



## **Unit: Computer Systems**

### **Assignment title: Practical Portfolio**

## **SAMPLE**

## **Marking Scheme**

Markers are advised that, unless a task specifies that an answer be provided in a particular form, then an answer that is correct (factually or in practical terms) **must** be given the available marks. If there is doubt as to the correctness of an answer, the relevant NCC Education materials should be the first authority.

This marking scheme has been prepared as a **guide only** to markers and there will frequently be many alternative responses which will provide a valid answer.

Each candidate's script must be fully annotated with the marker's comments (where applicable) and the marks allocated for each part of the tasks.

**Throughout the marking, please credit any valid alternative point.**

# Task 1

## Part a) Outline Requirements Specification – 20 marks

0-5 marks	6-7 marks	8-11 marks	12-13 marks	14-20 marks
<p>No organisation identified or minimal information provided</p> <p>No or <b>superficial</b> or insufficient discussion to provide <b>clarity</b> on an organisation or functional requirements</p> <p>No or <b>superficial</b> or insufficient specifications provided for HW/SW</p>	<p>Organisation identified but lacking reasoning</p> <p><b>Limited but (incomplete) functional and non-functional</b> requirements</p> <p><b>Limited but (incomplete)</b> specifications provided for HW/SW</p>	<p>Organisation clearly identified</p> <p><b>Some relevant functional and non-functional</b> requirements.</p> <p><b>Some Relevant</b> specifications provided for HW/SW</p>	<p>Organisation clearly identified with reasoning</p> <p><b>Mostly relevant functional and non-functional</b> requirements <b>prioritised and justified</b></p> <p><b>Mostly Relevant</b> specifications provided for HW/SW <b>prioritised and justified</b></p>	<p>Organisation clearly identified and justified</p> <p><b>Comprehensive</b> discussion of <b>relevant functional and non-functional</b> requirements <b>prioritised and justified</b> using MOSCOW</p> <p><b>Comprehensive</b> discussion of specifications for HW/SW <b>prioritised and justified</b> using MOSCOW</p>
<p><b>No, superficial or very inconsistent</b> description of CPU type, RAM and Disk space in the performance of the system</p>	<p><b>Limited (incomplete)</b> description of CPU type, RAM and Disk space in the performance of the system <b>missing key detail.</b></p>	<p><b>Clear description</b> of CPU type, RAM and Disk space in the performance of the system with <b>minor gaps in the details.</b></p>	<p>Clear, <b>consistent description</b> of CPU type, RAM and Disk space in the performance of the system.</p>	<p><b>Comprehensive</b> discussion of CPU type, RAM and Disk space in the performance of the system, <b>related explicitly to the needs of the organisation</b></p>
<p><b>No, superficial or very inconsistent</b> description of disk space organisation.</p>	<p><b>Limited (incomplete)</b> description of of disk space organisation, <b>missing key detail.</b></p>	<p><b>Some relevant description</b> of disk space organisation.</p>	<p><b>Mostly relevant description</b> of disk space organisation. <b>Related in part to the requirements of the organisation</b></p>	<p><b>Comprehensive</b> discussion of disk space organisation. <b>Related explicitly to the requirements of the organisation</b></p>

## Part b) System Design Specification - 20 marks

0-5 marks	6-7 marks	8-11 marks	12-13 marks	14-20 marks
No, irrelevant or superficial discussion to provide <b>clarity</b> on system specifications	<b>Limited</b> (incomplete) but <b>relevant</b> system specification <b>missing key detail</b> .	<b>Some relevant</b> system specification but with <b>minor gaps in the details</b> .	<b>Mostly relevant</b> system specifications	<b>Comprehensive</b> complete and fully <b>relevant</b> system specifications <b>taking account of priorities</b>
No, or <b>ONE relevant</b> products identified for <b>some requirements</b>	<b>TWO relevant</b> products identified for <b>a few</b> requirements	<b>Two relevant</b> products identified for <b>around half</b> requirements	<b>Two relevant</b> products identified for <b>most</b> requirements	<b>Two relevant</b> products identified for <b>all</b> requirements, may have <b>very minor details omitted</b>
<b>No or superficial/ unclear/ inaccurate,</b> product/ supplier /pricing details provided,	<b>Limited product/ supplier /pricing or</b> inaccurate details given	<b>Some complete</b> product/ supplier /pricing <b>minor gaps in the details</b> .	<b>Mostly complete</b> product/ supplier /pricing	<b>Comprehensive</b> complete product/ supplier /pricing

## Part c) Critical Evaluation and System Selection – 10 marks

0-2 marks	3 marks	4-5 marks	6 marks	7-10 marks
<b>No or unclear/ inaccurate</b> identification of <b>preferred solution</b>	<b>Limited</b> (incomplete) identification of <b>preferred solution</b>	<b>Some relevant</b> identification of <b>preferred solution</b>	<b>Mostly relevant</b> identification of <b>preferred solution</b>	<b>Comprehensive</b> relevant identification of <b>preferred solution</b>
<b>No or unclear/ inaccurate</b> justification of how proposed solutions meet requirements.	<b>Limited</b> (incomplete) justification of how proposed solutions meet requirements. <b>missing key detail</b> .	<b>Some relevant</b> justification of how proposed solutions meet requirements.	<b>Mostly relevant</b> justification of how proposed solutions meet requirements. <b>Related in part to the requirements of the organisation</b>	<b>Comprehensive</b> justification of how proposed solutions meet requirements. <b>Related explicitly to the requirements of the organisation</b>

## Task 2

### Windows Installation (30 marks)

#### a) Installation of Windows (10 marks)

0-2 marks	3 marks	4-5 marks	6 marks	7-10 marks
No, irrelevant or superficial discussion to provide <b>clarity</b> of installation	<b>Most key stages Identified</b>  <b>Limited</b> (incomplete) but <b>relevant</b> ID/description of drivers/ source/ issues <b>missing key detail.</b>	<b>All key stages Identified</b>  <b>Some relevant</b> ID /description of drivers/ source/ issues with <b>minor gaps in the details.</b>	<b>All key stages Identified clearly</b>  <b>Most relevant</b> ID /description of drivers/ source/ issues	<b>All key stages Identified</b>  <b>Comprehensive</b> complete and <b>fully relevant</b> ID /description of drivers/ source/ issues

#### b) Antivirus Software (10 marks)

0-2 marks	3 marks	4-5 marks	6 marks	7-10 marks
No, irrelevant or superficial discussion to provide <b>clarity</b> of AV product	<b>AV product Identified</b>  <b>Limited</b> (incomplete) but <b>relevant</b> id/description of AV install, problems, update process <b>missing key detail.</b>	<b>AV product Identified clearly</b>  <b>Some relevant</b> id/description of AV install, problems, update process with <b>minor gaps in the details.</b>	<b>AV product Identified clearly with explanation</b>  <b>Most relevant</b> id/description of AV install, problems, update process	<b>AV product Identified clearly and justified</b>  <b>Comprehensive</b> complete and <b>fully relevant</b> id/description of AV install, problems, update process

#### c) Office Package (5 marks)

0-1 marks	2 marks	3 marks	4-5 marks
No, irrelevant or superficial discussion to provide <b>clarity</b> of installation	<b>Product Identified</b>  <b>Limited</b> (incomplete) but <b>relevant</b> ID /description of install, problems <b>missing key detail.</b>	<b>Product Identified clearly</b>  <b>Some relevant</b> ID /description of install, problems with <b>minor gaps in the details.</b>	<b>Product Identified clearly</b>  <b>Comprehensive</b> complete and <b>fully relevant</b> ID /description of install, problems

#### d) Free Utility (5 marks)

0-1 marks	2 marks	3 marks	4-5 marks
No, irrelevant or superficial discussion to provide <b>clarity</b> of installation	<b>Product Identified</b>  <b>Limited</b> (incomplete) but <b>relevant</b> ID /description of install, problems <b>missing key detail.</b>	<b>Product Identified clearly</b>  <b>Some relevant</b> ID /description of install, problems with <b>minor gaps in the details.</b>	<b>Product Identified clearly</b>  <b>Comprehensive</b> complete and <b>fully relevant</b> ID /description of install, problems

