

STUDENT EDUCATION NUMBER

GOVERNMENT OF SAMOA
MINISTRY OF EDUCATION, SPORTS AND CULTURE

Samoa Secondary Leaving Certificate

COMPUTER STUDIES

2020

QUESTION and ANSWER BOOKLET

Time allowed: 3 Hours & 10 minutes

INSTRUCTIONS

1. You have 10 minutes to read **before** you start the exam.
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, 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.

CURRICULUM STRANDS		Page	Time (min)	Weighting
STRAND 1:	PERSONAL COMPUTERS SYSTEMS AND MANAGEMENT	2	54	30
STRAND 2:	FUNDAMENTALS OF COMPUTER PROGRAMMING	7	45	10
STRAND 3:	USING PERSONAL COMPUTER APPLICATION	9	81	60
TOTAL			180	100

Check that this booklet contains pages 2-18 in the correct order and that none of these pages are blank.

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

Use Exhibit 1 to answer Numbers 1 – 4.



Exhibit 1

1. Name the **expansion card** that can enhance the internet connection of Exhibit 1.

SL 1

2. Explain with an example how the expansion card in Number 1 function.

SL 3

3. Name a peripheral device in Exhibit 1.

SL 1

4. List TWO roles for the device labeled **X**.

SL 2

5. Describe RAM.

SL 2

6. List TWO User Interface elements which are appropriate with controlling the Inputs.

SL 2

Use Exhibit 2 to answer Numbers 7 and 8.

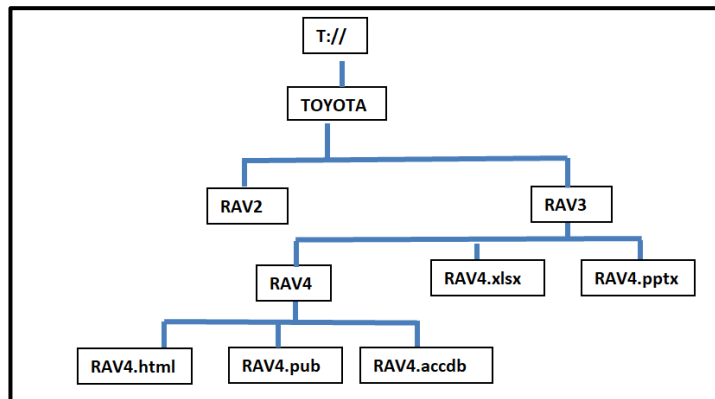


Exhibit 2

7. Circle the spreadsheet file 'RAV4'.

SL 1

8. Write the pathway for the web file.

SL 2

9. Since the COVID 19 pandemic, the internet has been used to reach out to others for teaching, learning, communicating, working and so forth. With the intensified usage, the number of malware cyber-attacks has also increased.

- (i) Evaluate with examples the needs for computer systems to be protected against computer viruses using appropriate anti-virus software.

SL 4

- (ii) With pandemics causing nationwide lockdowns, discuss the importance of programmers to the world of education.

SL 4

- (iii) Explain how pandemics have changed the nature of work and enterprises in terms of meetings and conferences. Provide an example of an application which people can use to hold their meetings and conferences online.

SL 3

- (iv) Discuss equity issues with the use of technology during lockdown for student learning in Samoa. Give examples and provide evidence to support.

SL 4

10. Describe software.

SL 1

A bus is collecting passengers from Apia to Toomatagi. Since the State of Emergency (SOE), the number of passengers travelling by bus has been limited to 20 people only. Use this scenario to answer Numbers 11 to 15.

11. Draw the symbol for a flowchart used to indicate the beginning of the journey.

SL 1

12. Draw the symbol indicating the process of the bus picking up passengers along the way to Toomatagi.

SL 1

13. Draw an analysis plan to ensure that there are no more than 20 people on the bus and to explore options for the driver to take if more than 20 passengers stopping the bus.

SL 2

14. Write suitable algorithms to produce a solution.

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SL 3

15. Draw a simple flow chart for the algorithm Number 14.

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SL 3

16. State the concept used in word processor where the cursor moves from line to line without pressing the **Enter** key on the keyboard.

