DEPARTMENT OF EDUCATION

UPPER SECONDARY SCHOOL CERTIFICATE EXAMINATIONS

INFORMATION COMMUNICATION TECHNOLOGY

Tuesday

20 October 2015

Time allowed:

2 hours and 30 minutes

(11:00am – 1:30 pm)

NO EXTRA TIME

(NO OTHER TIME)

Candidates are advised to fully utilize the allocated time

ICT

INSTRUCTIONS TO CANDIDATES

To be read by the external invigilator to all candidates

1. The **subject code** for **Information Communication Technology** is **16.**

2. There are **14** printed pages in the question booklet.

3. An Electronic Answer Sheet and **6 printed** pages of answer booklet are inserted in the center of the question booklet.

4. There are two parts in this paper. Answer all questions.

    Part A: Multiple Choice Questions - 30 marks
    This section will be electronically marked.
    Electronic Answer Sheets will be distributed by your external invigilator.
    All answers to the Multiple Choice Part MUST be answered on this Answer Sheet.
    Carefully following the instructions, fill in your Candidate Information and Subject Information.

    Part B: Short Answer Questions   - 70 marks
    Write down your name, your school name and your 10-digit candidate number on the Part B Answer Sheet provided.

5. You are required to write the correct answer in the space provided.

6. Answer all questions on the answer sheet. Answers on any other paper including rough work paper and the question paper **will not be marked**

7. ALL working must be shown step by step to get full marks. Students may lose marks for writing down final answers only.

8. Correctional Fluid is <u>not allowed</u> on the answer sheet. Where you have made an error, cross out all the working and start on a new line.

PENALTY FOR CHEATING OR ASSISTING TO CHEAT IN NATIONAL EXAMINATIONS IS NON-CERTIFICATION.

DO NOT TURN OVER THE PAGE

AND DO NOT WRITE

UNTIL YOU ARE TOLD TO START.

PART A: MULTIPLE CHOICE   (QUESTIONS 1 to 30)   30 MARKS

Answer each question by shading in with HB pencil, the circle directly under the correct alternative A or B or C or D.

If you make a mistake, rub it out completely using an eraser rubber and shade the correct answer on the ELECTRONIC ANSWER SHEET.

QUESTION 1

The part of the CPU of a computer that carries out mathematical, comparative and logical process is called a/an

A.   Clock.   B.   Control Unit.   C.   Arithmetic Logic Unit.   D.   Random Access Memory.

QUESTION 2

Study figure1 below.

		Z						

Figure 1: Table

The table cell labeled Z was achieved by:

A.   Delete Table   B.   Enlarge Cell   C.   Merge Cell   D.   Split Cell

QUESTION 3

A computer virus

A.   is a firewall.
B.   can infect people.
C.   is a computer program.
D.   can be found in new computers only.

QUESTION 4

In a given MS Excel spreadsheet, cell A1 contains the value 100. If the function **=if(A1<100,"x", "Y")** is used in cell B1 of the same spreadsheet, the result will be

A.   X   B.   100   C.   0   D.   Y

QUESTION 5

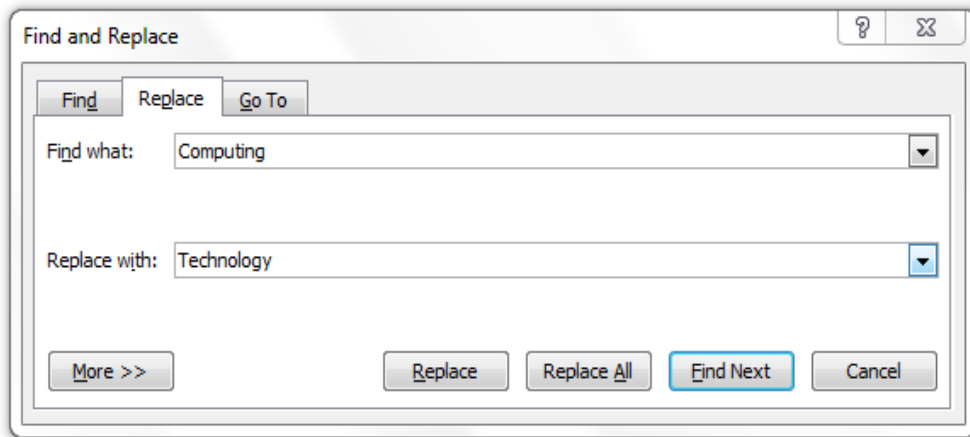Figure 2 below shows a Find and Replace dialogue box.

