CA | THE INSTITUTE OF CHARTERED ACCOUNTANTS OF SRI LANKA

SCHOOL OF ACCOUNTING AND BUSINESS

BSc. (APPLIED ACCOUNTING) GENERAL / SPECIAL DEGREE

PROGRAMME 2014/15

YEAR I SEMESTER I (Group A)

END SEMESTER EXAMINATION – JUNE 2014

ICT 10130 Introduction to Information Technology

Date   :   25th June 2014
Time   :   9.00a.m. – 11.30 p.m.
Duration   :   Two and half (02 1/2) Hours

Instructions to Candidates:

- This paper consists of two parts (A and B)
- Part A – Answer **all** questions in the sheet provided.

  Part B – Answer any **Two (2)** questions out of the Three (3) questions.
- The total marks for the paper is 60.
- The marks for each question are shown in brackets.
- Answers should be written neatly and legibly.

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Part A

Answer <u>ALL</u> Questions

Multiple Choice Questions

1. Which of the following inventions resulted in the most substantial increase in processing power of early computers while bringing their sizes down?
   a. Invention of the Vacuum Tubes
   b. Invention of Semiconductors
   c. Invention of the Transistor
   d. Invention of the Integrated Circuits (ICs)

2. How would you represent the decimal value of 33 in Binary?
   a. 1E
   b. 30
   c. 1C
   d. 10001

3. Communication between computers is achieved by connecting them together and setting up of strict rules for communication to take place. These 'rules' are more appropriately termed as :
   a. Protocols
   b. Internet
   c. Web
   d. Browser

4. Which of the following storage devices allows access to information in a sequential manner?
   a. CD-R
   b. DVD
   c. Hard disk
   d. Magnetic tape

5. Testing a program for any syntax or semantic errors is known as :
   a. Double checking
   b. Editing
   c. Debugging
   d. Decoding

6. In programming, converting a high level language instructions into machine language instructions is done by :
   a. Drivers
   b. Service Programs
   c. Converters
   d. Translators / Compilers

7. Which of the following protocols is used for sending email?
   a. FTP
   b. SMTP
   c. TCP/IP
   d. HTTP

8. Which of the followings is NOT a function of the Operating System?
   a. Database management
   b. Process management
   c. Memory management
   d. Disk management

9. Which of the following Technologies is likely to be used for Cash less payments in buses in the near future in Sri Lanka :
   a. NFC (Near Field Communication)
   b. Visa Credit Cards
   c. Master Cards
   d. Dialog eZCash

10. Microwave transmission is a typical example of _____.

    a. Line of sight transmission

    b. Ground Wave transmission

    c. Infrared Wave transmission

    d. Optical transmission

11. _____ provide a file-system interface where clients can create, update, read and delete files.

    a. Compute Server Systems

    b. Peer-to-peer Systems

    c. File Server Systems

    d. None of these

12. Which of the following is a traditional scheme of IP Addressing?

    a. IPv6

    b. IPv4

    c. Broadcasting

    d. None of these

13. A computer derives its basic strength from _____.

    a. Speed

    b. Accuracy

    c. Memory

    d. all of the above

14. Modern computers compared to earlier computers are _____.

    a. Faster and larger

    b. Less reliable

    c. Larger and stronger

    d. Faster and smaller

15. A computer is capable of performing almost any task, provided that it can be _____.
    a. Memorized
    b. Analyzed
    c. Reduced to a series of logical steps
    d. Changed top mathematics equation

16. A Bit represents a _____.
    a. Decimal digit
    b. Octal digit
    c. Binary digit
    d. Hexadecimal digit

17. A computer has very high speed, accuracy and reliability. Its intelligence quotient could be of the order of _____.
    a. 100
    b. 0
    c. 50
    d. 200

18. Processors of all computers, whether micro, mini or mainframe must have _____.
    a. ALU
    b. Local storage
    c. Control Unit
    d. All of the above

19. Real time computing is possible because of the following characteristic of computer _____.
    a. Storage capability
    b. High speed
    c. Accuracy
    d. Versatility

