



20200105010012

**THE POLYTECHNIC, IBADAN**  
**DEPARTMENT OF COMPUTER STUDIES**  
**SECOND SEMESTER EXAMINATION 2020/2021 SESSION**

**COURSE CODE:** COM 126  
**COURSE TITLE:** PC UPGRADE & MAINTENANCE  
**CLASS:** NDI COMPUTER (FT & DPP)  
**TIME:** 2 HOURS  
**INSTRUCTION:** ANSWER ANY FOUR (4) QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS

**QUESTION ONE**

- a. What is a computer virus? [2 marks]
- b. Hence, what are the two behaviours of a virus? [2 marks]
- c. In a tabular form, with three (3) factors, differentiate between computer virus and computer worm [3 marks]
- d. Write down "true" or "false" in response to the following:
  - i. Boot sector viruses infects the system area of a disk
  - ii. The only way to clean a file infected by an overwrite virus is to delete the file completely, thus losing the original content.
  - iii. Blended threats combine the characteristics of viruses, worms, Trojan horses, and malicious code with server and Internet vulnerabilities to initiate, transmit, and spread an attack.
  - iv. Spyware is a type of malware that performs certain behaviors such as advertising, collecting personal information or changing the configuration of your computer, generally without appropriately obtaining your consent first.
  - v. A Potentially Unwanted Program is a program that may be unwanted, despite the possibility that users consented to download it.
  - vi. Viruses can be cleaned up by anti-viruses.
  - vii. Network viruses rapidly spread through copying files from infected system with flash disk
  - viii. Trojan horse replicate themselves. [8 marks]

**QUESTION TWO**

- a. What is computer hardware upgrade? [2 marks]
- b. State three (3) benefits each derivable from computer hardware and software upgrade [3 marks]
- c. Explain the difference(s) between software upgrades and updates [2 marks]
- d. List four (4) hazards that can threaten the normal operations of a personal computer [4 marks]
- e. State eight (8) items you can back up from your computer. [4 marks]

**QUESTION THREE**

- a. Write 'true' or 'false' in response to the following
  - i. If you work with a lot of digital video, you can probably benefit from adding RAM and/or changing from an integrated or "on-board" graphics card to a dedicated graphics card.
  - ii. If you are running out of storage space, you can upgrade to a bigger hard drive with more storage capacity.
  - iii. Because graphics processing uses RAM, a graphics card upgrade may improve overall performance.



- iv. To see the biggest increase in performance, decrease the amount of RAM in an older computer.
- v. Completely replacing a hard drive will involve transferring all your files from the old drive to the new one, as well as reinstalling the operating system and all the software.
- vi. When installing a new processor, the key consideration is finding one that will work with your motherboard.
- vii. A faster processor can help your computer run faster, but this is not an easy upgrade and should be approached with caution.
- viii. The additional capacity of DVDs makes copying files or backing up difficult
- ix. If your computer is slow, upgrading to a faster hard drive may slow down overall performance [9 marks]
- b. Describe the following:
- i. Spyware ii. Malware [3 marks]
- c. List six (6) computer components that can be upgraded [3 marks]

#### QUESTION FOUR

- a. Highlight the basic housekeeping tasks you must first carry out before deciding you need a hardware upgrade. [3 marks]
- b. What is the full meaning of SSD? Hence, state four advantages of SSD over the traditional hard disk drive [3 marks]
- c. Write the correct word that fills the gap in the statements below
  - i. A \_\_\_\_\_ is when a software program stops working and then closes.
  - ii. A \_\_\_\_\_ is when a software program becomes unresponsive.
  - iii. A \_\_\_\_\_ is when a software program stops functioning and cannot perform any functions. [1 mark each]
- d. Enumerate any four (4) types of viruses you know [2 marks]
- e. List any eight (8) computer antivirus software known to you [4 marks]

#### QUESTION FIVE

- a. *Because of the publicity that viruses have received, it is easy to blame any computer problem on a virus.* On this assertion, highlight six (6) problems that are not likely to be caused by a computer virus. [3 marks]
- b. Write 'yes' or 'no' in response to the following ways of keeping your computer clean for maximum performance [4 marks]
  - i. When purchasing a computer, remember to also purchase dust covers.
  - ii. When considering a location for the computer in your home or office, place it in an area that is susceptible to rain and dust
  - iii. If one is serious about maintaining his computer for optimal performance, then he should consider cleaning the computer on a regular basis.
  - iv. Maintaining the optimum performance of one's computer also includes managing the files on the computer's hard-drive.
- c. Highlight the basic steps in troubleshooting a hardware problem [4 marks]

#### QUESTION SIX

- a. Give five (5) general precautions in order to have safe computing [5 marks]
- b. Differentiate between CD and DVD. [2 marks]
- c. What are Potentially Unwanted Programs (PUPs)? [2 marks]
- ii. Hence, highlight four (4) things that PUP can do [4 marks]
- d. Memory is added to the computer in the form of SIMMs or DIMMs. State the full meaning of SIMM and DIMM. [2 marks]