



MARKER CODE

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STUDENT EDUCATION NUMBER

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Samoa Secondary Leaving Certificate

COMPUTER STUDIES

2015

QUESTION and ANSWER BOOKLET

Time allowed: 3 Hours & 10 Minutes

INSTRUCTIONS:

1. You have 10 minutes to read **before** you start writing.
2. Write your **Student Education Number (SEN)** in the space provided on the top right hand corner of this page.
3. Answer **ALL QUESTIONS**. Write your answers in the spaces provided in this booklet.
4. If you need more space for answers, ask the Supervisor for extra paper. Write your SEN on all extra sheets used and clearly number the questions. Attach the extra sheets at the appropriate places in this booklet.

STRANDS	Page number	Time (minutes)	Weighting
1. Computer Systems	2	45	25
2. Fundamentals of Computer Programming	7	27	15
3. Word Processing, Spreadsheets & Databases	11	108	60
TOTAL		180	100

Check that this booklet contains pages 2-26 in the correct order and that none of these pages is blank.

YOU MUST HAND THIS BOOKLET TO THE SUPERVISOR AT THE END OF THE EXAMINATION.

Instruction: Write your answers in the spaces provided.

- 1. Use the picture of the computer component provided below to answer questions a) and b).



a) Name the component:

Skill Level 1	
1	
0	
NR	

b) Explain why the component is a necessary part of the computer system and what would happen if it fails to function.

Skill Level 3	
3	
2	
1	
0	
NR	

2. A Universal Serial Bus (USB) port is commonly used these days. Give ONE example of a PC peripheral that can have a USB port.

Skill Level 1	
1	
0	
NR	

3. Explain how sound cards contribute to improve PC capabilities.

Skill Level 3	
3	
2	
1	
0	
NR	

4. Sina received an email with the file **statement.xls** attached to the mail. Name the program with which the specified file can be opened with

Skill Level 1	
1	
0	
NR	

5. List the critical purposes that RAM serves in the processing of information in computers.

Skill Level 2	
2	
1	
0	
NR	

6. *A teacher often mentions GUI as the acronym for Graphical User Interface in his presentation.*
List TWO ways in which GUI is used in computers today.

Skill Level 2	
2	
1	
0	
NR	

7. A researcher often advises his colleague to save their files and do back-ups regularly. Explain the importance of such practice.

Skill Level 3	
3	
2	
1	
0	
NR	

8. Evaluate the need for computer systems to use appropriate anti-virus software as protection against viruses. Use specific examples.

Skill Level 4	
4	
3	
2	
1	
0	
NR	

9. *A computer technician working at the National Health –Hospital gave out a doctor’s phone number to a patient without the doctor’s consent. Identify a legal issue involved.*

Skill Level 1	
1	
0	
NR	

10. Discuss the importance of programmers in the Information Communication Technology (ICT) field. Use specific examples.

Skill Level 4	
4	
3	
2	
1	
0	
NR	

STRAND 2: Fundamentals of Computer Programming

WEGHTING 15

1. Define the following terms in relation to programming.

a) Problem analysis

Skill Level 1	
1	
0	
NR	

b) Decision making

Skill Level 1	
1	
0	
NR	

c) Flow chart

Skill Level 1	
1	
0	
NR	

2. The given command will produce the given output

Command:

```
System.out.println ("Hello world");
```

Output:

Hello world

Write the output for the given command

Command:

```
System.out.print (" Hello ");
System.out.println (" world");
```

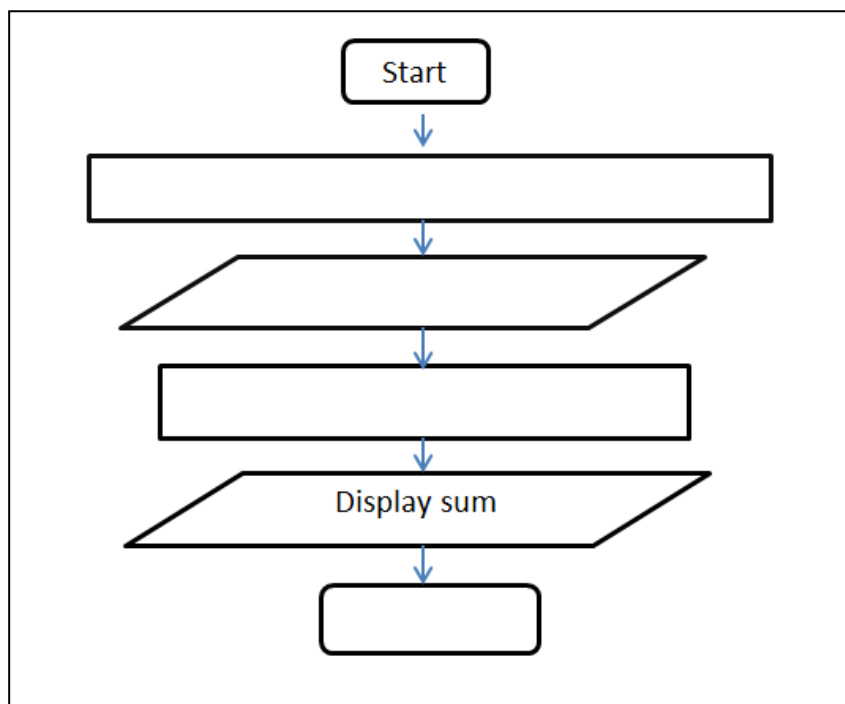
Output:

