No. of Pages   -   10
No of Questions -   05

THE INSTITUTE OF
CHARTERED ACCOUNTANTS OF SRI LANKA

SCHOOL OF ACCOUNTING AND BUSINESS
BSc. (APPLIED ACCOUNTING) GENERAL / SPECIAL DEGREE
PROGRAMME

YEAR I SEMESTER I – INTAKE VIII (GROUP B)
END SEMESTER EXAMINATION – JUNE 2017

ICT 10130 Introduction to Information Technology

Date   :   10th June 2017
Time   :   9.00 a.m. - 11.00 a.m.
Duration   :   Two (02) Hours

Instructions to Candidates:

- Write the Index Number in the space provided at the top of this sheet. Do not write your name anywhere in this question paper.

- This paper consists of two parts (A and B)

- Part A - Answer **all** questions on question paper itself.

- Part B - Answer any **Three (3)** questions out of the Four (4) 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.

Part A

Multiple Choice Questions

Answer **ALL** Questions. There are **thirty (30)** questions and each worth **1 mark**.

Question No. 01

1. _____ is regarded as the first computer programmer in the history of computing.
   a. Blaise Pascal
   b. Charles Babbage
   c. Ada Augesta Lovelace
   d. Alan Turing

   Answer: ……..

2. Which of the following technologies is used in the computers of third generation?
   a. Very Large Scale Integration
   b. Integrated Circuit
   c. Transistor
   d. Vacuum Tube

   Answer: ……..

3. Which of the followings is **not** an element of a data communication system?
   a. Communication protocol
   b. Connection device
   c. Communication channel
   d. Network topology

   Answer: ……..

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4. Which of the followings is located outside the microprocessor?

   a. Random Access Memory

   b. Registers

   c. Control Unit

   d. Arithmetic and Logic Unit

   Answer: ……..

5. In computer programming, _____ reads high-level program statements in a program one at a time and turns it into machine code.

   a. assembler

   b. compiler

   c. interpreter

   d. converter

   Answer: ……..

6. Which of the followings lists the secondary storage media in the order of increasing capacity?

   a. BD, DVD, Hard disk

   b. Hard disk, BD, CD

   c. Hard disk, DVD, CD

   d. DVD, BD, Hard disk

   Answer: ……..

7. Which of the following methods is used by an operating system to execute an application which requires more memory than the maximum memory available in a computer?

   a. Cache Memory

   b. Virtual Memory

   c. Read Only Memory

   d. Random Access Memory

   Answer: ……..

8. If the character 'E' is represented as 01000101 in ASCII coding scheme, what is the ASCII code for character 'B'?

   a. 01000001

   b. 01000010

   c. 01000011

   d. 01000100

                                             Answer: ……..

9. Which of the followings cann**ot** be a potential source of computer viruses?

   a. Pirated software

   b. Flash drive

   c. External hard disk

   d. Plain text email

                                             Answer: ……..

10. Which of the followings shows the protocol of the https://payment.casrilanka.lk/index.html URL used to access a resource on Internet?

   a. https

   b. payment.casrilanka.lk

   c. index.html

   d. .html

                                             Answer: ……..

11. When a computer program is executed, program instructions and data are directly brought into the CPU through the cache memory from the _____.

   a. computer network

   b. hard disk

   c. main memory

   d. optical disc

                                             Answer: ……..

12. Which of the following technologies is the **most** appropriate to be incorporated into library books when implementing a self-checkout library system?

    a. Quick Response (QR) codes

    b. Magnetic strips

    c. Radio Frequency Identification (RFID) tags

    d. Barcodes

    Answer: ……..

13. Which of the followings is an essential function of an operating system?

    a. Detecting malicious software

    b. Executing applications

    c. Backing up data

    d. Defragmenting hard disk

    Answer: ……..

14. "Adobe Photoshop" is an example for a

    a. specialized application software.

    b. general purpose application software.

    c. software utility.

    d. system software.

    Answer: ……..

15. The parts of a typical information system are

    a. liveware, software, hardware and data.

    b. liveware, software, hardware, data and procedures.

    c. firmware, software, hardware, data, procedures and connectivity.

    d. liveware, software, hardware, data, procedures and connectivity.

    Answer: ……..

16. Which of the followings lists the computer networks based on the geographic area that they span in ascending order?

    a. PAN, WLAN, MAN, WAN

    b. PAN, LAN, MAN, WLAN

    c. WAN, MAN, LAN, PAN

    d. PAN, MAN, LAN, WAN

<div align="right">Answer: ……..</div>

17. Which of the following statements is **incorrect** regarding the files in a computer?

    a. Files are used to store data electronically.

    b. A file name can have an extension.

    c. It is possible to create folders inside a file.

    d. The extension of a file can be changed.

