



Digi-Trailblazers

Spring 2019

Examination Paper

Part A (Theoretical)

Candidate name: _____

Centre name: _____

Candidate instructions

- Write your name and the name of your centre above.
- The total examination time is 90 minutes:
 - **45 minutes for Part A (Theoretical)**
 - 45 minutes for Part B (Practical)
- Your teacher will tell you if you are completing the Theoretical and Practical questions at this time (Part A and B), just the Theoretical questions (Part A) or just the Practical questions (Part B).
- Complete all of the questions you are given.
- Write all of your answers to Part A in this booklet. Write these answers in pen.

Ask your teacher if you are not sure what to do.

For teacher's use only

NCC Education Student ID:	
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Part A: Understanding Computing (50 marks)

Tick ONE (1) correct answer for each question

Question 1

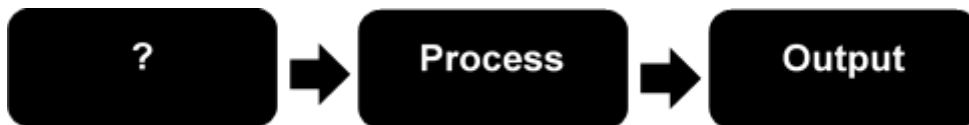
Which ONE (1) of the following is used to lock accounts and demand payment for release?

<input type="checkbox"/> Virus	<input type="checkbox"/> Trojan	<input type="checkbox"/> Ransomware	<input type="checkbox"/> Phishing
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4 marks

Question 2

Which ONE (1) of the following is missing from the diagram below?



<input type="checkbox"/> Display	<input type="checkbox"/> Input	<input type="checkbox"/> Print	<input type="checkbox"/> Online
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4 marks

Question 3

Which ONE (1) of the following is not a form of storage?

<input type="checkbox"/> Flash drive	<input type="checkbox"/> Cloud	<input type="checkbox"/> Hard drive	<input type="checkbox"/> CPU
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4 marks

Question 4

Which ONE (1) of the following is a video file?

<input type="checkbox"/> .wav	<input type="checkbox"/> .mp4	<input type="checkbox"/> .au	<input type="checkbox"/> .jpg
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4 marks

Question 5

Which ONE (1) of the following is a type of Loop used in programming?

<input type="checkbox"/> IF	<input type="checkbox"/> REPEAT	<input type="checkbox"/> ELSE	<input type="checkbox"/> THEN
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4 marks

Question 6

Which ONE (1) of the following is **not** used as a way to collect data?

<input type="checkbox"/> Questionnaire	<input type="checkbox"/> Interview	<input type="checkbox"/> Observation	<input type="checkbox"/> Printing
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4 marks

Question 7

Which ONE (1) of the following programming commands is an operator?

<input type="checkbox"/> Subtract (-)	<input type="checkbox"/> For	<input type="checkbox"/> Print	<input type="checkbox"/> Variable
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4 marks

Question 8

If you were a small business owner which ONE (1) of the following applications would you use to store financial data?

<input type="checkbox"/> Word processor	<input type="checkbox"/> Presentation software	<input type="checkbox"/> Image editor	<input type="checkbox"/> Spreadsheet
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4 marks

Question 9

Which ONE (1) of the following uses a computer system to operate?

<input type="checkbox"/> Mobile phone	<input type="checkbox"/> Car	<input type="checkbox"/> Washing machine	<input type="checkbox"/> All use a computer system
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4 marks

Question 10

Manufacturing uses which ONE (1) of the following computer models?

<input type="checkbox"/> Financial forecasting	<input type="checkbox"/> Robotics	<input type="checkbox"/> X-ray	<input type="checkbox"/> Traffic light
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4 marks

Question 11

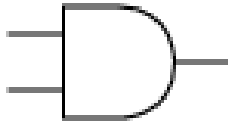
Which ONE (1) of the following is not a type of network?

<input type="checkbox"/> Star	<input type="checkbox"/> Bus	<input type="checkbox"/> Ring	<input type="checkbox"/> Bar
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4 marks

Question 12

Which ONE (1) of the following Boolean operators is shown in the image below?



<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AND	NOT	OR	NOR

4 marks

Question 13

The ASCII number for the uppercase letter N is 78. Which ONE (1) represents the binary equivalent number?

