

**DEPARTMENT OF BUSINESS AND INFORMATION TECHNOLOGY**

**ICT TECHNICIAN LEVEL 6**

**UNIT CODE: ICT/CR/2/6A UNIT OF COMPETENCY: INSTALL COMPUTER SOFTWARE I**

**DECEMBER 2023 MAIN EXAM TIME: 2 HOURS**

**INSTRUCTIONS:** The paper consists of **TWO** sections: **A and B.** Attempt all Questions in **Section A** and any **THREE** Questions in **Section B.**

**SECTION A: (40 MARKS)**

**Answer ALL questions in this section**

1. Define the following terms as used in software.
2. Software. (2 Marks)
3. Installation (2 Marks)
4. Differentiate between systemsoftware and application software. (4 Marks)
5. Operating system is a type of system software, outline two examples of the operating system. (2 Marks)
6. Highlight two installation media used during software installation. (2 Marks)
7. State five steps involved in functional testing of the software. (5 Marks)
8. During software installation documentation is very key, highlight four advantages of software documentation. (4 Marks)
9. Distinguish between software update different from software upgrade. (4 Marks)
10. Software piracy is a major challenge in our society today, highlight three ways in which software piracy can be minimized. (3 Marks)
11. Statetwo benefits of using maintenance software. (2 Marks)
12. Explain two methods in which a computer user can acquire software. (4 Marks)
13. Explain three hardware requirements for software installation. (6 Marks)

**SECTION B (60 MARKS)**

**Answer any THREE questions in this section**

12. a) Software Testing Techniques help one to design better test cases aimed at evaluating an attribute or capability of a program or product and determining that it meets its quality. Highlight four Techniques of Software testing (4 marks)

b) What are the four benefits of software configuration management? (4 marks)

c) Operating Systemsare set of complex programs that work together to control execution of user programs called applications and acts as a go between (interfaces) between the applications of the computer hardware. Briefly explain three functions of the operating system. (6 marks)

d) Data security is a set of standards and technologies that protect data from intentional or accidental destruction, modification, or disclosure. Briefly explain three principles of data security also referred to as information security (6 marks)

13. a) Explain the following terms in Software

i. Off-the-Shelf/Standard Software (2 marks)

ii. In-House Developed Programs (2 marks)

iii. Open Source/ Freeware (2 marks)

b) Software documentations provide details about given software. Describe three types of documentation associated with software. (6 Marks)

c) Testingis to compare the actual result with the expected result. Testing is done to identify whether all the function is working as expectations.Highlight four importance of software testing. (4 Marks)

d)Software installation refers to the process of setting up software to work with the computer, printer, and other hardware Discuss any Two types of software installation.

(4 Marks)

14. a) A Software is a set of programs, which is designed to perform a well-defined function hence tells a computer what to do or how to perform a task as well as accomplishing the specific user’s task. Explain three types of software requirements. (6 Marks)

b) Describe translation programs as used in operating system citing two examples of such programs. (4 Marks)

c) Functional testing it is a type of software testing which is used to verify the functionality of the software application, whether the function is working according to the requirement specification. Highlight four Advantages of functional testing (4 Marks)

d) Operating system is a type of system software, Explain three features of operating systems. (6 Marks)

15. a) Off-the shelf software programs are developed by software engineers, packaged and then made available for purchase through a vendor, a distributor or directly from the developer.Outline four advantages of off-the shelf software. (4 Marks)

1. Software Testing Techniques help one to design better test cases aimed at evaluating an attribute or capability of a program or product and determining that it meets its quality.Explain any five types of software testing techniques. (10 Marks)
2. Software License Agreement is an agreement between a company and its customers for use of the software they have the rights to. Describe three types of software licenses (6 Marks)