest B2C websites is Amazon. B2C sites aim to make easy for shoppers to buy products and enjoy this process.

- **C2B stands for Consumer to Business (C2B) – In C2B** business models individuals offer goods and services to companies that offer their services to customers. The C2B website finds the seller who is eager to sell the goods for the price that the consumer wants. C2B businesses, as well as consumers, profit from the flexibility of such services. Survey scout and Survey Monkey are typical C2B models.
  - **C2C stands for Consumer to Consumer (C2C) – In C2C** model a website serves as a mediator between clients (consumer) and gives an opportunity to sell or purchase goods directly. One customer may buy a product of another consumer by viewing the description on the website. For instance, eBay and Airbnb are typical C2C web-services. Airbnb allows travellers to book homes or to rent apartments all over the world, while on eBay they can purchase everything from fashionable clothes to antique masterpieces.
- (e) Discuss what does the Tanzanian Cybercrime Act 2015 says about the following practices:
- (i) **Intellectual property rights violation using computer systems**
    - 24. – (1) A person shall not use a computer system with intent to violate intellectual property rights protected under any written law.
  - (ii) **Data espionage**
    - Without prejudice to the National Security Act, a person shall not obtain computer data protected against unauthorized access without permission.

### ANSWER 3

- (a) (i) State which type of software has been used writing electronic Spreadsheet/Excel
- (ii) Write the formulas which would be contained in the following cells
- D2:        =C2\*B2 or =(C2\*B2)  
F2:        =D2-(D2\*E) or =(D2-(D2\*E))  
F10:    = F2+ F3 + F4+ F5 + F6+ F7+ F8 or = ( F2+ F3 + F4+ F5 + F6+ F7+ F8 ) or =SUM(F2:F8)  
\*The Above Formulas are not case sensitive
- (iii) Mention the type of data in the highlighted cell C3.  
**Number / Numeric value**
- (iv) Mention three advantages that the Head Master is getting for using this software package for his work, rather than using a calculator and paper.
- Easier to edit

- Changes are automatically re-calculated in the totals
- Time can be saved by replication of cells
- Faster data manipulation
- 100% Precision
- Better Data Presentation
- Secure file
- Easily share of information

(b) Differentiate between the following concepts:

(i) Volatile and non-volatile memory

- Volatile memory is the temporary memory that stores data only when computer is on and loses data when computer is turned off before data has been saved.
- Non-volatile memory is the permanent memory that stores data even if the computer is off.

(ii) System software and application software

- System software is computer software designated to operate the computer hardware, to provide basic functionality, and to provide a platform for running application software. Good examples are Operating System, device drivers and utilities.
- Application software are those software that users use to perform various tasks. Examples are Word Processors such as MS-word, Presentations Software such as Ms Power point, Media Players such a Windows media player and Desktop Publishing Software such as Ms Publisher and adobe page maker.

(iii) Data and Information

**Data:**

- These are facts or raw data that has not been processed. Cannot be used for decision making. They are stream of raw facts representing events such as business transactions.
- Things known/assumed facts for making basis of reasoning or calculation

**Information:**

- They are results of processed data. These are clusters of facts meaningful and useful to human beings in the processes such as making decisions.
- Processed data, stored or transmitted by computer
- Knowledge you get about someone or something
- Facts or details about subject

## ANSWER 4

(a) Structured query language (SQL) is the most popular query language used to request information. However, in some cases Query by example (QBE) is used as substitute. A Query tool involves raising questions or queries on fields contained in various tables of the database management systems.

(i) Explain what is a Structured query language (SQL) and how does it differ from Query by example (QBE).

Structured query language (SQL)	Query by example (QBE)
<ul style="list-style-type: none"><li>• It allows people to perform complicated searches by using relatively simple statements or keywords.</li><li>• Typical keywords are SELECT (to specify a desired attribute), FROM (to specify the table to be used), and WHERE (to specify conditions to apply in the query).</li></ul>	<ul style="list-style-type: none"><li>• In QBE, the user fills out a grid or template (also known as a form) to construct a sample or description of the data he or she wants.</li><li>• Users can construct a query quickly and easily by using drag-and-drop features in a DBMS such as Microsoft Access. Conducting queries in this manner is simpler than keying in SQL commands.</li></ul>

(ii) What are the basic tasks that could be performed by a query tool?

**The query tool performs many tasks, some of which include:**

- Selection of data from the DBMS
- Addition of new data in the DBMS
- Updating an existing field of the DBMS with a new value
- Deletion of specific subsets of records
- Creation of a new table using the existing database

(b) State any five general Technological Limitations of e-commerce

- Lack of universally accepted standards for quality, security, and reliability.
- Insufficient telecommunications bandwidth.
- Still-evolving software development tools.
- Difficulties in integrating the Internet and EC applications and software with some existing (especially legacy) applications and databases.
- Need for special Web servers in addition to the network servers.
- Expensive and/or inconvenient Internet accessibility for many would-be users.
- Lack of Privacy
- Tax Issues in different geographical locations

(c) **Explain the differences between Wearable computers (wearable devices) and Embedded computers**

<b>Wearable computers (wearable devices)</b>	<b>Embedded computers</b>
Are designed to be worn and used on the body. Industrial applications of wearable computers include systems for factory automation, warehouse management, and performance support, such as viewing technical manuals and diagrams while building or repairing something.	Are placed inside other products to add features and capabilities. For example, the average mid-sized automobile has more than 3,000 embedded computers, called controllers that monitor every function from braking to engine performance to seat controls with memory.