Skill Level 1	
1	
0	
NR	

3. A logic flowchart and algorithm will assist Enoka in writing a code to add two numbers. Some parts of the flowchart and steps of the algorithm has been done for you.

Finish the flowchart **(a)** and write a suitable algorithm **(b)** to add two numbers.

a) Flowchart to add two numbers.



Skill Level 3	
3	
2	
1	
0	
NR	

b) Algorithm to add two numbers.

Step 1 – Start
Step 2 –
Step 3 – Read values num1 and num2
Step 4 –
Step 5 –
Step 6 –

Skill Level 3	
3	
2	
1	
0	
NR	

4. Name a feature of a good computer program

Skill Level 1	
1	
0	
NR	

5. Define *data types*

Skill Level 1	
1	
0	
NR	

6. Define *constant data type*

Skill Level 1	
1	
0	
NR	

7. Write the syntax to declare a constant value for PI.

$\pi = 22/7;$

Skill Level2	
2	
1	
0	
NR	

STRAND 3: Word Processing, Spreadsheets & Databases

WEIGHTING 60

1. Define the two terms.

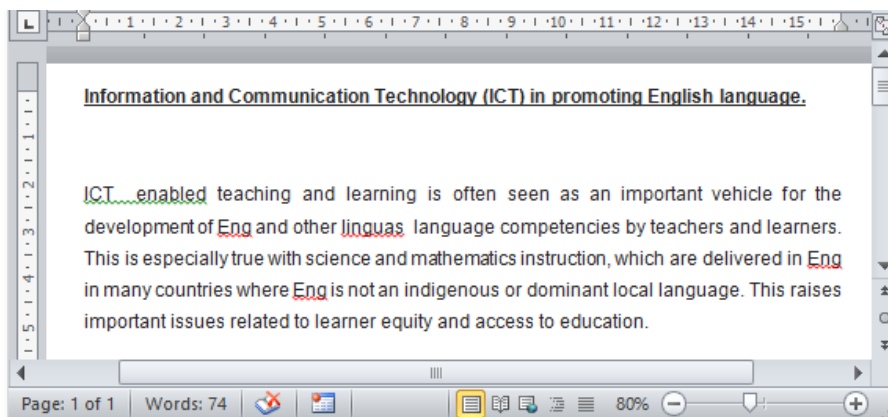
a) Text Processor

Skill Level 1	
1	
0	
NR	

b) Document processor

Skill Level 1	
1	
0	
NR	

2. The Word-processor was thought of as the most appropriate software to use for typing the article shown below. Use it to answer the questions that follow



Name and describe one principle of word-processor which contributed to writing the article.

a) Name : _____

Skill Level 1	
1	
0	
NR	

b) Explain the named principle mentioned in part (a)

Skill Level 3	
3	
2	
1	
0	
NR	

c) *The word such as 'Eng' has a wiggly red line.*
What does the wiggly red line indicate?

Skill Level 1	
1	
0	
NR	

d) Name an effect that has been applied to the title of the article

Skill Level 1	
1	
0	
NR	

- e) The acronym ICT has been changed to Information and Communication Technology. Name the command or activity applied to the text.

Skill Level 1	
1	
0	
NR	

- f) Write the word education using Upper case letters.

Skill Level 1	
1	
0	
NR	

- g) In the box, draw the shape of the button in the box that can bring the size of a file down.



Skill Level 1	
1	
0	
NR	

- h) During editing, the word **teaching** is replaced with another word from the thesaurus. Briefly explain how the use of the thesaurus is helpful for word processing.

Skill Level 3	
3	
2	
1	
0	
NR	

- i) What command is used to add text on the top of every page?
Explain the usefulness of the command in word processing.