## Task 3

### Faulty PCs and Software Maintenance (20 Marks)

#### a) Fault finding and computer maintenance (10 marks)

0-2 marks	3 marks	4-5 marks	6 marks	7-10 marks
No, irrelevant or superficial discussion to provide <b>clarity</b> on fault finding	<b>Steps taken identified but not clearly</b>  <b>Less than half faults discussed or</b> limited/ incomplete but <b>relevant ID</b> of cause/ steps taken/result <b>missing key detail</b>	<b>Steps taken identified clearly for some faults</b>  <b>Missing discussion of some faults or</b> <b>some relevant ID</b> of cause/ steps taken/result with <b>minor gaps in the details.</b>	<b>Steps taken identified clearly for most faults</b>  <b>Discussion of all faults and most relevant ID</b> of cause/ steps taken/result	<b>Steps taken clearly identified for all faults</b>  <b>Discussion of all faults and comprehensive</b> complete and <b>fully relevant ID</b> of cause/ steps taken/result
No, irrelevant or superficial discussion to provide <b>clarity</b> on computer maintenance	<b>Update / software package/ driver Identified</b>  <b>Maintenance performed</b>	<b>Update / software package/ driver Identified clearly</b>  <b>Maintenance performed and outcome explained</b>	<b>Update / software package/ driver identified clearly</b>  <b>Maintenance performed and outcome explained and improvements explained</b>	<b>Update / software package/ drive identified clearly</b>  <b>Maintenance performed and outcome explained and improvements explained convincingly and clearly</b>

#### b) Routine / Preventative maintenance (10 marks)

0-2 marks	3 marks	4-5 marks	6 marks	7-10 marks
<b>None or one</b> potential reason identified	<b>Two</b> potential reasons identified <b>with some explanation</b>	<b>Three</b> potential reasons identified <b>and explained clearly</b> and appropriately	<b>Four</b> potential reasons identified <b>and explained clearly</b> and appropriately	<b>Five</b> potential reasons identified <b>and explained clearly</b> and appropriately
<b>None or one</b> maintenance task identified	<b>Two</b> maintenance tasks identified <b>with some explanation</b>	<b>Three</b> maintenance tasks identified <b>and explained</b> appropriately	<b>Four</b> maintenance tasks identified <b>and explained clearly</b> and appropriately	<b>Five</b> maintenance tasks identified <b>and comprehensively explained</b>

## Learning Outcomes matrix

Task	Learning Outcomes assessed	Marker can differentiate between varying levels of achievement
1	1, 2, 3	Yes
2	1, 2, 3	Yes
3	4	Yes

## Grade descriptors

Learning Outcome	Pass	Merit	Distinction
Understand the function of computer systems	Has adequate awareness of different perspectives or approaches within the area of study	Has sound, informed awareness of different perspectives or approaches within the area of study	Has comprehensive, well-informed awareness of different perspectives or approaches within the area of study
Be able to design computer systems	Demonstrates adequate ability to review the effectiveness and appropriateness of actions, methods and results	Demonstrates sound ability to review the effectiveness and appropriateness of actions, methods and results	Demonstrates comprehensive ability to review the effectiveness and appropriateness of actions, methods and results
Be able to build and configure computer systems	Can adequately Identify, adapt and use appropriate skills, methods and procedures to reach appropriate solutions.	Can soundly identify, adapt and use appropriate skills, methods and procedures to reach supported and appropriate solutions.	Can coherently identify, adapt and use appropriate skills, methods and procedures to reach well supported and highly appropriate solutions.
Be able to undertake routine maintenance on computer systems	Can adequately Identify, adapt and use appropriate skills, methods and procedures to reach appropriate solutions.	Can soundly identify, adapt and use appropriate skills, methods and procedures to reach supported and appropriate solutions.	Can coherently identify, adapt and use appropriate skills, methods and procedures to reach well supported and highly appropriate solutions.