Figure 2: Find and Replace Dialogue box

If the Replace All command was selected, what would be the likely result?

A.   The word Computing will replace the word Technology in the text.

B.   The word Technology will replace the word Computing in the text.

C.   The words Computing and Technology will both be deleted from the text.

D.   The words Computing and Technology will both be inserted in the text.

QUESTION 6

MS Access is an example of a/an

A.   presentation software.   B.   database software.

C.   anti virus software.   D.   word processing software.

QUESTION 7

An image in figure 3 was formatted to produce the result as shown in figure 4.

Figure 3

Figure 4

What formatting technique was used to produce the image in figure 4?

A.   Cut   B.   Crop   C.   Delete   D.   Resize

QUESTION 8

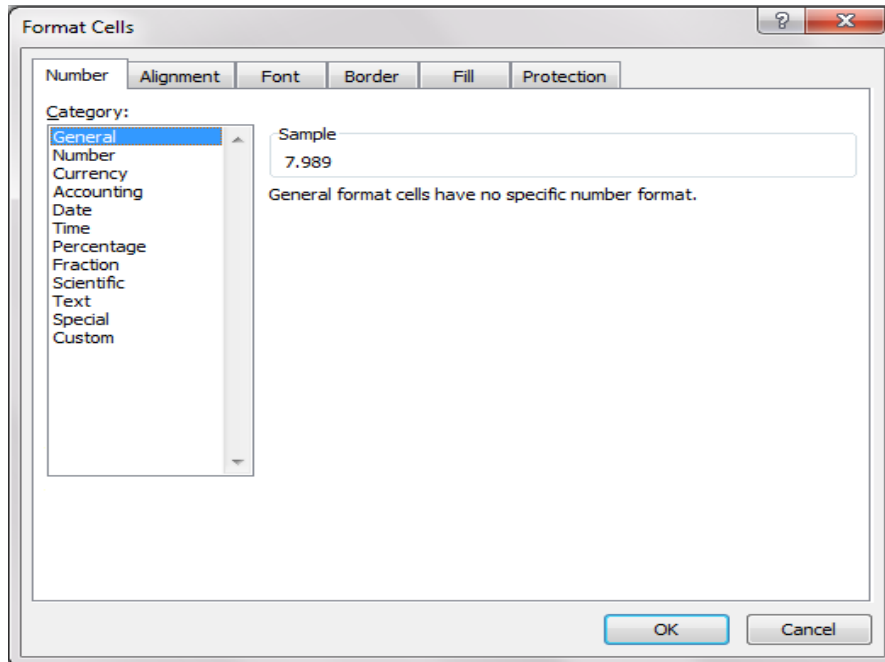Study figure 5 to answer the question.

Figure 5

What category should be selected to change the number of decimal places for a number in a cell?