<input type="checkbox"/>	<input type="checkbox"/>
0100 1110	0100 1100

2 marks

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Examination Paper

Part B (Practical)

Candidate name: _____

Centre name: _____

Candidate instructions

- Write your name and the name of your centre above.
- The total examination time is 90 minutes:
 - 45 minutes for Part A (Theoretical)
 - **45 minutes for Part B (Practical)**
- Your teacher will tell you if you are completing the Theoretical and Practical questions at this time (Part A and B), just the Theoretical questions (Part A) or just the Practical questions (Part B).
- Complete all of the questions you are given.
- Part B will be completed using a computer.
- Any computer-based work must be saved following your teacher's instructions.

Ask your teacher if you are not sure what to do.

For teacher's use only

NCC Education Student ID:	
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Part B: Using Computers (50 marks)

Question 14

- a) Imagine you are a party organiser for an entertainment company. The owner would like to see how many guests have attended each party over the first 6 months of this year. Use spreadsheet software to produce spreadsheet using the data below.

Guests attending:

January: 502

February: 232

March: 843

April: 338

May: 646

June: 989

Choose a layout, font and colour scheme for your spreadsheet that you think the owner would like. Your spreadsheet must include a suitable title and formatting.

10 marks

- b) Add ONE (1) suitable chart to the spreadsheet including a title, vertical and horizontal axis labels.

8 marks

- c) Add a formula to calculate the total number of guests attending over the first six months.

2 marks

- d) How can you test the accuracy of the spreadsheet?

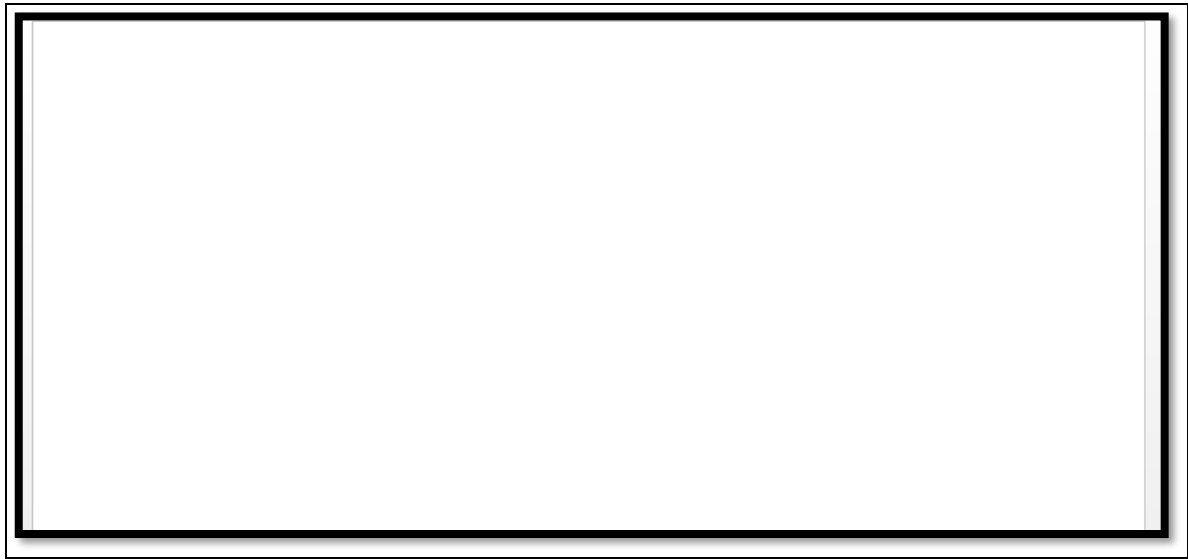
2 marks

Question 15

a) Design a questionnaire that allows you to find out the following information:

- Mrs
- My first name is Alexandra
- My surname is Donald
- My date of birth is 12 July 1995
- I am 23 years old

Plan your design in the box below:



5 marks

b) Other than the example data included in part a) above, state FIVE (5) **OTHER** pieces of data could be included in a questionnaire to find out more about the individual?

1. _____
2. _____
3. _____
4. _____
5. _____

5 marks

Question 16

a) In programming not calling a function is a common error in programming. List TWO (2) types of errors that you might find in a program.

1. _____

2. _____

4 marks

b) Debugging during testing is key to the delivery of operational programs. State TWO (2) ways you can test your program is working correctly.

1. _____

2. _____

4 marks

Question 17

In a word processor, write an algorithm that shows the steps that you would take to apply for a job online.

10 marks

End of paper