<div align="right">Answer: ……..</div>

18. The process of creating tracks and sectors on a magnetic disk is called as disk

    a. formatting.

    b. defragmenting.

    c. scanning.

    d. encrypting.

<div align="right">Answer: ……..</div>

19. OCR devices are used

    a. to read barcodes.

    b. to detect presence or absence of special marks.

    c. to read characters written in a magnetic ink.

    d. to recognise the characters in a document.

<div align="right">Answer: ……..</div>

20. Which of the following statements is false with respect to the ASCII coding scheme?

   a. It is used to represent keyboard characters.

   b. It is an 8-bit code.

   c. It is introduced to support international languages.

   d. It can represent a maximum of 256 symbols uniquely.

   Answer: ……..

21. If x is the base of the number 11_x, which of the following number system(s) can the number 11_x belong to?

   a. Binary only

   b. Decimal only

   c. Either binary or decimal only

   d. Either binary, decimal or hexadecimal

   Answer: ……..

22. Which of the followings can be classified as data in comparison to information?

   a. Average monthly temperature in Colombo

   b. A pie chart showing the percentages of male and female students in a university

   c. Country code of a telephone number

   d. Maximum marks obtained for accounts in the G.C. E (A/L) exam

   Answer: ……..

23. Quick Response (QR) code incorporated into billboards to direct the viewers to the corresponding website containing further details is an example for a

   a. raw input.

   b. information.

   c. processed data.

   d. raw output.

   Answer: ……..

24. Which of the followings is used to connect external devices to the system unit?

    a. Bus

    b. Port

    c. Clock

    d. Slot

<div align="right">Answer: ……..</div>

25. What is the 8-bit binary equivalent of hexadecimal F?

    a. 1111

    b. 11110000

    c. 00001111

    d. 1110

<div align="right">Answer: ……..</div>

26. What is the decimal equivalent of binary 00100011?

    a. 23

    b. 33

    c. 35
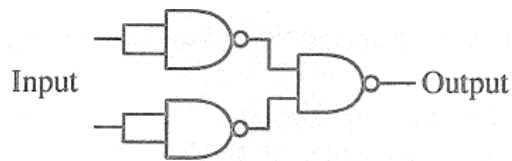
    d. 43

<div align="right">Answer: ……..</div>

27. The input required for the output of X OR Y to equal zero is

    a. $X = 0, Y = 0$.

    b. $X = 0, Y = 1$.

    c. $X = 1, Y = 0$.

    d. $X = 1, Y = 1$.

<div align="right">Answer: ……..</div>

28. Consider the following combinational circuit constructed using universal gates:

The above circuit is equivalent to a/an

a. NOT gate

b. AND gate

c. OR gate

d. NAND gate

Answer: ……..

29. _____ are used to conceal the internal network structure and thereby make computers and users on internal network anonymous.

a. Firewalls

b. User names and passwords

c. Cloud servers

d. Proxy servers

Answer: ……..

30. Which of the following statements is true with respect to the computer security?

a. Firewalls are only available as hardware.

b. Spam is an unsolicited emails.

c. Camfecting is hacking into a webcam and activate it without the owner's knowledge.

d. Logical security can be achieved through the use of user names and passwords.

Answer: ……..

Part B

Open-Ended Questions

Answer any **Three (3)** questions out of the Four (4) questions

Question No. 02

a. Giving examples, explain the role of system software plays in computer systems.

(5 marks)

b. "General purpose applications are a kind of software that you should know how to use to be computer literate".

Do you agree with the above statement? Explain using examples.

(5 marks)

(Total 10 marks)

Question No. 03

a. Describe the characteristics such as media, device, capacity, speed and cost of secondary storage taking Digital Versatile Disc as an example.

(5 marks)

b. "LED monitors generally have a higher contrast ratio over their LCD counterparts".

Do you agree with the above statement? Explain your answer.

(5 marks)

(Total 10 marks)

Question No. 04

a. Taking internet telephone modem as an example, explain the role that is played by connection devices in data communication systems.

(5 marks)

b. What do you mean by cloud computing? Explain using examples.

(5 marks)

(Total 10 marks)

Question No. 05

a. Using a suitable example, describe the need of a binary coding scheme like ASCII in computing.

(5 marks)

b. How images are represented in computers? Explain using a four colour simple image as an example.

(5 marks)

(Total 10 marks)