

MARKER CODE			



Student Personal Identification Number (SPIN)					

TONGA GOVERNMENT
MINISTRY OF EDUCATION AND TRAINING

TONGA FORM SIX CERTIFICATE 2015

COMPUTER STUDIES

QUESTION AND ANSWER BOOKLET

Time allowed: 2 Hours

INSTRUCTIONS

1. Answer ALL questions.
2. This examination has **TWO** Sections.

Section	Description	Marks
A	MULTIPLE CHOICE	20 Marks
B	SHORT ANSWERS	80 Marks

3. The answer sheet for **Section A** is found on the inside front cover (page 2). Write the answers for **Section B** on the spaces provided in this booklet.
4. Write your **Student Personal Identification Number (SPIN)** in the box at the top right hand corner of this page and on the last page of this booklet.
5. Check that this booklet contains pages 2 – 23 in the correct order blank.

**YOU MUST HAND THIS BOOKLET TO THE SUPERVISOR BEFORE YOU
LEAVE THE EXAMINATION ROOM.**

TOTAL MARKS

100

MULTIPLE CHOICE ANSWER SHEET**Remember to write the letter of the correct answer only.**1. 2. 3. 4. 5. 11. 12. 13. 14. 15. **CHECK THE QUESTION NUMBER CAREFULLY**6. 7. 8. 9. 10. 16. 17. 18. 19. 20.

P.2

20	
----	--

S.A

20

SECTION A**MULTIPLE CHOICE****(20 MARKS)**

Write the **LETTER** of the **BEST** answer for each question in the correct box on page 2. If you want to change your answer, put a cross through your first answer and write the letter of your new choice beside the box.

1. Most computer users refer to the _____ as the brain of the computer.

A. ROM
B. CPU
C. RAM
D. Motherboard

2. Volatile memory keeps data _____.

A. permanently
B. when power is On
C. for a very short time
D. for later use

3. A good _____ can display high quality movies or games on your computer screen.

A. graphic card
B. pixel card
C. flash memory
D. projector

4. The _____ transfer data between the main components inside a computer.

A. expansion slots
B. motherboard
C. bus lines
D. USB ports

5. A computer with high capacity memory can _____.

A. keep many files
B. run without power
C. access storage faster
D. perform multiple tasks

6. Many computers today can be able to support _____ USB device(s).
- A. only one
 - B. only two
 - C. a maximum of five
 - D. more than hundred
7. The Function keys on a standard keyboard are used mainly for _____ tasks.
- A. simple utility
 - B. specific operating system
 - C. any software
 - D. online operation
8. The compressed file _____ was sent to you via email by a friend.
- A. comp.doc
 - B. comp.avi
 - C. comp.zip
 - D. comp.wav
9. A computer _____ is the person who normally design and develop software.
- A. technician
 - B. programmer
 - C. system analyst
 - D. multimedia specialist
10. Having a Firewall system is the best _____ for Internet users.
- A. security and protection
 - B. antivirus system
 - C. connection speed
 - D. legal protection

11. A text processor can NOT _____ but a word processor can.
- A. print documents
 - B. save documents
 - C. insert images
 - D. copy and paste
12. If you want to send the same document to different addresses using a word processor, you can use the _____ feature
- A. thesaurus
 - B. mail merging
 - C. word wrapping
 - D. spell checking
13. A _____ can best demonstrate values as part of a whole.
- A. line graph
 - B. bar chart
 - C. pie chart
 - D. scattergram
14. A spreadsheet formula normally starts with _____.
- A. -
 - B. +
 - C. %
 - D. =
15. A given cell reference such as A1:C10 can be referred to as_____.
- A. active cells
 - B. a cell range
 - C. selected group
 - D. normal cells
16. Using an absolute cell references in a spreadsheet allows cell references to stay _____.
- A. formatted
 - B. normal
 - C. changed
 - D. fixed

17. You can use a Database system for _____.
- A. checking data errors
 - B. keeping police records
 - C. analyzing data
 - D. updating financial reports
18. A database table contains multiple _____.
- A. rows and columns
 - B. data values
 - C. cell types
 - D. strings
19. You can move a table from a Database into a Spreadsheet by using the _____ feature.
- A. reporting
 - B. importing
 - C. exporting
 - D. SQL query
20. Database records are represented on a table as _____.
- A. defined variables
 - B. separate rows
 - C. common SQL statements
 - D. sets of instructions

SECTION B: SHORT ANSWERS

(80 Marks)

Answer ALL five questions.
Each question is worth 16 marks.

QUESTION ONE

1. A computer is made up of many different computer parts as shown below. A collection of internal computer parts and some basic peripherals that can be used to build a computer.



- a. Complete the table below with the computer parts that you may need to use inside a computer box and the basic peripherals that can be connected to the computer box.

Inside the computer	Basic Peripherals
i)	i)
ii)	ii)
iii)	iii)
iv)	iv)

2 marks	
2	
1	
0	
NR	

- b. Describe the basic function of each computer part that you can use inside the computer.

- i) Part 1

1 mark	
1	
0	
NR	

ii) Part 2

1 mark	
1	
0	
NR	

iii) Part 3

1 mark	
1	
0	
NR	

iv) Part 4

1 mark	
1	
0	
NR	

- c. Fill the table below with names and descriptions of two optional devices that you can connect to a computer.

Optional device	Basic function
i)	
ii)	

2 marks	
2	
1	
0	
NR	

- d. One of the optional devices can be connected to the computer via the serial or parallel ports. Describe the main difference between the serial and parallel connections.

1 mark	
1	
0	
NR	

2. Computer hardware failures are very common in the Pacific.
- a. Name two (2) major conditions that contribute to such problems in the Pacific.

Conditions causing hardware problems	
i)	ii)

1 mark	
1	
0	
NR	

- b. Describe two common hardware problems caused by these conditions

i) Problem 1

1 mark	
1	
0	
NR	

ii) Problem 2

1 mark	
1	
0	
NR	

- c. Briefly explain the steps that you need to take in order to protect your computer hardware from problems caused by;

i) condition 1.

2 marks	
2	
1	
0	
NR	

ii) condition 2.

	2 marks	
	2	
	1	
	0	
	NR	

QUESTION TWO

1. After buying his first laptop computer, Fifita was told that he must first install an Operating System (OS).

- a. Briefly explain why Fifita must install an operating system on his laptop.

1 mark	
1	
0	
NR	

- b. Fill the table below with four (4) of the basic functions of an operating system.

OS functions	
i)	
ii)	
iii)	
iv)	

2 marks	
2	
1	
0	
NR	

- c. Describe Graphic User Interface (GUI), a major component of an operating system.

1 mark	
1	
0	
NR	

2. Chip-based operating systems are used by many devices today. Name one of those devices and describe an important feature of a chip-based operating system.

2 marks	
2	
1	
0	
NR	

3. Talita is a graphic designer and she needs a good printer to print her graphics and work.

a. Suggest a good type of printer for Talita and provide two (2) important reasons for your suggestion.

i) type of printer

ii) two (2) main reasons.

2 marks	
2	
1	
0	
NR	

b. Name a common printer error that Talita may run into with the type of printer and suggest a way to fix the error (a possible solution)

i) a common error

1 mark	
1	
0	
NR	

ii) a possible solution

1 mark	
1	
0	
NR	

4. Computers and digital devices use many different media and technologies for storing computer data. Describe your understanding of the following storage concepts.

a. Disk storage

1 mark	
1	
0	
NR	

b. Read Only Memory (ROM)

1 mark	
1	
0	
NR	

5. Briefly explain how the ASCII code and the binary system are related when storing computer files.

2 marks	
2	
1	
0	
NR	

6. Programming languages is one of the main types of computer software.

a. Describe the key function of programming languages.

1 mark	
1	
0	
NR	

b. Name two popular programming languages.

1 mark	
1	
0	
NR	

QUESTION THREE

1. The table below contains different formatting features applied on different parts of a word processing document.

a. Complete the table with the formatting features applied on each part of the document.

Parts of a document	Formatting feature
An integrated package is a software package that contains a suite - several applications whose data is compatible	i)
These packages usually include word processing, spreadsheet and database applications. The most well-known example is ☐ Microsoft Office	ii)
Examples of integrated packages The following suites are examples of editions; their contents may vary according to whether you purchase the package for home use or for an organisation.	iii)
Go to the <u>vendor websites</u> for more detail about the contents of these suites.	iv)
<i>http://www.lotus.com/</i>	v)
You do have to pay for some versions which have been packaged and are supported, but it's still much cheaper than other operating systems.	vi)

3 marks	
3	
2	
1	
0	
NR	

b. Describe the effect if the following word processing feature is applied on the last sentence of the document.

i) Full Justify

1 mark	
1	
0	
NR	

ii) Increase Indent

		1 mark	
		1	
		0	
		NR	

c. The document uses the font style “Times new Roman”. Describe the meaning of the following font styles.

i) Fixed spacing

		1 mark	
		1	
		0	
		NR	

ii) Proportional spacing

		1 mark	
		1	
		0	
		NR	

d. Briefly explain when you need to use the Find and Replace feature on a word document.

		1 mark	
		1	
		0	
		NR	

2. As a student, you should be concerned with the growing ethical issues and illegal activities (unacceptable behavior) on the Internet.

- a. For each of the given ethical concern or issue, provide an example of an Internet activity that can cause such a concern or issue.

Ethical concern or issue	Internet Activity
Privacy concern	i)
Copyright issue	ii)
Corporate confidentiality concern	iii)
Piracy issue	iv)

4 marks	
4	
3	
2	
1	
0	
NR	

- b. Discuss how students can be prevented from being involved in activities or actions that can be regarded as ethical concerns or issues when using the Internet.

2 marks	
2	
1	
0	
NR	

3. Information and Communication Technology (ICT) has changed the way we live and work. Discuss how the use of ICT changed the way people work.

2 marks	
2	
1	
0	
NR	

QUESTION FOUR

1. The Mo'ui Fuolua Tennis club is organizing a team tour to Vava'u and each member is required to pay \$100 each as contribution to their airfare. The table below is a worksheet showing each member's contributions so far.

	A	B	C	D	E	F
1	Mo'ui fuolua Tennis Club					
2	Team Contribution					
3						
4	Name	Collection 1	Collection 2	Total	IC or C	
5	Sifa	35	45			
6	Movete	56	60			
7	Taani	35	70			
8	Fiona	44	68			
9	Kaati	25	54			
10						
11	Average Amount					
12						

- a. Describe why using a spreadsheet is useful for recording the type of information above.

1 mark	
1	
0	
NR	

- b. Write down the basic formula for finding the TOTAL collections for member "Sifa".

1 mark	
1	
0	
NR	

- c. Describe how to quickly apply the same formula to the rest of the members.

1 mark	
1	
0	
NR	

- d. In cell B11, write down a formula using the Average function to calculate the members' average contribution for Collection 1.

1 mark	
1	
0	
NR	

- e. Write down an If statement in cell E5 to state C if the total collection is more or equal to 100 OR IC if the total collection is less than 100.

2 marks	
2	
1	
0	
NR	

- f. Describe how you can change the format for the group of cells B5:D9 to currency with 2 decimal places.

1 mark	
1	
0	
NR	

- g. Describe why you may need to use the sorting feature on the total collection.

1 mark	
1	
0	
NR	

- h. Write down the required steps for creating a column chart to present both the members' collections.

2 marks	
2	
1	
0	
NR	

- i. With a spreadsheet application, you can print only a part of a worksheet. Describe the required steps in preparing only a group of worksheet cells for printing.

2 marks	
2	
1	
0	
NR	

2. As the owner of a book store, you wanted to sell 100 books next week. Explain how the “what if” analysis feature which is available with many spreadsheet application can help you with your book sales.

2 marks	
2	
1	
0	
NR	

3. Fill the table below with the proper spreadsheet function required for performing each given task.

Task	Function
To quickly calculate the total number of names on a list	i)
To calculate the total amount in a list	ii)
To find the highest amount in the list	iii)
To find the lowest amount in the list	iv)

2 marks	
2	
1	
0	
NR	

QUESTION FIVE

1. You have been asked to develop a Database for the Vaiola hospital. Use your understanding of database systems to answer the questions that follow.

- a. Name one database table that you can create to keep specific type of information for the hospital.

Table name:

1 mark	
1	
0	
NR	

- b. Using the database table above, fill the table below with four (4) required fields and datatypes as well as some sample data values.

Table Name:		
Field	Data Type	Value
i)		
ii)		
iii)		
iv)		

4 marks	
4	
3	
2	
1	
0	
NR	

- c. Describe two (2) main advantages of using a Database for the Hospital.

i)

1 mark	
1	
0	
NR	

ii)

1 mark	
1	
0	
NR	

2. The school Drama Club collected contributions from students for their annual concert tour. A sample of the information that they kept in their record book is given below.

Table name: Student Contribution

Contribution Information: students' contributions, classes and student villages.

Fane	\$25	Class 9	Afa
Kepu	\$30	Class 11	Nomuka
Maile	\$67	Class 7	Neiafu
Fepaki	\$65	Class 9	Houma

- a. Write down a query that can provide a list of names and their contribution in ascending order.

2 marks	
2	
1	
0	
NR	

- b. Display the result from the query in question a. above.

1 mark	
1	
0	
NR	

- c. Write a query to list the class 9 names and their contribution only.

2 marks	
2	
1	
0	
NR	

- d. Display the result from the query in question c. above.

1 mark	
1	
0	
NR	

3. Describe any specific method that you can use to make sure that data being entered into a Database is accurate.

		1 mark	
		1	
		0	
		NR	

4. Describe the effect of the following SQL operators when used in a query statement.

i) AND

		1 mark	
		1	
		0	
		NR	

ii) OR

		1 mark	
		1	
		0	
		NR	

Student Personal Identification Number (SPIN)

--	--	--	--	--	--

TONGA FORM SIX CERTIFICATE

COMPUTER STUDIES

2015

(Marker's Use Only)

SECTIONS	MARK	CHECK MARKER	TOTAL
Multiple Choice			20
Question One			16
Question Two			16
Question Three			16
Question Four			16
Question Five			16
TOTAL			100