(d) A router translates information from one network to another. They have replaced the hubs and switches that are capable of performing basic functions. What are the four basic characteristics of a router?

**Characteristics of a router are:**

- A router can manage the data traffic by keeping a log of network usage statistics and handle security.
- A router can transmit data between two protocols. For example, it can transmit data from the FTP server to a TCP/IP protocol.
- Routers are used to transmit data in linear, star, bus and star wired network topologies.
- Routers can transmit data through various mediums such as fiber optic, coaxial, twisted pair and even wirelessly.
- Routers are multiport devices with high - speed backbones
- Routers also support filtering and encapsulation like bridges
- Routers learn of the existence of new routers, nodes and LAN segments
- Router view the network on a link-by-link basis
- The packet handled by router may include destination address, packet priority level, least-cost route, minimum route delay, minimum route distance, and route congestion level



**SUGGESTED SOLUTIONS**  
**T04 – BUSINESS COMMUNICATION SKILLS**  
**NOVEMBER 2018**

**ANSWER 1**

- (a) (i) Title of passage “Public Speaking Skills”  
(ii) Summary of the passage
- (b) The use of punctuation marks with supporting examples
- (i) Apostrophe (‘)
- Used to substitute for a missing letter or letters in a word. For example:  
We can’t agree that habit (can’t for cannot).
  - Used to show ownership/possession. For example, David’s shirt has been stolen.
- (ii) Semicolon (;)
- Used to separate two independent clauses in a compound sentence. For example: The examination was cancelled today; The lecturers got an emergency.
  - To assemble detailed lists
- (iii) Ellipsis (...)
- Used to show that part of the text has been intentionally been left out. For example: ...one day all Tanzanians will understand our President
- (iv) Quotation mark (“ ”)
- Used before and after the words that people have said to indicate direct speech. For example: Martha said, “We must work hard”
- (v) Colon (:)
- Used to indicate the beginning of a list. For example: She bought the following items: cupboards, shelves, tables and chairs.

**ANSWER 2**

- (a) Correct the following sentences
- (i) Where was your argument leading?
- (ii) I wish he would get off the phone.
- (iii) They are responsible for aircraft safety in the air, in the hangars, and on the runways.
- (iv) Company’s directors must become aware of and sensitive to its customer’s concerns.
- (v) This is project you can sink your teeth into.



- (b) Using the words in brackets, complete the text below with the appropriate tenses:
- (i) put
  - (ii) heard
  - (iii) ridden
  - (iv) seen
  - (v) bought
- (c) Change the following sentences into passive voice
- (i) The letter was typed by the secretary
  - (ii) His clothes are washed everyday
  - (iii) Some potatoes are being cooked by my mother
  - (iv) The tree was cut yesterday by him
  - (v) My book has been taken by him
- (d) Find the mistakes in the following sentences and correct them accordingly:
- (i) Although Joseph worked hard, he was not promoted/ Joseph worked hard but he was not promoted.
  - (ii) Majuto has been a leader, supervisor, caretaker and spokesman of the company for a long time
  - (iii) The beautiful two big Japanese cars arrived yesterday.
  - (iv) His wife ate the food.
  - (v) How old is his eldest son?

### ANSWER 3

- (a)
- (i) T
  - (ii) F
  - (iii) T
  - (iv) T
  - (v) F
- (b) Matching the items in column A with those in column B by writing the letter of the correct answer.
- 1. F
  - 2. E
  - 3. C
  - 4. G
  - 5. A

#### ANSWER 4

- (a) Definition of sales letters  
**Sales letter** are sale promotion instruments used by business houses to promote their sales
- (b) The four objectives of sales letter
- i. **To promote sales**, this is to enable more selling of products.
  - ii. **To make new customers**, through sales letter people may socialize each other creating relationship with new customers.
  - iii. **To introduce new product in the market**, it enables presenting new products to customers so as can be sold.
  - iv. **Create and maintain good will**, it enables to know each other in good relationship.
  - v. **To expand customer network**, it facilitates increasing customers.
  - vi. **To generate new markets for old product**.

#### ANSWER 5

- (a) (i) **Listening**: is the process of paying attention to sound waves and understanding. It is a communication process through which listener hears what is being told and interprets the communication correctly.