A.   Scientific   B.   Text   C.   Number   D.   Fraction

QUESTION 9

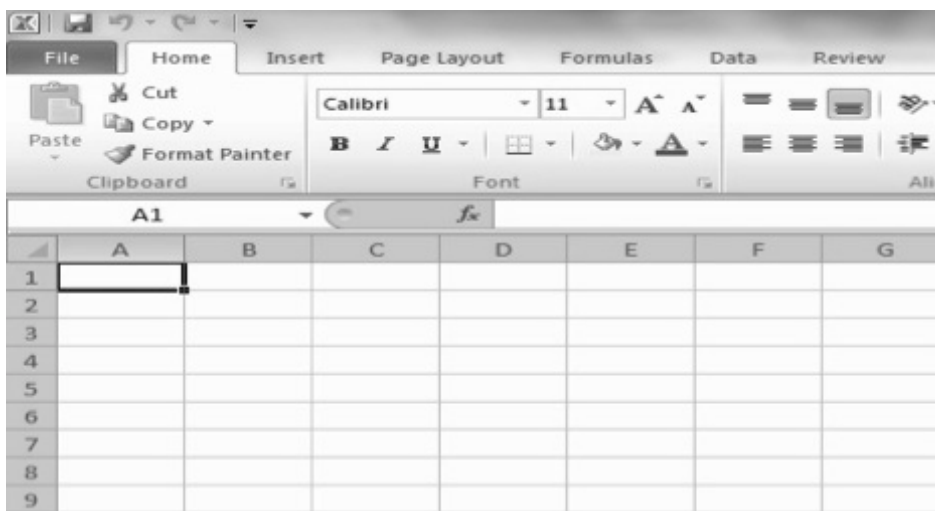When you first open the MS Excel program, you will see a window as shown in figure 6 below.

Figure 6: MS Excel Window

The large area of rows and columns is called the

A.   spreadsheet.   B.   formula .   C.   calculated field.   D.   function.

QUESTION 10

The data types of a number field in an MS Access table **do not** include

A. byte.   B. integer.   C. long integer .   D. decimal.

QUESTION 11

The controls on an MS Access report **do not** include

A. text box.   B.   label.   C. circle.   D. rectangle.

QUESTION 12

An MS Access query uses data from

A. reports and forms.   B. queries and wizards.   C. tables and queries.   D. tables and labels.

QUESTION 13

One of the acronyms used in relation to the Internet is HTTP. HTTP is

A. Hyper Technology Tracking Protocol.

B. Hyper Text Transfer Protocol.

C. Hyper Text Transfer Port.

D. Hyper Transfer Technology Plan.

QUESTION 14

Which of the following is **NOT** a Publication Type in MS Publisher?

A. Brochures   B. Calculators   C. Catalogues   D. Flyers

QUESTION 15

The feature that provides frequently used commands in MS Word or MS Publisher would be

A. Start menu.   B. Short-cut menu.   C. Task bar.   D. Quick Access Toolbar.

QUESTION 16

The colour scheme of a publication may be altered using the commands on which of the following ribbon or menu options?

A. Home   B. Format   C. Page Design   D. Page layout

QUESTION 17

Which of the following best describes firewall in ICT? It

A. ensures that data is available to anyone.

B. is a physical wall for fire protection.

C. ensures continuity of operations

D. protects computers or networks from other users or network.

QUESTION 18

Which of the following best represent the data communication devices?

A. Cables, smart phones, radio, modem
B. Phones, modem, fibre optic, printer
C. Data cables, modem, router, hub
D. Router, mouse pad, satellite, cable

QUESTION 19

The software that allows people to browse the web for information is

A. Search Engine.   B. Multimedia.   C. Network Server.   D. Browser.

QUESTION 20

A many to many relationship in a database can be found in

A. Fields   B. Queries   C. Tables   D. Data types

QUESTION 21

Study figure 7 below.

