

INTI INTERNATIONAL UNIVERSITY

FOUNDATION IN SCIENCE
CSC1214 BASIC COMPUTING
FINAL EXAMINATION: MAY 2016 SESSION

Instructions: This paper consists of TWO (2) sections. **SECTION A** consists of TWENTY FIVE (25) multiple-choice questions. **SECTION B** consists of FOUR (4) essay questions. All questions in the two respective sections carry equal marks.

SECTION A: Answer ALL Questions.

1. A computer is an electronic device operating under the control of instructions, which is stored in its own _____.
 - (A) Bus
 - (B) Chip
 - (C) Motherboard
 - (D) Processor
 - (E) Memory

2. Which of the following is **NOT** an element of an information system?
 - (A) procedures
 - (B) Software
 - (C) People
 - (D) Internet
 - (E) Hardware

3. A _____ allows various types of devices inside the system unit to communicate to each other.
 - (A) Tape
 - (B) Bus
 - (C) CMOS
 - (D) Memory
 - (E) Port

4. Access time of a memory is measured in _____.
 - (A) Teraseconds
 - (B) Picoseconds
 - (C) Microseconds
 - (D) Nanoseconds
 - (E) Miliseconds

5. On which of the following pointing devices, can you control the pointer by sliding your fingertip?
 - (A) Touchpad
 - (B) Mouse
 - (C) Digital tablet
 - (D) Online pad
 - (E) Touch screen

6. What terms refers to the process of entering input by speaking into a microphone?
 - (A) Voice matter
 - (B) Voice output
 - (C) Voice input
 - (D) Voice outreach
 - (E) Voice messenger

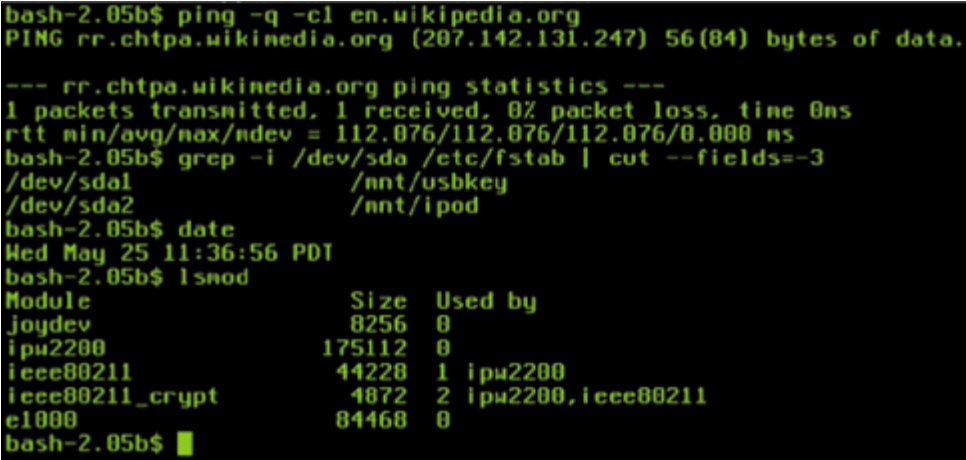
7. Which of the following printer is a small printer that prints on an adhesive-type material that can be placed on a variety of items such as envelopes, packages, and file folders?
 - (A) Mobile
 - (B) Label
 - (C) Thermal wax
 - (D) Laser
 - (E) Dye-sublimation

8. Choose a **TRUE** statement on a Solid State Drives (SSDs) compared to the traditional hard disks.
 - (A) SSDs have lower storage capacities
 - (B) SSDs have faster transfer rate
 - (C) SSDs generate more heat
 - (D) SSDs have a shorter life span
 - (E) SSDs contains moving parts

9. How is printer resolution measured?
 - (A) Points per inch
 - (B) Dots per inch
 - (C) Pixels per inch
 - (D) Strikes per inch
 - (E) Matrix per inch

10. Which of the following is **TRUE** about Query by Example (QBE)?
- (A) Consists of simple, English-like statements that allow users to specify the data to display, print, or store.
 - (B) Provides areas for entering or modifying data in a database.
 - (C) Allows users to design a report on the screen, retrieve data into the report design, and then display or print the report.
 - (D) Stores and manages the data required to analyze historical and current transactions
 - (E) Provides a graphical user interface to assists users with retrieving data.
11. A standard CD-ROM is referred to _____ disc because manufacturers writes all item on the disc at one time.
- (A) Multisession
 - (B) Single-session
 - (C) Unisession
 - (D) Compound-session
 - (E) One-time-session
12. Which of the following are task of a pointing device can accomplish?
- (A) Select text, enter text, click menu commands
 - (B) Click icons, control a pointer on the screen, change keyboard keys
 - (C) Drag pointers, click links, enter text
 - (D) Move a pointer on the screen, click buttons, select graphics
 - (E) Change a pointer shape, communicate with multiple computers, click links
13. Which of the following does **NOT** use direct access?
- (A) RAID
 - (B) Flash memory storage
 - (C) Hard disks
 - (D) Optical discs
 - (E) Tape
14. A _____ reorganizes the files and unused space on a computer's hard disk so that the operating systems can accesses the data quickly and programs load faster.
- (A) Disk defragmenter
 - (B) Disk cleanup
 - (C) File manager
 - (D) Uninstaller
 - (E) Restore utility

15. Which of the following is a technique used by intruders to make their network or Internet transmission appear legitimate to a victim computer or network.
- (A) Rebuking
 - (B) Spoofing
 - (C) transmitting
 - (D) Victimizing
 - (E) Phishing
16. _____ allows web developer to include more graphical interest and interactivity.
- (A) Script
 - (B) ActiveXcontrols
 - (C) Ruby on Rails
 - (D) Dynamic HTML
 - (E) XHTML

17. 

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bash-2.05b$ ping -q -c1 en.wikipedia.org
PING rr.chtpa.wikimedia.org (207.142.131.247) 56(84) bytes of data.

--- rr.chtpa.wikimedia.org ping statistics ---
1 packets transmitted, 1 received, 0% packet loss, time 0ms
rtt min/avg/max/mdev = 112.076/112.076/112.076/0.000 ms
bash-2.05b$ grep -i /dev/sda /etc/fstab | cut --fields=-3
/dev/sda1          /mnt/usbkey
/dev/sda2          /mnt/ipod
bash-2.05b$ date
Wed May 25 11:36:56 PDT
bash-2.05b$ lsmod
Module              Size  Used by
joydev               8256  0
ipw2200             175112  0
ieee80211            44228  1 ipw2200
ieee80211_crypt      4872   2 ipw2200,ieee80211
e1000                84468  0
bash-2.05b$

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Figure 1

- Figure 1 shows an interface, where a user types commands or presses special keys on the keyboard to enter data and instructions. What is the term for this kind of interface?
- (A) Command-line interface
 - (B) Command-prompt interface
 - (C) Menu-driven interface
 - (D) Performance-monitor interface
 - (E) Graphical user interface
18. What occurs when someone steals personal or confidential information?
- (A) Information theft
 - (B) Corruption
 - (C) Fraud
 - (D) Compaction
 - (E) Information exchange

19. The _____ is a key that uniquely identifies each records.
- (A) Secondary key
 - (B) Candidate key
 - (C) Alternate key
 - (D) Primary key
 - (E) Foreign key
20. Which of the following is a classic programming language?
- (A) C#
 - (B) FOTRAN
 - (C) F#
 - (D) Delphi
 - (E) C++
21. Word processing provides collections of electronics drawings, photos and others images which is known as _____.
- (A) Clip art
 - (B) Gallery art
 - (C) Picture gallery
 - (D) Photo gallery
 - (E) Smart tags
22. The concept of _____ applies that the accuracy of computer's output, depends on the accuracy of the input.
- (A) Garbage out garbage in (GOGI)
 - (B) Last in last out (LILO)
 - (C) Last in first out (LIFO)
 - (D) First in first out (FIFO)
 - (E) Garbage in garbage out (GIGO)
23. A _____ is a collection of individual programs available together as a unit.
- (A) Personal information manager software
 - (B) Database software
 - (C) Software suite
 - (D) Custom software
 - (E) Scaled down software

24. What is a compiler?
- (A) A compiler does a conversion line by line as the program is running.
 - (B) A compiler converts the whole of a higher level program code into machine code in one step
 - (C) A compiler is a general purpose language providing very efficient execution
 - (D) A compiler is a program that contains the code to be converted to machine language
 - (E) None of the above
25. Networks, servers, mainframes and supercomputers allow hundreds to thousands of users to connect at the same time, and thus their operating system are referred to as which of the following?
- (A) Single user
 - (B) Multiuser
 - (C) Single processing
 - (D) Multiprocessing
 - (E) Multi-operations

SECTION B: Answer any THREE (3) Questions only.**Question 1**

- (a) List the **SEVEN (7)** categories of the computers. (7 marks)
- (b) Provide **TWO (2)** advantages of using computers and **TWO (2)** disadvantages of using computers. (4 marks)
- (c) Define the following terms:
(i) Multi-core processor
(ii) Memory
(iii) Parallel processing (6 marks)
- (d) Briefly explain the machine cycle. (8 marks)

Question 2

- (a) Define the following terms:
(i) Input
(ii) Output
(iii) Input device
(iv) Output device (8 marks)
- (b) What is cloud storage? Give **TWO (2)** examples of cloud storage services. (4 marks)
- (c) List **THREE (3)** types of operating system. Provide **ONE (1)** example for each one of them. (6 marks)
- (d) Briefly explain on any **TWO (2)** of utility programs. (4 marks)
- (e) List any **THREE (3)** characteristics of a hard disks. (3 marks)

Question 3

- (a) What are the **FOUR (4)** categories of application software? Provide **ONE (1)** examples of application four each of the category. (8 marks)
- (b) Briefly describe the following forms of application software:
(i) Freeware
(ii) Open source software
(iii) Custom software (6 marks)
- (c) List any **FIVE (5)** characteristics of valuable information. (5 marks)
- (d) Describe **THREE (3)** characteristics of file processing approach and **THREE (3)** characteristics of database approach. (6 marks)

Question 4

- (a) Explain the following encryption algorithm:
(i) Transposition
(ii) Substitution
(iii) Expansion
(iv) Compaction (8 marks)
- (b) Describe on any **TWO (2)** measures can be taken to prevent unauthorized access and use to resources. (4 marks)
- (c) Provide **TWO (2)** differences between machine language and procedural language. (2 marks)
- (d) What are the **THREE (3)** features offered by Web 2.0? (3 marks)
- (e) List the **SIX (6)** phases in program development cycle. (6 marks)
- (f) List any **TWO (2)** of classic programming language. (2 marks)

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