The examinee should explain the following sub-processes

- i. **Hearing**: Auditory reception of acoustic signals (perception), as also performed on non-speech sounds.
  - ii. **Categorization of sounds**: Particular languages have different kinds and numbers of speech sounds as well as different sound systems.
  - iii. **Word recognition**: Joining sequences of sounds into meaningful linguistic units (morphemes/words); and retrieving their meaning from long term memory.
  - iv. **Comprehension**: Integrating meanings of the words in their sequence into an interpretation of the entire utterance. Reconstruction of the speaker's communicative intention (decoding the intended message ready for desired response).
- (b) The examinee is expected to illustrate the following activities
- (i) **Scanning** is reading quickly to search for specific information. Such specific information may include: Dates, Places, Names, Page numbers, etc.
  - (ii) **Skimming** is reading quickly to gain a general idea/main aspects of the reading. The main aspects may include: Title/ name of the book, Sub-title/ names of chapters, Chapter questions, objectives or summaries, The introduction (abstracts), First line of each paragraph, Pictures/ diagrams, Conclusion, etc.

- (iii) **Critical reading** means weighing/ evaluating the opinions of the writer, with the right to agree or disagree with such opinions. Examples of questions you can ask when doing a critical reading: Is the text based on fact or opinion? Do I agree with the author’s viewpoint?
- (iv) **Extensive reading** is a reading skill which involves reading large quantities of material or long texts for global/general understanding. Extensive reading is doubled ‘learn to read’ because it involves practicing the skill of reading by reading for information. Examples of extensive reading include reading novels, story books, and long poems.
- (v) **Intensive reading** refers to careful reading of shorter, more difficult text with the goal of complete and detailed understanding. Intensive reading is also referred to as ‘**read to learn**’ because it focuses on learning about the language itself or about the detailed content of the text.

### Alternative Answer

Subcategorization of listening (sub-processes of listening comprehension which aid in distinguishing listening from hearing.

#### i. **Intentional:**

Hearing is usually unintentional while listening is intentional as the listener is required to focus on what is being told, understand it and make an informed decision or judgement or act in accordance with it.

#### ii. **Passive versus active process**

Hearing is a passive process while listening is an active process and the listener is actively involved in understanding what is being said.

#### iii. **Conscious effort**

Hearing is not a conscious effort as it is a passive process while listening requires a conscious effort being made by the listener.

#### iv. **Importance in relation to communication**

Mere hearing is not important for communication whereas active listening is an important part in the process communication as concentration is required to understand what is being said.

- (c) The examinee is expected to focus their answers on any five of the following categories
  - (i) **Television advertising;** offers the benefit of reaching large numbers in a single exposure.
  - (ii) **Radio advertising;** promotion through radio has been a viable advertising option for over 80 years. It is mostly local but very effective because of its wide coverage.
  - (iii) **Print publications advertising;** Print publication such as magazines, books, newspapers and Special Issue publications offer advertising opportunities at all geographic levels.
  - (iv) **Internet advertising;** The fastest growing media outlet for advertising is the Internet. Compared to spending in other media, the rate of spending for Internet advertising is experiencing tremendous growth across the globe.

- (v) **Direct mail advertising;** This method of advertising uses postal and other delivery services to ship advertising materials, including postcards, letters, brochures, catalogs and flyers, to a physical address of targeted customers. Direct mail is most effective when it is designed in a way that makes it appear to be special to the customer.
- (vi) **Signage and billboard advertenting;** The use of signs to communicate a marketer's message places advertising in geographically identified areas in order to capture customers attention. The most obvious method of using signs is through billboards, which are generally located in high traffic areas. Outdoor billboards come in many sizes, though the most well-known are larger structures located near transportation points intending to attract the interest of people traveling on roads or public transportation. Indoor billboards are often smaller than outdoor billboards and are designed to attract the attention of foot traffic (i.e. those moving past the sign). For example, smaller signage in airports, train terminals and large commercial office space fit this category.
- (vii) **Mobile device advertising** Handheld devices, such as cellphones, smartphones, portable computers and other wireless devices, make up the growing mobile device market. Such devices allow customers to stay informed, gather information and communicate with others without being tied to a physical location.

#### **Alternative Answer**

Some candidates answered the question by explaining types of advertisement as shown below:

- i. **New product/service:**  
This is an advertisement to introduce new products
- ii. **Induction:**  
Intended for new members/employees
- iii. **Training:**  
Intended for importing knowledge to members
- iv. **Report presentation:**  
It is when the performance of the business is to be prepared
- v. **Project proposal:**  
Is when organizational is preparing to engage in certain project

## ANSWER 6

- (a) (i) C
- (ii) B
- (iii) D
- (iv) A
- (v) C

(b) Punctuate the following of words:

Public speaking is a powerful tool that can be used to motivate, inform, persuade, translate, entertain or influence others, Good public speakers have opportunities to change the ideas of listeners and affect the emotions of the audience. Some popular types of public speaking include motivational speaking, business presentations, customer service, large group or mass communication and political speeches. You must grab an audiences' attention immediately. Open with a startling statistic a story or an interesting quote. An energetic delivery of the information helps, and includes movement, hand gestures, facial expressions, \emotions and variety in vocal.