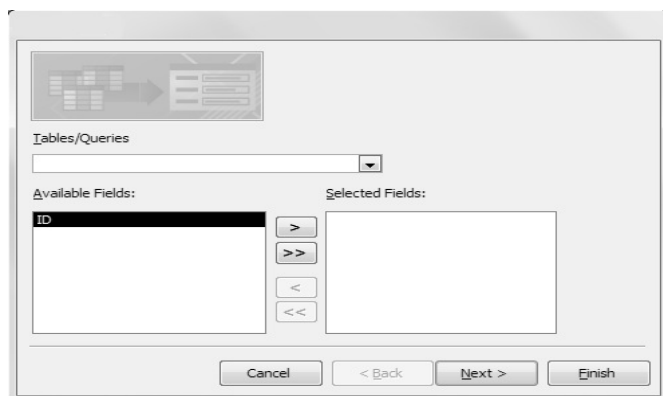Figure 7

The screen or window in figure 7 is a sample of a

A. table wizard.   B. form wizard .   C. data type.   D. field property.

QUESTION 22

To enter data into a table in MS Access, you can use the

A. design view.   B. table properties .   C. datasheet view.   D. label wizard.

QUESTION 23

A crosstab query wizard in MS Access

A. displays data in a spreadsheet-like format.

B. creates simple queries from spreadsheet files.

C. finds records with duplicate values.

D. allows data entry by keyboard.

QUESTION 24

The first page of a website is called a/an

A. web page.   B. internet.   C. world wide web.   D. home page.

QUESTION 25

An example of an HTML text editor is

A. MS PowerPoint.   B. Windows notepad.   C. PDF creator.   D. Windows Paint brush.

QUESTION 26

What is the purpose of inserting an alternative text to an image when creating a webpage?

A. If the image cannot be displayed when the page is being viewed, then the text will appear instead.

B. If the text is not given, the image will not show when the page is being viewed.

C. The image needs the text in order for it to be displayed.

D. There is no specific reason.

QUESTION 27

To have your name showing at the top of any new slide you create in a MS PowerPoint presentation, you would write your name once in the

A. footer.   B. text box.   C. header.   D. Word Art.

QUESTION 28

Study figure 8 below.

Figure 8: Part of an MS PowerPoint Window

The MS PowerPoint screen in figure 8 represents the

A. title slide.   B. title and content slide.   C. section header slide .   D. comparison slide.

QUESTION 29

To be able to allow remote viewers to watch your PowerPoint presentation using a <u>web browser</u>, you must choose;

A. Rehearse current slide.

B. Custom Slide Show.

C. Record Slide Show.

D. Broadcast slide show.

QUESTION 30

Which of the following best describes someone who analyzes business activities and computer systems and recommends appropriate software to be used?

A. Webmaster   B.   Programmer   C. Network Engineer   D. Systems Analyst

PART B: SHORT ANSWERS   (QUESTIONS 31 to 40)   70 MARKS

For each Question, work out the answers for each question and write the answer in the space provided on the ANSWER BOOKLET.

QUESTION 31

The two main components of a computer system are hardware and software. Answer the following general questions.

a) Name two (2) primary computer hardware components that are used for data input.   (2 marks)

b) Briefly explain each of the following:

   i) System software   (1 mark)

   ii) Application Software   (1 mark)

c) What is the acronym or initials ROM stands for?   (1 mark)

d) Name two secondary storage devices   (2 marks)

QUESTION 32

Study figure 9 below to answer the questions that follow.

Figure 9

a) The spreadsheet in figure 9 contains the data for sales person, sales amount collected and bonus rate. To get the bonus amount, the bonus rate must be multiplied by the sale amount collected.

   i.   Write the correct excel formula that should go to cell F5 so that, when this formula is selected and copied to all cells in column F, the correct amount will be calculated.   (2 marks)
   ii.   What is the bonus rate in percentage (%)?   (1 mark)
   iii.   Write the function that should go to cell E11, to calculate the total amount collected.   (2 marks)
   iv.   Name the menu option to use in order to combine the column name 'Sales Person' in C4 with D4 so that there is only one header for columns C and D.   (1 mark)

b) A pivot table in MS Excel can be used to _____data.   (1 mark)

QUESTION 33

a) In a practical ICT class, a student was asked to convert a word document named 'Computer Studies' to PDF (Portable Document Format) format by using the Save As command as shown in figure 10 below.

Figure 10: Save As dialogue box

What are the two final steps the student must do to complete the conversion from word document to PDF?   (2 marks)

b) Study the text below.

 List five formatting styles that were applied on the text.   (5 marks)

QUESTION 34

a)   What is the purpose of 'backing up' your data regularly?   (2 marks)
b)   Is it appropriate or allowed for anyone to download any photo or images from the World Wide Web to use anytime?   (1 mark)
c)   Give two (2) examples of what a computer can be used for, in a government hospital.   (2 marks)
d)   Mary and Tim are accountants in an insurance company. According to company policy, each employee must use his or her own password to access the insurance system. Passwords are administered by the company's systems administrator. On a particular day, Tim forgot his password and asked to use Mary's password for an urgent job on the system. Mary was reluctant to share her password with Tim.
    i.   What would be a valid reason, besides the company policy, why Mary should not share her password?
                                                                                                                           (1 mark)
    ii.   What should Tim do immediately?   (1 mark)

QUESTION 35

a) Use the correct words given in the list below to fill the spaces.

