**ASSESSMENT INSTRUMENT KS08.1.**

**Module KS08Use the internet effectively [ICT skills 3]**

**Learning Outcome KS08.1: Demonstrate understanding of key concepts in computer basics**

**Candidate’s Name:**

**Institute:**

**Class:**

**Date:**

Assessor’s Name:

Assessor’s Signature:

**Internal verification**

Date Verified

Internal Verifier’s Name:

Verifier’s Signature:

|  |  |
| --- | --- |
| Result | Feedback from internal verifier |
|  |  |

You will be assessed on the following:

**Learning Outcome 1:** KS08.1 Demonstrate understanding of key concepts in computer basics

**Performance Criteria:**

KS08.1.1 Describe **different types of computers** in terms of capacity, speed, cost, and typical use

KS08.1.2 Define basic **computer system terms**

KS08.1.3 Describe the main use of four application software programmes

KS08.1.4 Describe the function of **hardware components** in a computer system

KS08.1.5 Describe the function of **hardware components** *inside* a computer

KS08.1.6 Describe how CPU speed is measured

KS08.1.7 Define **units** used to measure computer **memory**

KS08.1.8 Describe the function of basic **software components** in a computer system

KS08.1.9 Outline what is meant by cloud computing

KS08.1.10 Describe how you will avoid **damage** to your computer system from the work environment

KS08.1.11 Outline basic **terms** associated with window desktop screens

KS08.1.12 Distinguish between password and users ID

KS08.1.13 Describe **characteristics of strong** passwords

KS08.1.14 Describe **characteristics of weak** passwords

KS08.1.15 Distinguish between different **types of malware**

KS08.1.16 Describe ways to **secure your computer system**

KS08.1.17 Describe **copyright issues** related to use of computers

**Range Statement:**

**different types of computers** mainframe, server, desktop, personal digital device (PDA), tablet, smartphone, workstation

**computer system terms** hardware, software, application software, malware, input device, output device

**hardware components** monitor, keyboard, mouse / track pad / track ball, printer, scanner, modem, speakers, digital camera, USB port, dongle, touch screen, microphone, bar code reader, webcam

**software components inside** CPU, motherboard, power supply unit, RAM, ROM, hard drive, video card, sound card, network card

**units memory** bit, byte, KB, MB, GB, TB

**software components** operating system, BIOS, graphical user interface, firewall

**damage** caused by, but not limited to, dust, smoke, water, humidity, power surges, brownouts

**terms** title bar, menu bar, toolbar/ribbon, file, folder,

**characteristics strong** use of different character classes (lower case, upper case, numbers, punctuation, special characters), length at least 12

**characteristics weak** names close family members / friends, own name, words in dictionary, common names, repeating login code, keyboard patterns (QWERTY, 123456, AAAAAA), words / names spelled backwards

**types of malware** including, but not restricted to, viruses, worms, Trojan horses, ransom ware, spyware

**secure computer system** including, but not restricted to, firewall, using users ID and strong password, using latest updates of programme, installing current anti-virus software, using secure encrypted connections to servers, **not** opening suspicious attachments / emails / downloads, scanning before opening

**copyright issues** including, but not restricted to, software piracy, plagiarism, fair use, Creative Commons licences

**INSTRUCTIONS TO CANDIDATES**

Please read these notes before attempting the assessment:

* Read the questions carefully before attempting them
* Any problems you see should be brought to the attention of the assessor prior to attempting the assessment
* Make sure you have the required equipment, tools and materials to attempt this assessment prior to commencement
* Ensure your name and date is on every sheet of paper you give to the assessor
* Complete the assessment – you have 2 hours for this.
* When finished make certain you give all relevant documents to the assessor
* To demonstrate your competence on this LO you must answer ALL 20 questions **correctly**

Name Date

Answer ALL of the following 20 questions. If space provided is insufficient you can use lined paper to answer a question. Ensure you clearly write on these ‘additional sheets’ your name and date and staple them to the assessment instrument. TIME ALLOWED **2 hours**

**Question 1**: What is a computer?

**Question 2:** Describe each of the following types of computers in terms of capacity, speed, cost, and typical use

| **Type of computer** | **Describe: what is it?** | **Capacity** | **Speed** | **Cost** | **Typical used for** |
| --- | --- | --- | --- | --- | --- |
| Mainframe |  |  |  |  |  |
| Server |  |  |  |  |  |
| Desktop |  |  |  |  |  |
| Laptop |  |  |  |  |  |
| PDA |  |  |  |  |  |
| Tablet |  |  |  |  |  |
| Smartphone |  |  |  |  |  |
| Workstation |  |  |  |  |  |

**Question 3** Define computer hardware

**Question 4** Define computer software

**Question 5a** What is application software?

**Question 5b** Give FOUR examples of application software and their main use.

|  |  |
| --- | --- |
| **Application software** | **Main use** |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |

**Question 6a** Describe the function of each of the following hardware components of a compute system

|  |  |
| --- | --- |
| a. Monitor |  |
| b. Keyboard |  |
| c. Mouse / trackpad / track ball |  |
| d. Printer |  |
| e. Scanner |  |
| f. Modem |  |
| g. Speakers |  |
| h. Digital camera |  |
| i. USB port |  |
| j. Dongle |  |
| k. Touch screen |  |
| l. Microphone |  |
| m. Bar code reader |  |
| n. Webcam |  |

**Question 6b**

Of the above listed components of computer systems in the first column:

[use the letters a, b, etc]

Which are input devices?

Which are output devices?

**Question 7**

Describe the function of each of the following components found inside a computer

|  |  |
| --- | --- |
| CPU |  |
| Motherboard |  |
| Power supply unit |  |
| RAM |  |
| ROM |  |
| Hard drive |  |
| Video card |  |
| Sound card |  |
| Network card |  |

**Question 8**

1. What basic unit is used to measure the speed of the CPU of a computer?
2. Mention two larger units and their relation to the basic unit.

**Question 9**

1. Define bit and byte
2. What do the following stand for KB, MB, GB, TB and how do they relate to the byte?

**Question 10**

Describe the function of each of the following software components of a computer sytem

|  |  |
| --- | --- |
| BIOS |  |
| Operating system |  |
| Graphical user interface |  |
| Firewall |  |

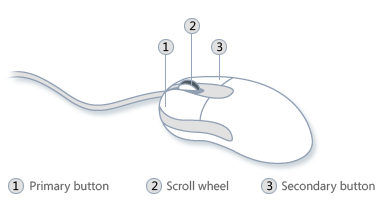
Give THREE examples of operation systems.

a/

b/

c/

**Question 11**



Name the parts of the mouse and their function

|  |  |  |
| --- | --- | --- |
|  | Name | Function |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |

**Question 12**

Picture of mouse pointers

The mouse pointer can have any of the above shapes. Explain what they stand for

Arrow pointer:

I-beam:

Pointing finger:

**Question 13**

Describe how you will avoid damage to your computer system from

|  |  |
| --- | --- |
| Dust and smoke |  |
| Water and humidity |  |
| Heat |  |
| Power surges / brownouts |  |

**Question 14**

Describe what you understand by “cloud computing”

**Question 15**

|  |  |
| --- | --- |
| 1 |  |
| 2 |
| 3 |

Name the bars

1.

2.

3.

**Question 16**

a. What is a file?

b. What is a folder?

**Question 17a**

Describe the difference between users’ ID and users’ password

**Question 17 b**. Give TWO example each of a weak / strong password with justification

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Password** | **Example 1** | **Example 2** | **Justification for example 1** | **Justification for example 2** |
| Weak password |  |  |  |  |
| Strong password |  |  |  |  |

**Question 18**

a. What is computer malware?

b. Describe THREE different types of computer malware

(i)

(ii)

(iii)

c. Describe FOUR ways to secure your computer system

(i)

(ii)

(iii)

(iv)

**Question 19**

a. What is meant by copyright?

b. Discuss shortly THREE copyright issues related to the use of computers

* Software piracy
* Plagiarism
* Fair use

**Question 20**

There are 6 Creative Commons copyright licenses

http://i.creativecommons.org/l/by/3.0/88x31.png

What are others allowed under each of these 6 licences?

| Licence | What other parties are allowed to do under the licence |
| --- | --- |
| CC BY |  |
| CC BY – SA |  |
| CC BY – ND |  |
| CC BY– NC |  |
| CC BY - NC – SA |  |
| CC BY – NC - ND |  |

|  |
| --- |
| **Guidance to assessor** |
| This is a competence based course i.e. **ALL** questions have to be **answered correctly**.  If candidate is NOT competent on one or more questions REASSESSMENT will be needed on those questions only at a time arranged with the candidate, allowing sufficient time for updating /revising knowledge and/or remedial activities by the trainer/teacher.  If some responses are not very clear, and would need some further explanation by the candidate **ORAL supplementation** can be arranged as soon as you assessed the submitted work of the candidate. You are to use and complete the standard ‘oral supplementation’ form in these cases. This completed document will be part of the evidence to be placed in the portfolio. |

|  |
| --- |
| **1st Assessment session**  Overall Comments:  Decision COMPETENT  NOT YET COMPETENT  The follow concepts need attention in the reassessment:  Signature of Assessor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **1st Reassessment session**  Overall Comments:  Decision COMPETENT  NOT YET COMPETENT  The follow concepts need attention in the 2nd reassessment:  Signature of Assessor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |