First Term Examination - 2015
Information and Communication Technology - I

Grade 10   තොරතුරු හා සන්නිවේදන තාක්ෂණය – I   **Time : 1 hour**

Name/ Index No. :

- **Answer all questions.**
- **In each of the 1 to 40, pick one of the alternatives (1), (2), (3), (4) which you consider as correct or appropriate.**

01. Who invented the Adding Machine?

    (i) Gottfried Wilhelm   (ii) Joseph Jacquard   (iii) Charles Babbage (iv) Blase Pascal

02. Howard Aiken invented the machine called,

    (i) Automatic Sequence Control Calculator   (ii) a mechanical loom

    (iii) Abacus   (iv) Pascaline

03. Not an attribute of information

    (i) Accuracy   (ii) Size   (iii) Relevance   (iv) Timeliness

04. Consider the following statements.

    A - Keyboard is an input device

    B - Monitor is and output device

    C - Flash Drive is a storage device

    Which of the above is / are true?

    (i) A only   (ii) B only   (iii) A and C only   (iv) All A, B and C

05. Under which of the following categories is a Personal Digital Assistance classified?

    (i) Micro computer   (ii) Mini computer   (iii) Main frame   (iv) Super computer

06. Disadvantage of a micro computer than a mini computer is,

    (i) Less electricity consumption.   (ii) Small in size

    (iii) Less expensive   (iv) Less memory capacity

07. Which of the following is not a way of giving information as the output?

    (i) Soft Copy   (ii) Live Copy   (iii) Hard Copy   (iv) Sound Copy

08. An example for non-impact printer is,

    (i) Line printer   (ii) Thermal printer   (iii) Daisy wheel printer   (iv) Dot Matrix Printer

09. The smallest unit of information is

    (i) a byte   (ii) a nibble   (iii) a bit   (iv) a block

10. An example for volatile memory is.

    (i) Random Access Memory   (ii) Compact Disk

    (iii) Cache Memory   (iv) Hard Disk

11. Which of the following is not a secondary storage media?

    (i) Solid State Media (ii) Magnetic Media   (iii) Optical Media   (iv) Static Media

12. Consider the following statements.

    A - Magnetic Tapes a re used to back up data and information in server computers

    B - Hard disk is an example for read/writers memory

    C - Magnetic Media are used for read and write data and information in compact disk

    Which of the above is / are true ?

    (i) A only   (ii) B only   (iii) A and B only   (iv) All A, B and C

13. A 74_{16} (hexadecimal) is equals to...

    (i) 1521_S (ii) 5164_S (iii) 1251_S (iv) 1526_S

14. The decimal number 839 is equal to

    (i) $1A9_{16}$ (ii) 347_{16} (iii) $1C8_{16}$ (iv) $2D9_{16}$

15. Binary coded decimal equivalent to 94 is?

    (i) 1010010   (ii) 10010010   (iii) 01011110   (iv) 100010010

16. Unequal of decimal number 25 is,

    (i) 11001_2 (ii) 19_{16} (iii) 11101_2 (iv) 31_8

17. 16 characters can be represented in BCD code. The BCD value of decimal 8 is,

    (i) 11101_{BCD} (ii) 1010_{BCD} (iii) 00010000_{BCD} (v) 1000_{BCD}

18. If X = 10102 and Y = 111_2 the value of X = Y is.

    (i) 11_{16} (ii) 111_{12} (iii) 10_8 (iv) 27

19. What is the base value of the number system that consist of the digit set {0, 1, 2, 3, 4, 5, 6, 7}?

    (i) Two   (ii) Eight   (iii) Sixteen   (iv) Seven

20. Which cannot be the result after deduct 1 from the number 1000 with unknown base.

    (i) 111   (ii) FFF   (iii) 1111   (iv) 999

21. What is the MSD and LSD of the binary 0100010 respectively ?

    (i) 0,0   (ii) 0,1   (iii) 1,0   (iv) 1,1

22. Which is the value equal to 3×2^{20} Byte.

    (i) 3×2^{24} Bits   (ii) 3x 2048MB   (iii) 3 x 2048 KB   (iv) 3 x 1024 KB

23. Which Hexadecimal value is equal to the binary 11111111?

(i)   AB9 16   (ii) 1FF 16   (iii) 1E6 16   (iv) 1F7 16

24.   Low capacity of storage device is,

(i)   Hard disk   (ii) Compact disk   (iii) Digital versatile disk   (iv)Floppy disk

