



**L-Università  
ta' Malta**

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE  
EXAMINATIONS BOARD

**SECONDARY EDUCATION CERTIFICATE LEVEL  
2019 MAIN SESSION**

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SUBJECT:	<b>Information Technology</b>
PAPER NUMBER:	Controlled – Unit 3
DATE:	8 <sup>th</sup> April 2019
TIME:	10:00 a.m. to 11:35 a.m.

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**THIS PAPER SHOULD BE RETURNED TO THE INVIGILATOR  
AFTER THE EXAMINATION.**

**Name of candidate** \_\_\_\_\_

**I.D. number** \_\_\_\_\_

**School** \_\_\_\_\_

**Class** \_\_\_\_\_

Answer **ALL** questions in the space provided.

**Scenario**

- You have been sent by your company to help the accounting firm, Bernard & Sons, with their current system.
- They have been having trouble with slow computers that are preventing employees from completing their work in a timely manner.
- At Bernard & Sons you notice that while the computers are quite recent, they don't seem suitable for the work needed.

**Question 1**

**K1 (4 marks)**

State **FOUR** reasons why you might consider upgrading a computer.

Reason 1: \_\_\_\_\_  
\_\_\_\_\_ (1)

Reason 2: \_\_\_\_\_  
\_\_\_\_\_ (1)

Reason 3: \_\_\_\_\_  
\_\_\_\_\_ (1)

Reason 4: \_\_\_\_\_  
\_\_\_\_\_ (1)

**Question 2**

**C1 (6 marks)**

a) The manager would like you to describe the implications of the upgrades you have recommended. Describe **ONE** implication induced by the following hardware upgrades:

i. Upgrade from Intel Core i5 to i7;

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(1.5)

ii. Upgrade from a 1TB HDD to a 2TB HDD.

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(1.5)

b) Describe any other **THREE** implications of hardware installation, upgrade or replacement not described in question 2(a) above.

Implication 1:

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(1)

Implication 2:

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(1)

Implication 3:

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(1)

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**Question 3**

**K3 (4 marks)**

Describe **FOUR** risks involved when upgrading hardware components.

Risk 1:

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(1)

Risk 2:

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(1)

Risk 3:

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(1)

Risk 4:

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(1)

**Question 4**

**C2 (6 marks)**

In order to ensure that the upgrades are carried out smoothly, all the necessary precautions need to be taken.

a) For **EACH** of the precautions listed below, discuss how it helps reduce the risks.

- i. Watch out for excessive force;

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(1)



iii. Precaution 3: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ (1)

**Question 5**

**K5 (4 marks)**

Correct working procedures are essential for a safe working environment. Mark with a ✓ to outline the correct working procedure. Mark with an X the incorrect working procedure.

<b>PROCEDURES</b>	
Work in a dirty environment	
Check for compatibility	
Install components in any order you like	
Take backups	
Set a system restore point	
Wear anything you like as long as it's comfortable	
If you know you did a good job there's no need to test the system	
Take backups only before installing new software	
Test the computer system	
Restore data and install the necessary software	
Only set a restore point if you don't have any backups	
Prepare the necessary equipment and clean up the computer system	
Always let the user restore their own data	
Install components in the correct order	
Identify the problem and think of a possible solution	
Do not use anti-static protection	

**Question 6**

**K8 (4 marks)**

You have just finished installing the upgrades, however not everything is working well. Read the errors listed below and identify **TWO** possible issues for each error.

a) The computer starts booting up but shuts down soon after.

i. Possible issue 1:

\_\_\_\_\_ (0.5)

ii. Possible issue 2:

\_\_\_\_\_ (0.5)

b) The computer switches on but the monitor remains entirely blank.

i. Possible issue 1:

\_\_\_\_\_ (0.5)

ii. Possible issue 2:

\_\_\_\_\_ (0.5)

c) The computer starts booting but an error appears saying 'No operating system installed'.

i. Possible issue 1:

\_\_\_\_\_ (0.5)

ii. Possible issue 2:

\_\_\_\_\_ (0.5)

d) System is on but there is no sound.

i. Possible issue 1:

\_\_\_\_\_ (0.5)

ii. Possible issue 2:

\_\_\_\_\_ (0.5)

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**Question 7**

**K10 (4 marks)**

The manager at Bernard & Sons has noticed that the upgraded PCs are getting notifications asking to register the new products. He doesn't think it is important and wants to ignore the notifications.

List **FOUR** advantages of product registration to convince the manager that this is an important process.

a) Advantage 1:

\_\_\_\_\_ (1)

b) Advantage 2:

\_\_\_\_\_ (1)

c) Advantage 3:

\_\_\_\_\_ (1)

d) Advantage 4:

\_\_\_\_\_ (1)

**Question 8**

**C5 (6 marks)**

The manager understands that over time the computers will need to be maintained, however he doesn't know what types of maintenance are possible. Help him understand the different types of maintenance by explaining **TWO** practical measures for each type of maintenance described below.

a) Explain **TWO** corrective maintenance measures that can be carried out to fix malfunctions.

Measure 1:

\_\_\_\_\_  
\_\_\_\_\_ (1)

Measure 2:

\_\_\_\_\_  
\_\_\_\_\_ (1)



b) Explain **TWO** perfective maintenance measures that can be carried out to increase computer performance.

Measure 1:

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(1)

Measure 2:

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(1)

c. An employee has realised that there doesn't seem to be a port that matches his new monitor cable. Help the employee by explaining the type of maintenance required.



Figure 1: Video Port

Source: <https://commons.wikimedia.org/>



Figure 2: Video Cable

Source: <https://pixabay.com/>

i. Type of maintenance:

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(1)

ii. Explanation of measure required to carry out maintenance:

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(1)

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