Skill Level 3	
3	
2	
1	
0	
NR	

j) *When previewing the whole document, it is noticed that some pages exceeded the margins when printing on portrait layout.*

Name another layout that can be chosen for printing.

Orientation: _____

Skill Level 1	
1	
0	
NR	

3. Define

a) proportional spacing fonts

Skill Level 1	
1	
0	
NR	

b) fixed spacing fonts

Skill Level 1	
1	
0	
NR	

c) serif fonts

Skill Level 1	
1	
0	
NR	

5. A worksheet had records of the population distribution in Upolu island and the status of the phone company coverage area. Use the data entered in the excel spreadsheet given below to answer the following questions.

C3 fx =IF(B3>10000,"", "")					
	A	B	C	D	E
1	TALANOA CAMPAIGN REPORT				
2	Site	Number of population	coverage?	target area?	
3	Faleata	15609	GOOD		
4	Falealili	10936	GOOD		
5	Vaimauga	13035	GOOD		
6	Agoamaa	9020	BAD		
7	Aleipata	9820	BAD		
8	Safata	11236	GOOD		
9	Aaga	7692	BAD		
10	Siumu	5693	BAD		
11					
12	Count :				
13	Total :				

- a) What type of data is entered in cell C3?

Skill Level 1	
1	
0	
NR	

- b) Explain how an expression is used as the logical test in cell C3

Skill Level 3	
3	
2	
1	
0	
NR	

- c) Write a function to be used in cell **B12** to count the occurrences of the number of sites already recorded.

Skill Level 1	
1	
0	
NR	

- d) List the formatting that has been applied to cell B2

Skill Level2	
2	
1	
0	
NR	

- e) Create a function and a formula in cell **B13** to add the total number of the population included.

Skill Level 2	
2	
1	
0	
NR	

- f) It was noted that the company focused their coverage in more populated areas. Write an **IF Function** to be used in cell **D3** which will display “Yes” or “No”. Report should pin point areas with BAD coverage as targeted areas.
*Hint: Show **Yes** to **BAD** coverage areas.*

Skill Level 3	
3	
2	
1	
0	
NR	

- g) You want to draw a pie graph to display the information on the sites with data on column D.
 Write the keyboard key to press with the mouse in order to select the two columns.

Key: _____

Skill Level 1	
1	
0	
NR	

- h) List TWO advantages of using a spreadsheet to create the Talanoa Report

Skill Level 2	
2	
1	
0	
NR	

7. An Information Manager is working on transferring files to a database as shown on the table below. Use this information to answer the questions that follow.

StaffID	Name	Age	Date of Birth	Salary	Division
AA001	Leilani Keys	25	16/02/1980	\$42,000.00	Operation
AA002	Kinai Sean	33	31/07/1972	\$63,000.00	Administration
AA003	Sasa Taua	28	2/09/1987	\$33,000.00	Marketing
AA004	Sio Taufua	22	22/07/1993	\$27,530.00	Administration
AA005	Angel Edmund	24	16/04/1991	\$29,630.00	Operation
AA006	Enox Filisoa	34	21/05/1981	\$30,509.00	Marketing
AA007	Kekoa Faaiu	26	19/04/1989	\$25,600.00	Operation
*					

- a) Name the data type for Staff ID.

Skill Level 1	
1	
0	
NR	

- b) How many fields are there in the Staff Table?

Skill Level 1	
1	
0	
NR	

c.) Data was sorted in Descending order according to the Staff's age. Name the staff member that will show at the bottom of the table.

Skill Level 1	
1	
0	
NR	

Use the query to answer questions d and e.

```
SELECT Name, Division
FROM Staff
WHERE Salary > 30000;
```

d) How many records will be displayed as a result of the above query?

Skill Level 1	
1	
0	
NR	

e) Write the output that will be displayed from the above query

Skill Level 2	
2	
1	
0	
NR	


f) Write a query to display details of staff working in the Operation Division.

Skill Level 2	
2	
1	
0	
NR	

8. Provide TWO advantages of choosing a database over a spreadsheet

Skill Level 2	
2	
1	
0	
NR	

9. Assign the data types for the given fields.

Table1	
Field Name	Data Type
 CDcode	
CDname	
PUBLISHEDdate	
CDcost	

Skill Level 2	
2	
1	
0	
NR	

10. Evaluate the importance of data integrity practices and examples.

Skill Level 4	
4	
3	
2	
1	
0	
NR	

Student Education Number

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COMPUTER STUDIES

2015

(For Markers only)

STRANDS	Weighting	Marker	Check Marker	Final Weighting
1. Computer Systems	25			
2. Fundamentals of Computer Programming	15			
3. Word Processing, Spreadsheets & Databases	60			
TOTAL	100			