GOVERNMENT OF SAMOA
MINISTRY OF EDUCATION, SPORTS AND CULTURE

Samoa Secondary Leaving Certificate

COMPUTER STUDIES

2019

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	6	45	10
STRAND 3:	USING PERSONAL COMPUTER APPLICATION	8	81	60
	TOTAL		**180**	**100**

Check that this booklet contains pages 2-18 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

Figure 1

Use Figure 1 to answer Numbers 1 – 4.

1. Name the *Operating System* that is run on the desktop computer.

    _____

SL 1

2. Name a basic component that is ***connected*** to the desktop computer box.

    _____

    _____

SL 1

3. Name a *peripheral* device.

    _____

SL 1

4. Name a component that can be *found inside* the computer box.

    _____

SL 1

5. Explain the basic function of the *motherboard power supply* inside the computer case.

	SL 3

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6. Explain how Graphic User Interface (GUI) elements make computer programs, user friendly.

	SL 3

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7. Explain the concept of *creating* a file by using the *SAVE* option.

	SL 2

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8. Computer programmers are people who can develop software by writing programming codes. Discuss the importance of programmers in the field of ICT.

SL 4

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9. Evaluate the *needs* to protect computer components from computer viruses using an antivirus program.

SL 4

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10. Discuss *equity* issues relating to computers with examples of gender and disability.

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11. List TWO basic elements of GUI from the following:

Checkboxes,   Option Buttons, CPU, motherboard, RAM

1._____ 2. _____

12. Printers are used to produce *printed* documents from the computer. Describe the role of printers in the computer system.

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13. Describe the desktop computer's operating system.

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SL 2

STRAND 2:   FUNDAMENTALS OF COMPUTER PROGRAMMING   Weighting 10

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14. Name a feature of a good computer program.

_____

SL 1

Figure 2

FALSE   TRUE
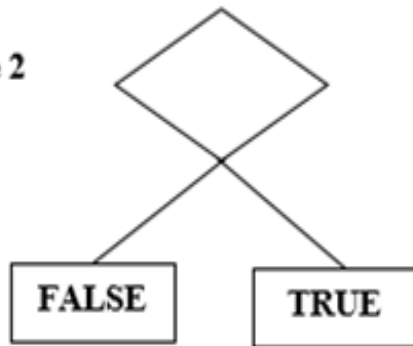
15. Which function is indicated by the symbol ⬦ in Figure 2 above?

_____

SL 1

16. Write the logical flow chart for the following program task:
Input a number and then Input another number
IF number 1 is equal to number 2 then
Display "The two numbers are the same"
ELSE
Display "The two numbers are not the same"

Diagram 1:

| Input Num1 | → | | → | Num1 > Num2? |

Num1 * Num2

Num1 + Num2

Display the Answer
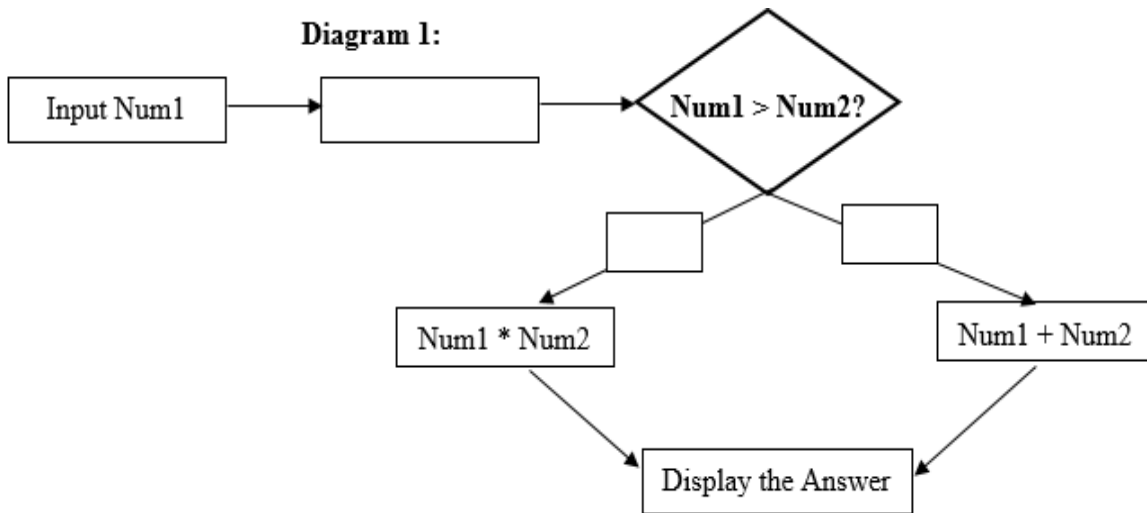
17. Apply the principles of logical flow chart by *filling in the blank shapes* in Diagram 1 to solve the following problem:

The user inputs Num1 then inputs Num2
Then program tests IF Num1 is greater than Num2
IF yes THEN add the two numbers OTHERWISE multiply the two numbers
Display the Answer

18. Write a suitable algorithm from the logical flow chart in Diagram 1 (page 7).

	SL 3

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STRAND 3:   USING PERSONAL COMPUTER APPLICATIONS   Weighting 60

19. Discuss how acquiring word processing skills can empower people in the workplace.

	SL 4

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20. Name a principle of word processing.

