TEVETA
Technical Education, Vocational and Entrepreneurship Training Authority

DIPLOMA IN ELECTRICAL ENGINEERING

LEVEL 6 YEAR I EXAMINATIONS

FINAL INTEGRATED SUMMATIVE EXAMINATIONS

SITTING: JULY/AUGUST 2023

SUBJECT: INTRODUCTION TO COMPUTERS

TIME: THREE (3) HOURS **TOTAL MARKS: 100**

PASS MARK: 50

INSTRUCTIONS TO CANDIDATES

1. Write your Examination number and National Registration Card (NRC) number on the answer booklet provided. Ensure you append your signature in the space provided on the answer booklet.
2. Write the ANSWER SCRIPT SERIAL NUMBER on the examination register and on the entry slip.
3. This paper has THREE (3) Sections.
   - Answer ALL questions in section A and B.
   - Answer Four (4) questions in Section C.
4. Diagrams may be used where necessary to clarify your answer.
5. Cell phone and programmable calculators are not allowed in the examination room

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO

SECTION A: Answer BOTH questions in this section **Total marks: 40**

QUESTION 1

Functions of the computer are as shown in the diagram below,



Explain three activities that take place at each function identified above and mention two hardware devices found at each function.

a) Input [5 marks]

b) Process [5 marks]

c) Storage, and [5 marks]

d) Output [5 marks]

[Total 20 marks]

QUESTION 2

a) Google is an American multi-national technology company focusing on [1]*online advertising*, [2]*search engine* technology, [3]*cloud computing*, computer software, quantum computing, [4]*e-commerce*, [5]*artificial intelligence* and consumer electronics.

Explain the meaning of all the five underlined terms in the passage above.

[10 marks]

b) Industry has appreciated the use of the internet in the workplaces including learning institutions, however the internet has its own merits and demerits

i. Outline four merits of using the internet in a workplace [4 marks]

ii. Explain three differences between extranets and intranets [6 marks]

[Total – 20 marks]

GUI

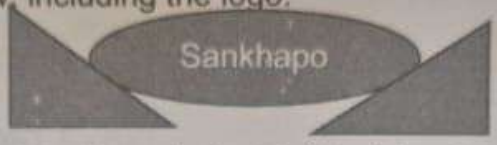
ALU

SECTION B:

QUESTION 3 – MICROSOFT WORD

You have been requested by the hosting company for your industrial attachment to produce an introductory letter from your learning institution. The Head of Section who authored the letter only has a hard copy as below, and it is for a different student, therefore he asks you to reproduce the letter to be used as a template.

a) Type the letter as below, including the logo. [6 marks]



Sankhapo Industrial Training Centre

P.O. Box 36012, Siavonga

DATE: 15th May, 2023

To whom It May Concern

Dear Sir/Madam,

RE: INTRODUCTORY LETTER – Inswi Zatha

Reference is made to the above captioned.

Mr. Zatha is our student undertaking a course in Diploma – Electrical Engineering at our institution. As is the course requirement, he wishes to be attached to your company for industrial experience.

Kindly accord him the necessary tasks to help him appreciate his career choice.

Your usual support will be highly appreciated.

Your faithfully,

Chipengo Bakupa

For/TRAINING MANAGER

b) Change font style for the whole letter to 'Book Antiqua' and Font-size 13.5 [2 marks]

c) Use narrow margins for you page margins [2 marks]

d) Insert footnote that has an automatic date update [3 marks]

e) Make the subject line to be in BOLD, Italic and font size of 14 [3 marks]

f) Insert footer as your exam number [2 marks]

g) Save your letter as **Question-3** [2 marks]

[Total – 20 marks]

QUESTION 4 – MICROSOFT EXCEL

a) Reproduce the following worksheet in Excel.

	A	B	C	D	E	F	G	H
1	**Kingsworld Engineers Limited**							
2	**Payroll - April, 2023**							
3	Man number	Employee Name	Section	Basic Pay	Allowances @ 10%	Gross pay	Deductions @ 2.5%	Net Pay
4	KEL-003	Kalasa Mukoso	Accounts	8500				
5	KEL-004	Kamoni Iwe	Procurement	8000				
6	KEL-007	Pocheza Mazulo	Operations	6500				
7	KEL-008	Chiko Hamungwala	Operations	6350				
8	KEL-009	Bene Ndiswe	Operations	6400				
9	KEL-010	Tiyende Pamodzi	Operations	6500				
10	KEL-002	Mubita Nyambe	Management	10000				
11	KEL-005	James Zakanaka	Sales	8000				
12	KEL-006	Mutinta Charity	Security	4500				
13	KEL-001	Sara Kashimbi	Management	12500				
14							Total	
15							Highest	
16							Lowest	
17							Average	
18								

b) Use absolute referencing to calculate:

i. Allowances at 10% for each employee [2 marks]

ii. Deductions at 2.5% for each employee [2 marks]

c) Using appropriate formula, calculate

i. Gross Pay as Basic Pay plus Allowances [2 marks]

ii. Net Pay as Gross Pay minus Deductions [2 marks]

iii. Total Net Pay, Highest Net Pay, Lowest Net Pay and Average Net Pay [4 marks]

d) Sort the data in the table according to descending order. [2 marks]

e) Insert a bar chart using employee name, section and number [2 marks]

f) Use the show formulas [2 marks]

g) Save your workbook as **Question-4** [2 marks]

[Total 20 marks]

QUESTION 5 – MICROSOFT POWERPOINT

You have been tasked to represent your supervisor at a workshop for Secondary School Teachers. As was requested for in the invitation letter, you will be given an opportunity to present on the importance of acquiring Engineering skills.

a) Using PowerPoint, create seven presentation slides about the subject. The contents of the slides should be as follows:

i. Slide-1 Title Slide
ii. Slide-2 Introduction
iii. Slide-3 Importance (1^{st})
iv. Slide-4 Importance (2^{nd})
v. Slide-5 Importance (3^{rd})
vi. Slide-6 Importance (4^{th})
vii. Slide-7 Conclusion [10 marks]

b) Apply a design theme of your choice. [2 marks]

c) In the Title Slide, Insert a clipart or shape with Engineering art work [2 marks]

d) Apply 'Curtains' Transition to all slides [2 marks]

e) Insert Footer as Examination number in all the slides [2 marks]

f) Save the presentation as Question-5 [2 marks]

[Total – 20 marks]