SL 1

17. Name the feature or effects applied to the font text.

i	font → font	
ii	font → FONT	

SL 1

SL 1

18. Name and explain ONE common command button on Exhibit 3.



Exhibit 3

Name: _____

SL 3

Explain: _____

19. Explain ONE principle of word-processing and give an example.

SL 3

20. Discuss how word-processing skills can improve a student who is typing his/her research. Give examples to support.

SL 4

21. Documents can be displayed or printed on a page orientation. Name ONE type of page orientation.

SL 1

22. Name a text control option, applied to a cell during formatting.

SL 1

23. Insert formula similar with the one provided: = SUM(B2:B4,B6)

SL 1

24. List TWO good features of using a Microsoft Excel spreadsheet.

SL 2

25. When selecting the type of graph to be used in excel, we need to identify our data from the table. List a sequence of steps to show how to select our data from cells B2 to B5 and cells D2 to D5 for the graph.

SL 2

26. List TWO types of cell referencing.

SL 2

27. A list of prices for items is placed at cells C5 to C11 on the spreadsheet. Provide a formula showing the function used to find which item contains the highest price.

SL 2

	A	B
1	COST	10%
2	4	
3	6	
4	8	
5	3	

Exhibit 4

28. Using Exhibit 4, provide a formula to find the values for column B if column A (Cost) is multiplied by 10%. Use absolute reference.

SL 3

29. Provide a function to perform a logical test for the details.
Column B3 to B8 records the ages of a family in Nuufu. According to the registered nurse, those who are above 40 years old should not be injected and therefore the text 'NO' should show on the column otherwise it will show 'YES'.

SL 4

Neti	10
Sam	25
Sala	40
Mary	10
Sio	15

Exhibit 5

30. Exhibit 5 shows the pizza portions for each person. Draw a **line graph** to show the table with appropriate titles for the chart, x-axis and y-axis.

SL 4

31. List TWO advantages of using a database.

SL 2

Refer to Exhibit 6 to answer Numbers 32 to 39.

Working Condition					
staff ID	Name	Date of Birth	Age	At Risk	Gender
BW27	Athena	18/3/1996	24	<input type="checkbox"/>	F
BW29	Sasa	16/01/1981	39	<input checked="" type="checkbox"/>	M
BW33	Neti	16/02/1992	28	<input type="checkbox"/>	F
BW39	Enoka	26/11/1980	40	<input checked="" type="checkbox"/>	M
BW45	Michael	16/12/1995	25	<input type="checkbox"/>	M
BW92	Alesana	07/04/1986	34	<input checked="" type="checkbox"/>	M
TW25	Samna	04/05/1985	35	<input checked="" type="checkbox"/>	M
TW81	Leilani	06/01/1978	42	<input checked="" type="checkbox"/>	F
TW97	Elijah	29/06/1994	25	<input type="checkbox"/>	M
*				<input type="checkbox"/>	

Exhibit 6

32. Design the data types for the fieldnames Age, At risk and Gender.

FieldName	Datatypes

SL 2

33. Provide the most appropriate field size in the field properties for Age.

SL 1

34. Fill in the appropriate Validation Rule and Validation Text for Gender.

Gender	Text
Field Properties	
General Lookup	
Field Size	255
Format	
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	No
Allow Zero Length	Yes
Indexed	No

SL 4

Validation Rule: _____

Validation Text: _____

35. Provide the output after running the query showing the names and age of 'at risk female staff' only.

SL 2

36. Describe with an example from the table a practical way in which one can ensure accuracy of data entry.

SL 2

37. What will appear on the last column of age, if the Table is sorted in ascending order by the staff name?

SL 1

38. You are asked to show the staff name, and staff age for those who are at risk only.

- (i) Write a SQL statement of the above query.

SL 4

- (ii) Design the query to find the same information.

Field:				
Table:				
Sort:				
Show:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Criteria:				
or:				

SL 3

- 39.** Present a simple report of the above query. Name the report , insert page number and todays date at the bottom of the report.

SL 4

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2020

(For Scorers only)

CURRICULUM STRANDS	Weighting	Scores	Chief Scorer	Double Entry (AED)
STRAND 1: PERSONAL COMPUTERS SYSTEMS AND MANAGEMENT	30			
STRAND 2: FUNDAMENTALS OF COMPUTER PROGRAMMING	10			
STRAND 3: USING PERSONAL COMPUTER APPLICATION	60			
TOTAL	100			