20. A collection of eight bits is called_____.

    a. Byte

    b. Word

    c. Record

    d. file

21. Control Unit of a digital computer is often called the _____.

    a. Lock

    b. Nerve center

    c. ICs

    d. all of the above

22. Group of instructions that directs a computer is called _____.

    a. Storage

    b. Memory

    c. Logic

    d. Program

23. Software instruction intended to satisfy a user's specific processing needs are called _____.

    a. System software

    b. A microcomputer

    c. Documentation

    d. Applications software

24. Which of the followings is not a factor when categorizing a computer?

    a. Amount of main memory that the CPU can use

    b. Capacity of the storage devices

    c. Where it was purchased

    d. Speed of the input/output devices

25. The Central Processing Unit (CPU) consists of:
    a. Input, output and processing
    b. Control unit, local storage & secondary storage
    c. Control unit, arithmetic-logic unit, local storage
    d. Control unit, processing, and local storage

26. What are the five main components of a computer system?
    a. CPU, CD-ROM, mouse, keyboard, sound card
    b. Memory, Video Card, Monitor, Software, Hardware
    c. Modem, Keyboard, Word Processor, Printer, Screen
    d. CPU, memory, system bus, input, output

27. How do the main components of the computer communicate with each other?
    a. Through system bus
    b. Through memory
    c. Via keyboard
    d. Using mouse

28. The three activities in an information system that produce the information to control operations are _____.
    a. input, processing, and output.
    b. data analysis, processing, and feedback.
    c. information retrieval, research, and analysis.
    d. input, output, and feedback.

29. The average number of tickets sold daily online is an example of _____.
    a. raw data.
    b. meaningful information.
    c. feedback.
    d. input.

30. Order data for baseball tickets and bar code data are examples of _____.

    a. raw input.

    b. sales information.

    c. customer and product data.

    d. raw output.

31. The hardware and software used to transfer data in an organization is called _____.

    a. networking and data management technology.

    b. data and telecommunications technology.

    c. data management technology.

    d. networking and telecommunications technology.

32. A malicious computer program that copies itself from one computer to another over a network is called a

    a. bug.

    b. pest.

    c. Trojan horse.

    d. worm.

33. A salesperson clicks repeatedly on the online ads of a competitor in order to drive the competitor's advertising costs up. This is an example of _____.

    a. pharming.

    b. spoofing.

    c. click fraud.

    d. phishing.

34. A keylogger is a type of _____.

    a. worm.

    b. spyware.

    c. virus.

    d. Trojan horse.

35. Hackers create a botnet by _____.
    a. infecting Web search bots with malware.
    b. by using Web search bots to infect other computers.
    c. by infecting corporate servers with "zombie" Trojan horses that allow undetected access through a back door.
    d. by causing other people's computers to become "zombie" PCs following a master computer.

36. Tricking employees to reveal their passwords by pretending to be a legitimate member of a company is called _____.
    a. pharming.
    b. social engineering.
    c. phishing.
    d. sniffing.

37. How do software vendors correct flaws in their software after it has been distributed?
    a. re-release software
    b. issue patches
    c. issue bug fixes
    d. issue updated versions

38. A digital certificate system _____.
    a. is used primarily by individuals for personal correspondence.
    b. uses tokens to validate a user's identity.
    c. uses third-party CAs to validate a user's identity.
    d. uses digital signatures to validate a user's identity.

39. Which of the following Network Topology is easiest to expand?
    a. Mesh
    b. Bus
    c. Star
    d. Ring

40. Which Software out of the followings belongs to the Licensing Type – Open Source?

    a. MS Word

    b. Firefox

    c. Oracle

    d. Acrobat Reader

(Total 40 Marks)

Part B

Answer any TWO (2) questions out of the THREE (3) questions given.

Open-Ended Questions

Question No. 01

a. What is the role of an Operating System (OS) in a typical personal computer?

(5 marks)

b. Is it possible to install open source software directly into a computer? Justify your answer.

(5 marks)

(Total 10 Marks)

Question No. 02

a. Consider the following statement.

"The Internet and World Wide Web (WWW) are the same". Is this a valid statement? Justify your answer.

(5 marks)

b. From an Internet user's point of view, what is meant by the term "upload" and "download"? Explain with an example.

(5 marks)

(Total 10 Marks)

Question No. 03

a. Explain using an example, how one can create a digital signature.

(5 marks)

b. Comment on the statement below with your justification.

"A digitally signed document can provide not only authentication but also integrity of the document."

(5 marks)

(Total 10 Marks)