

CST8101 – Computer Essentials First Term Assessment

Name: _____

Test Duration: 50 Minutes

DO NOT TURN THIS PAGE OVER UNTIL YOU ARE TOLD TO

You must fill in the Mark Sense sheet with a HB Pencil only.

- 1) No electronic equipment of any kind allowed:
 - a. No calculators
 - b. No laptops
 - c. No cell phones
 - d. No electronic translators
- 2) This is a **CLOSED BOOK** assessment.
- 3) There are 8 pages in this assessment including this one. There are 40 questions in this assessment. Unless otherwise stated, each question is worth 1 mark. The pages in this assessment are **double-sided**.
- 4) Each question has only one answer, choose the BEST answer for a given question. This assessment is worth 20% of your final mark.
- 5) You have one Mark Sense sheet and the question paper. If you need a replacement Mark Sense sheet, please ask.
- 6) Put your first and last name on both the Mark Sense sheet and the question paper!
 - a. Fill in the bubbles sheet under your name
 - b. Fill in your theory instructors name:
 - c. Fill in the test name: CST8101-300
 - d. Do not fill in your student ID**
 - e. Do not fill in your sex**
 - f. Do not fill in your age**
 - g. Do not fill in the MSS, MWS, and, Semester Bubble**
- 7) Hand in both the Mark Sense sheet and the question paper.

Quietly hand in your test and leave when you are finished... NO TALKING!!!!

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True/False Questions

1. At least one full backup copy should be stored off-site in case of a natural disaster such as an earthquake or a forest fire happens.
a. True
b. False
2. In order to keep your computer accounts safe, you can use passphrases instead of passwords. This will allow you to avoid changing your passwords every 4 to 6 months.
a. True
b. False
3. The terms incremental and differential backups are used interchangeably when discussing data backups in conversations.
a. True
b. False
4. A head crash is a hard-disk failure that occurs when a read–write head of a hard disk drive comes into contact with its rotating platter, resulting in permanent and usually irreparable damage to the magnetic media on the platter surface.
a. True
b. False
5. A sector on a mechanical hard drive is the smallest space on your hard drive that can be used for read/write operations.
a. True
b. False
6. USB is an acronym that stands for Universal Serial Bus which is a type of computer port which can be used to connect equipment to a computer.
a. True
b. False
7. Incremental backups produce a lot of duplicate files when compared to differential backups.
a. True
b. False
8. The parser performs a syntactic analysis, which evaluates the stream of tokens that the scanner created.
a. True
b. False

9. To install a virtual machine in VMware Workstation Pro you first need to allocate virtual computer hardware, then you need a physical disc containing an operating system or an ISO or disc image of the operating system, and, the operating system license key if required by the operating system.
 - a. True
 - b. False
10. USB is considered to be "peer to peer" because the devices don't need a computer to communicate with each other.
 - a. True
 - b. False
11. It is a good idea to check your junk e-mail folder for legitimate/valid e-mails in case they are placed there by your spam filter.
 - a. True
 - b. False
12. USB is royalty free.
 - a. True
 - b. False
13. Is a system image of the hard drive the same as a data backup?
 - a. Yes
 - b. No
14. Viruses, like Worms, require user interaction to infect the initial host
 - a. True
 - b. False
15. An optimizer works its way through the syntax tree, producing segments of machine code for each node.
 - a. True
 - b. False
16. Each time a Java program is run the compiler converts commands line by line into a format the computer can understand.
 - a. True
 - b. False
17. The generic term for software like Viruses, Trojans, and Worms is Malware.
 - a. True
 - b. False

18. Your Java lab partner gives a USB drive containing some source code and other files for you to incorporate into the group's programming assignment. You don't need to scan the USB for viruses before opening the files.
- a. True
 - b. False
19. An operating system is responsible for assigning resources and enforcing boundaries on programs.
- a. True
 - b. False
20. VGA is as an acronym that stands for Video Graphics Adaptor which is a type of computer port used to connect display devices such as monitors or projectors.
- a. True
 - b. False

Multiple Choice Questions

21. At a minimum, how often should a working computer engineer run some type of backup on their laptop?
- a. Once a day
 - b. Every second day
 - c. Once a week
 - d. Every second week
22. Symbols can be considered to be:
- a. Numbers
 - b. Lower and upper case characters
 - c. Punctuation marks
 - d. All of the above
23. The best way to prevent a spear phishing attack is to?
- a. User Education
 - b. Use a Spam Filter
 - c. Ensure your Firewall is turned on
 - d. Keep your Anti-Virus program up to date
24. To be considered to be a "proper" data backup, the data backup must:
- a. Consist of multiple backups versions made on a schedule
 - b. Be only stored in one place to make them easily accessible
 - c. Are done automatically with little to no human intervention
 - d. Both options a and c are correct