> *Multiple Page, Page Navigation, Green wavy line, Red wavy line, background colour, watermark, signature.*

i) The spelling command in MS Publisher will indicate misspelled words by a _____ under the word.
                                                                                                                           (1 mark)

ii) A _____ is an element that can be added to a page to include a wash-out image in the background of a publication.   (1 mark)

iii) The _____ pane in MS Publisher enables the user to see all pages of a multiple publications.   (1 mark)

b) The following questions refer to figure 11.

Page...	Ctrl+Shift+N
Duplicate Page	Ctrl+Shift+U
Section...	
Page Numbers...	
Date and Time...	
Symbol...	
Design Gallery Object...	
Add to Content Library...	
Item from Content Library...	Ctrl+Shift+E
Business Information...	
Picture	▸
Text Box	
Text File...	
Object...	
Hyperlink...	Ctrl+K
Bookmark...	

Figure 11. Drop down Menu

i) What menu on the menu bar was used to produce the drop down menu shown in figure 11?   (1 mark)

ii) An MS Excel document can be embedded on a Publisher page by using what features shown on the drop down menu in figure 11?   (1 mark)

c)   i) State the file extension of MS Publisher.   (1 mark)

      ii) What is a master page in MS Publisher?   (1 mark)

QUESTION 36

a) List two (2) methods of wireless connections that can allow people to use devices to transfer or receive data.

(2 marks)

b) In setting up a LAN for data communication, TCP/ IP should also be set on computers in the network. What do these acronyms stand for?

    i) LAN   (1 mark)

    ii) TCP/IP   (1 mark)

c) Name two (2) specialized software that can be used for accounting purposes at work.   (2 marks)

d) Name one (1) network topology that can be used to design a network.   (1 mark)

QUESTION 37

a) What is the purpose of inserting hyperlinks on web pages?   (1 mark)

b) Name a multimedia type or effect that can be found on a website.   (1 mark)

c) What is the common file extension for a web page?   (1 mark)

d) Explain each of the following terms.

    i) html document   (2 mark)

    ii) html editor   (2 mark)

QUESTION 38

a) Write two (2) examples of tools or devices that can be used to capture images.   (2 marks)

b) Study figure 12 below to answer the following questions.

Figure 12 : MS PowerPoint Menu bar

Which of the main menu options in MS PowerPoint can be used to;

    i) change the background style?   (1 mark)

    ii) Include or exclude slide numbers?   (1 mark)

    iii) Create a new slide?   (1 mark)

c) MS PowerPoint is an example of a _____ software.   (1 mark)

d) To insert a text label to an image in a PowerPoint slide, you would use the _____.   (1 mark)

QUESTION 39

a) Study figure 13 below to answer this question.

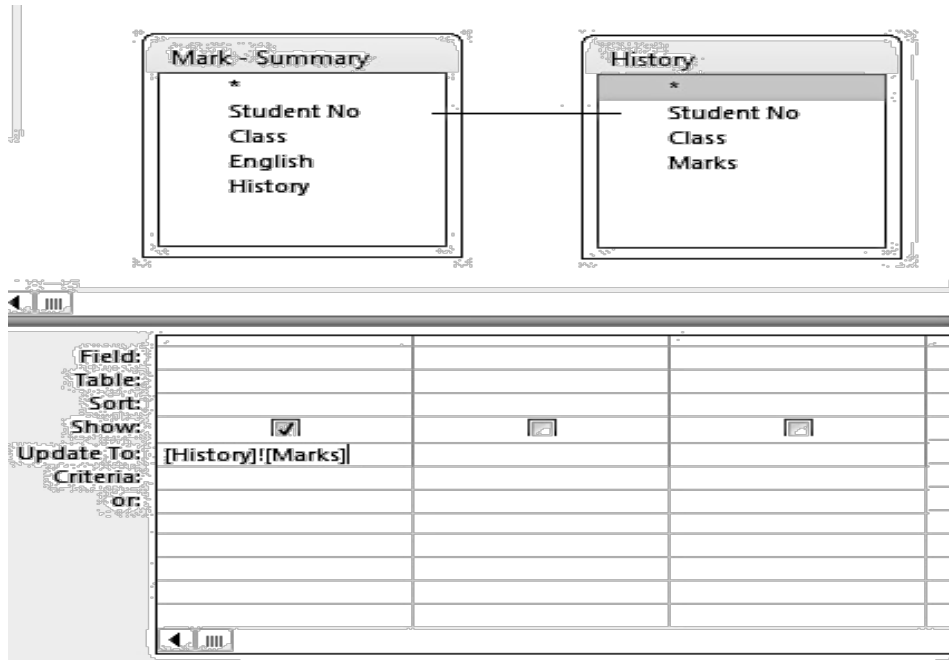What type of query is being designed in figure 13 as shown below?   (2 marks)