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SL 1

21. Define proportional spacing fonts.

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SL 1

22. List the use of these common command buttons:

B _____

U _____

SL 2

23. Differentiate between serif and san serif font types.

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SL 3

24. List the principles of word processing.

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25. What is the concept of *WYSIWYG* in word processing?

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Use Figure 3 to answer Numbers 26 – 28.

Figure 3
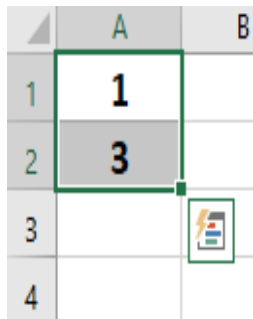
26. Using the autofill function OR fill series (+), what will be the values of cells A3 and A4?

A3_____

A4_____

27. List the *cell types* that are available in a spreadsheet.

_____

_____

_____

28. Write *ONLY* the *SPREADSHEET FUNCTION* to apply when one needs to:
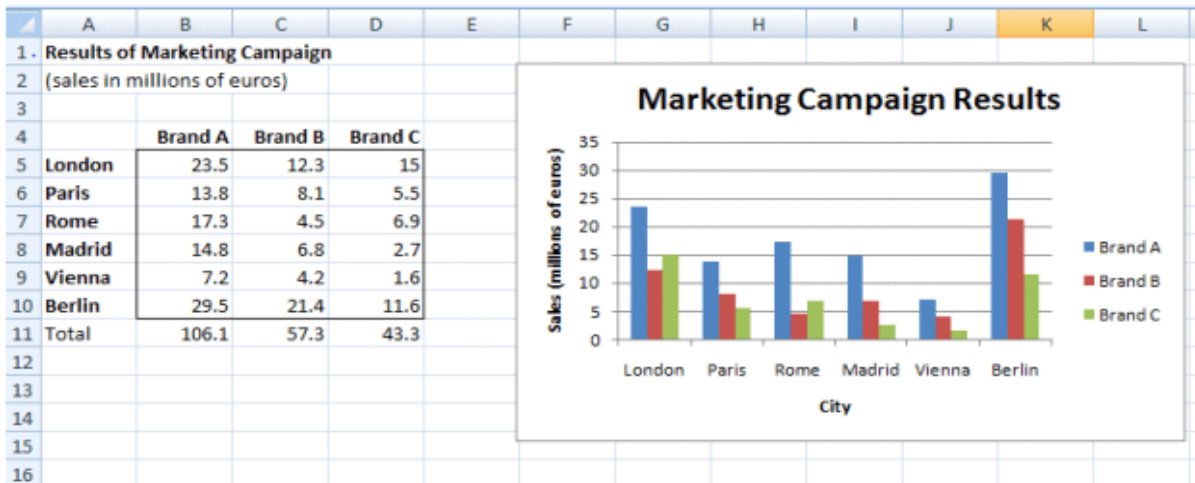
(i)   Add 1 and 3

_____

(ii) Find the Average between 1 and 3

_____

(iii) Find out IF 1 is greater than 3

_____

Use Figure 4 to answer Numbers 29 – 34.

Figure 4

29. Name the *range* of cells from which the graph is built.

_____

30. Provide the correct labels for the various sections of the graph.

(i)   x – axis

_____

(ii) y – axis

_____

(iii) Legends

_____

(iv) Title

_____

SL 4

31. Name the *cell type* of cell D11.

_____

SL 1

32. Write out the *formula* to calculate the total in cell B11.

_____

SL 1

33. Repeka wanted to sort the list in Figure 4 in alphabetical order of cities, which range of cells should be highlighted?

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SL 2

34. Explain what the computer does when applying the **Merge and Centre** function to cells A1 to D1.

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35. Discuss the advantages of acquiring spreadsheet skills in the employment field.

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Figure 5

Use Figure 5 to answer Numbers 36 – 37.

36. What would be an appropriate *datatype* for the field **SALARY**?

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SL 1

37. How many records have been entered in the table?

_____

_____

SL 1

38. Figure 6 shows a query designed with Query Wizard. Write the output in Table 1 provided.

Figure 6

Field:	ID	NAME	Salary	YEARS
Table:	Staff	Staff	Staff	Staff
Sort:				
Show:	☑	☑	☑	☑
Criteria:		="James"		
or:				

Table 1

ID	NAME	Salary	YEARS	

SL 2

39. Write the *SQL* version of the query in Figure 6.

SL 4

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40. Describe a database *table* as a collection of records *(rows)* and fields *(columns).*

	SL 2

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41. Describe the use of *validation rule* field property as a practical way to ensure accuracy of data entry.

	SL 2

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42. Explain the advantages of using a database.

	SL 3

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43. Use the terms *row heading*, *column heading*, *function and value* to fill in the spaces in the following statements.

When creating a *Crosstab Query* a user must assign one _____

option, and one or more _____ options, and one _____

option. A _____ can be assigned to the value field.

SL 4

44. Explain the importance of applying the input mask field property to ensure data integrity. Use an example of a field to which this field property can be applied.

SL 4

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COMPUTER STUDIES

2019

(For Scorers only)

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