25.   The printer that can be taken quality printouts is,

(i)   Dot matric printer   (ii) Ink jet printer

(iii) Laser Printer   (iv) Daisy Wheel Printer

26.   The data producer or the place where the data is produced for data transmission is known as,

(i)   Receiver   (ii) Data communication medium

(iii) Sender   (iv) Data processing

27.   Client computer in computer network is known as.

(i)   The computer which controls every works in computer

(ii) The computer which provides neccessary services for a computer network

(iii) The computer which receive the services in computer network

(iv) The computer which deliver data and information in computer network

28.   The unit Megahertz is used for,

(i)   To measure the capacity of random access memory

(ii) To measure the capacity of clock speed

(iii) To measure the capacity of hard disk

(iv) To measure the speed of data transmission speed,

29.   Which of the following is not a pointing device?

(i)   Touch Pad   (ii) Track ball   (iii) Joy Stick   (iv) Barcode Reader

30.   QWERTY is connected with,

(i)   Keyboard   (ii) CPU   (iii) Mouse   (iv) USB

31.   The instructions for starting the computer are housed on

(i)   CD Rom   (ii) Read only Memory

(iii) Random Access Memory   (iv) All the above

32.   .... can be considered as Raw data.

(i)   G.C.E. Advanced Level Examination Results

(ii) Z - Score of G.C.E. Advanced Level Examination Results

(iii) The Average Marks of students of G.C.E. Advanced Level classes.

(iv) The list of TOP Ten in G.C.E. Advanced Level classes.

33.   According to the Question number 32, ... can be considered as information.

(i) Only i   (ii) Only i, ii and iii   (iii) Only ii, iii and iv (iv) All of the above

34. Which of the following performs modulation and demodulation in data communication?

   (i)   Network Interface Card   (ii) Satellite

   (iii) Switch   (iv) MODEM

35. Select the incorrect statement regarding the Audio Port.

   (i)   Audio port is used to connect Speakers, Microphones and external sound generating devices.

   (ii) Line in is used to input sounds

   (iii) Line out is in the colour pink

   (iv) Line in is the colour blue

36. School Net is a network that connects 1000 secondary schools, 100 computer resource centers and many other institutes relating to education across Sri Lanka. Which of the following network type is most appropriate for school next?

   (i)   Local Area Network   (ii) Metropolitan Area Network

   (iii) Wide Area network   (iv) Bluetooth network

37. Which of the following computerized medical equipment uses radio waves technology?

   (i) CT Scanner   (ii) CAT Scanner   (iii) MRI Scanner   (iv) EEG Scanner

38. Selection of a suitable communication media is extremely crucial in expecting good performance from the network. If you only consider the "high speed data transmission", what will be your selection?

   (i)   Coaxial cable   (ii) Twisted pair cable

   (iii) Fiber - Optical cable   (iv) Shielded twisted pair cable

39. What is the correct answer for a feature of a portable computer ?

   (i) Lightweight   (ii) Small   (iii) LCD screen   (iv) All of the above

40. The founder of the WWW is

   (i) Charles Babage   (ii) Tim Berners Lee   (iii) Joshop Jackard   (v) Kelvin

First Term Examination - 2015

Information and Communication Technology - II

Grade 10   තොරතුරු හා සන්නිවේදන තාක්ෂණය – II   **Time : 2 hours**

Name/ Index No. :

- **Answer five questions only, including question No. 1 and 4 other questions.**

- **First question carries 20 marks and each of the other questions carries 10 marks.**

01. (i)   Describe what is Information and Data by giving an example.