Figure 13 : MS Access Window

b) What is the name of the MS Access function that determines the variances of the values in a field?   (1 mark)

c) What is the name of the MS access function that determines the total number of values in the field?   (1 mark)

d) What is the name of the MS Access function that determines the highest value in a field?   (1 mark)

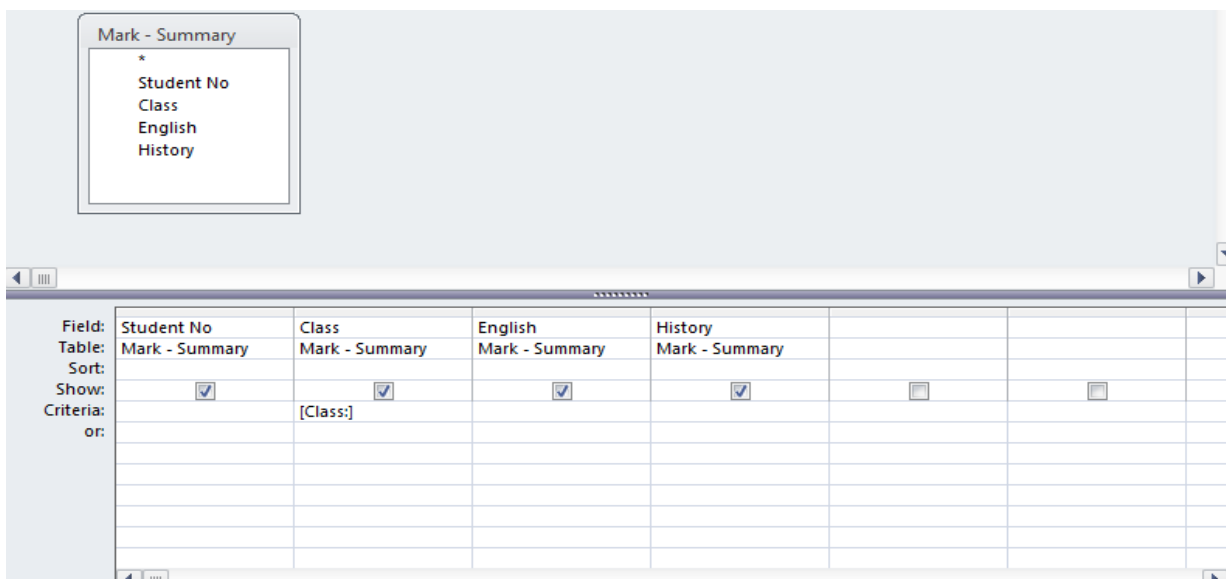e) What type of query is being designed in figure 14 below?   (2 marks)

Figure 14: MS Access window

QUESTION 40

Study figures 15 and 16 and answer the questions that follow.

Figure 15 shows the records in the Microsoft Access table called accounts.

Figure 16 shows the Design View of a query called query1.

Accounts _No ▾	First Name ▾	Surname ▾	Province ▾	Balance ▾
4259	David	Balu	ENB	240.15
6161	Kila	Heagi	EHP	96.85
0834	Ruo	Beten	Central	404.10
7719	Betty	Nelson	Oro	18.26
8476	Adam	Venson	Simbu	87.09
3232	Enna	Tani	Morobe	141.33

Figure 15: MS Access table (Accounts)

Accounts

* ID
Accounts _No
First Name
Surname
Province
Balance

Field:	Accounts _No	First Name	Surname	Province	Balance
Table:	Accounts	Accounts	Accounts	Accounts	Accounts
Sort:					
Show:	✔	✔	✔	✔	✔
Criteria:					
or:			< "L"		> "100"

Figure 16: MS Access query (query 1)

a) Given the query criteria in figure 16, how many records will be displayed as the result of running Query1?
                                                                                              (2 marks)

b) If figure 16 included "Province = EHP" on the 'criteria' line, how many records would be displayed when Query1 is run?   (1 mark)

c) Write down the criteria entries that should appear on Query1 in order to select records for which 'Surname < P' and 'Balance < 100'.   (2 marks)

d) Which of the fields in the table in figure 15 should normally be set to be the primary key field?   (1 mark)

e) The 'data type' for the balance field should be _____.   (1 mark)

END OF EXAMINATION

INFORMATION COMMUNICATION TECHNOLOGY (ICT)

PART B – ANSWER BOOKLET

Year		Province		School			Candidate No		
1	*5*								

Candidate Name:_____

School Name: _____

FOR MARKERS USE ONLY

	Score	Markers' Initials	
		Marker 1	Marker 2
PART B			
QUESTION 31			
QUESTION 32			
QUESTION 33			
QUESTION 34			
QUESTION 35			
QUESTION 36			
QUESTION 37			
QUESTION 38			
QUESTION 39			
QUESTION 40			
FINAL TOTAL	70		

START YOUR WORK ON THE NEXT PAGE

Question 31	Marks per Qs.	Marker 1	Marker 2
a). 1.	1		
2.	1		
b). i.			
	1		
ii.	1		
c).	1		
d). 1.	1		
2.	1		
For Markers Use Only *Total Marks*			

Question 32	Marks per Qs.	Marker 1	Marker 2
a). i.	2		
ii.	1		
iii.	2		
iv	1		
b).	1		
For Markers Use Only *Total Marks*			

Question 33	Marks per Qs.	Marker 1	Marker 2
a). Step 1.	1		
Step 2.	1		
b). i.	1		
ii.	1		
iii.	1		
iv.	1		
v.	1		
For Markers Use Only *Total Marks*			

Question 34	Marks per Qs.	Marker 1	Marker 2
a).	2		
b).	1		
c) i.	1		
ii.	1		
d). i.	1		
ii.	1		
For Markers Use Only *Total Marks*			

Question 35	Marks per Qs.	Marker 1	Marker 2
a). i.	1		
ii.	1		
iii.	1		
b). i.	1		
ii.	1		
c). i.	1		
ii.	1		
For Markers Use Only *Total Marks*			

Question 36	Marks per Qs.	Marker 1	Marker 2
a). i:	1		
ii:	1		
b) i	1		
ii.	1		
c). i	1		
ii.	1		
d).	1		
For Markers Use Only *Total Marks*			

Question 37	Marks per Qs.	Marker 1	Marker 2
a).	1		
b).	1		
c).	1		
d) i.			
	2		
ii.	2		
For Markers Use Only　　　　　　　***Total Marks***			

Question 38	Marks per Qs.	Marker 1	Marker 2
a). i.	1		
ii.	1		
b) i.	1		
ii.	1		
iii.	1		
c).	1		
d).	1		
For Markers Use Only　　　　　　　***Total Marks***			

Question 39	Marks per Qs.	Marker 1	Marker 2
a).	2		
b)	1		
c)	1		
d	1		
e).	2		
For Markers Use Only *Total Marks*			

Question 40	Marks per Qs.	Marker 1	Marker 2
a).	2		
b).	1		
c)	2		
d).	1		
e).	1		
For Markers Use Only *Total Marks*			