25. The compiling process begins with a part of the compiler program called a(n)
- Code generator
 - Lexer/Scanner**
 - Parser
 - Optimizer
26. Transfer rate is defined as:
- The speed at which data is transferred from the drive to the system after it has been accessed**
 - The time that it takes for the desired sector to move beneath the read-write head
 - The time it takes for the disk arm to move into position over the desired cylinder
27. Which of the following options best describe the difference between spear phishing and phishing.
- Spear phishing directly targets an organization or an individual**
 - Spear phishing uses e-mails with the company logo on it
 - Spear phishing e-mails appear to come from a bank or government agency
 - Spear phishing e-mails will ask you to click on a link
 - Identity theft
28. Which type of back up depends on a full data backup having already taken place?
- Differential
 - Incremental
 - Image
 - Unstructured
 - Both options a and b are correct**
29. Seek time is defined as:
- The speed at which data is transferred from the drive to the system after it has been accessed
 - The time that it takes for the desired sector to move beneath the read-write head
 - The time it takes for the disk arm to move into position over the desired cylinder**
 - The sum of Access time and Rotational delay
30. Solid state hard drives, SSDs, manage writing and removing data by:
- Writing data in blocks and deleting pages
 - Writing data in sectors and deleting clusters
 - Writing data in pages and deleting blocks**
 - Writing data in clusters and deleting sectors

31. A _____ is any set of all of tracks of equal diameter in a hard disk drive.
- a. Cylinder
 - b. Sector
 - c. Cluster
 - d. Track
32. A colleague of yours receives an e-mail, shown below, and informs you that they are thinking of replying because they really need the money. You tell them that this is a bad idea because this e-mail is an example of _____.
- a. Cyberware
 - b. Malware
 - c. Spear Phishing
 - d. Phishing

Hello,

I am Nelson Furo, Director of Diplomatic sub-contract approvals and payment at the Nigeria National Petroleum Corporation. I got your e mail address in the course of my search on the internet for reputable foreign e mail address. I have an offer that might interest you, this offer arose from the Government of Nigeria reserve vault under the care of my department, from which we pay both Indigenous and foreign executed contract and Sub contract. I need your assistance to stand as a beneficiary to the sum of S\$27,000,000.00 (Twenty Seven million United States dollars).

I am making this offer to you because i am convinced you can handle this deal without betraying my trust on you when the fund is eventually wired to you. The success of this deal is dependent on how swift and committed you will be in standing as the bonafide sub contractor and provision of a bank account to accomodate the fund.

Kindly, send me .your FULL Name .Your cell phone number .Your ContactAddress {D}.Your Occupation {E}.Age for further discussion. Feel free to call me on my private cell phone +234-802-624-4727
Mr. Nelson Furojjjj

33. A 2 TB hard drive disk is bought from a local store, when installed it only has 1.81TB of storage available. What is the reason for the size difference?
- a. The lost space is caused by bad sectors
 - b. The purchased hard drive is missing a platter
 - c. The missing space is reserved for hard drive partitioning
 - d. The hard drive manufacture is allowed to advertise hard drive sizes in base 10 (decimal), while computers use binary (base 2).

34. What is a hard disk image?
- A backup of a file that has changed since the last backup
 - A backup of files that have changes since the last full backup
 - A full backup of the all the data on the hard drive
 - A complete byte copy of all the contents of the hard drive**
35. Fire wire supports up to _____ devices being connected.
- 63**
 - 127
 - 128
 - Infinite number of devices
36. Which of the following devices can be virtualized
- Memory
 - CPU
 - Hard Disk
 - Network card
 - All of the above**
37. With respect to using VMWare Workstation Pro, which one of the following statements is correct?
- Both the host and guest computers are virtual computers
 - The host is the physical computer and the guest is the virtual computer**
 - The host is the virtual computer and the guest is the physical computer
38. Linux and Windows operating systems are examples of:
- Single user/single thread operating systems
 - Multi user/multi-threaded operating systems**
 - Real time operating systems
39. Access time is defined as?
- Seek time – Rotational delay
 - Seek time + Rotational delay**
 - Seek time * Rotational delay
 - Seek time / Rotational delay
40. Which of the following types of data backups take less time to restore:
- Full**
 - Incremental
 - Differential