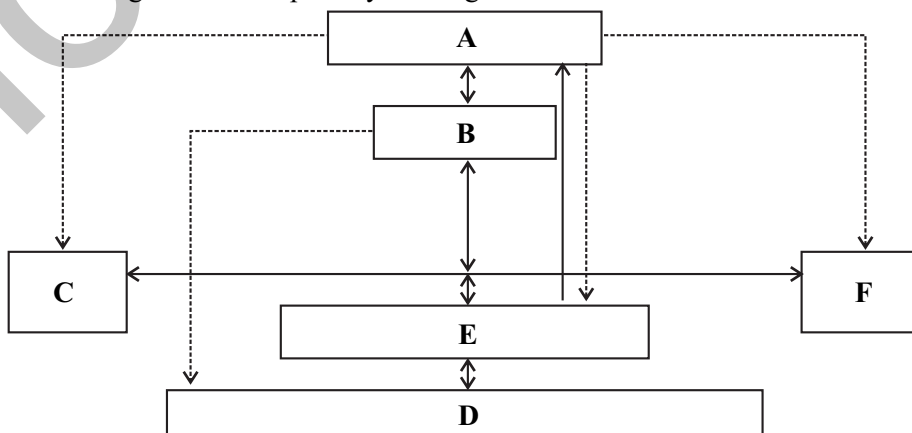 (ii)   Copy the following table to your answer sheet and fill the blanks.

Generation	Technology used
1st generation	
2nd gerneration	
3rd generation	
4th generation	

  (iii)   Place a tick ($\checkmark$) ($\times$) in the correct box to show whether each of the following sentences are TRUE or FALSE.

	TRUE	FALSE
ROM stands for Random Only Memory.		
ROM is permanent memory.		
RAM stores data temporarily.		
Adding more RAM to a computer will increase its processing power.		

  (iv)   Give 3 examples for Micro Computers.

  (v)   Write two examples for full duplex data transmission.

  (vi)   Convert 10010010_2 binary numbers into decimal. Show your computations.

  (vii)   Write two instances that Information and Communication Technology use in Banking field.

  (viii)   Give two advantages of flash memory over a DVD - RW

  (ix)   Write two advantages of star topology.

  (x)   Write four advantages of later generation computers other than 1st generation computers.

02.   The block diagram of a computer system is given below.

(i) Name the components marked with letters A, B, C, D, E and F.

(ii) Give two examples each for the components A, D and F

(iii) The above computer system is used for numerical calculations of several numbers. In which component does this operation take place?

(iv) Krishan prepares a report using a computer system. First he types a part of the report and saves it. After two days, he opens the partially complated report and completed report and completed it. He then took printouts of the report.

Identify the components among A, B, C, D, E and F that correspond to each of the following activities.

    1. Typing the report

    2. Saving the report

    3. Printing the report.

(v) What is the function of component E in carrying out the activities in (iv) above?

03. Identify the following ports and answer the questions given below.

(i) Name type of the port, number of pins/holes and write device/devices connect to them.

    • Serial Port

    • Parallel Port

    • VGA Port

    • PS / 2 Port

(ii) Write two special features of universal serial bus port.

04. Transmission of data from one place to another place is called Data Communication.

(i) What are the basic parts needed for data communication.

(ii) Write two main types of data communication media by giving two examples for each.

(iii) Name data transmission modes by giving one example for each.

05. With the development of the data communication, it is very important to develop the computer network in an organization.

(i) Name two computer network connecting devices.

(ii) Name the main types of computer networks.

(iii) Name two network topologies and briefly explain them by giving advantages and disadvantages of them.

(iv) Write two advantages and two disadvantages of computer networking.

06. Write short notes on 4 of the followings.

a. School - Net in Sri Lanka.

b. using ICT in field of transportation.

c. Social problems you faced by using computers.

d. Computer is a learning tool.