



JAFFNA HINDU COLLEGE

First Term Exam - 2023

Grade :- 10

Information and Communication Technology

Time : 3.00 Hours

Name / Index No :

PART I

Answer all the questions

01. Who invented the Analytical Engine?

- 1) Joseph Jacquard 2) Blaise Pascal 3) Charles Babbage 4) Howard Aiken

02. What was the effect when vacuum tubes were replaced by transistors and later transistors were replaced by integrated circuits in the CPU?

- 1) Both processing power and Electricity consumption increased.
2) Processing power increased while electricity consumption decreased.
3) Processing power decreased while electricity consumption increased
4) Both processing power and electricity consumption decreased

03. In which form is data and instructions stored in a computer?

- 1) Binary 2) Decimal 3) Hexadecimal 4) Octal

04. is used in identifying and counting the number of animals in a large area.

- 1) CCTV 2) RFID 3) Greenhouse 4) Robots

05. Which of the following is equivalent to the binary number 110010₂?

- 1) 23₁₀ 2) 52₁₀ 3) 48₁₀ 4) 50₁₀

06. Which of the following guided media is used in modern telephone network?

- 1) Coaxial cable 2) Unshielded twisted pair
3) Unshielded twisted pair 4) Fiber optics

07. Which of the following is nonvolatile memory?

- 1) Flash drive 2) Register 3) Cache 4) RAM

08. Consider the following devices.

- A – Joystick
B – Light pen
C – Plotter

Which of the above is/are pointing devices?

- 1) A only 2) B only 3) A, B only 4) A, B, C all

09. Which of the following is approximately equivalent to one Terabyte (TB)?

- 1) 1x10⁶ MB 2) 1x10⁶ GB 3) 1x10⁶ KB 4) 1x10⁶ bytes

10. Binary equivalent of 124_{10} is

- 1) 001111_2 2) 1110110_2 3) 111100_2 4) 101010_2

11. Consider the following ports.



These are respectively

- 1) RJ 45port, Serial port 2) PS/2 port, VGA port
3) RJ 45 port, Parallel port 4) RJ port, VGA port

12. Which input device is used to correct the MCQ answers?

- 1) OCR 2) MICR 3) OMR 4) Scanner

13. Which of the following is not characteristics of quality information?

- 1) Timeliness 2) Relevancy 3) Inaccuracy 4) Completeness

14. Which of the following is not G2G services?

- 1) Sri Lanka Map 2) Tourist information
3) Renewal of vehicle licenses 4) Sri Lanka custom information

15. machine can create digitalized images of internal organs of the body.

- 1) CAT 2) ECG 3) MRI 4) EEG

16. Which of the following is the best solution to protect crops from natural disasters?

- 1) Greenhouse 2) Drip irrigation
3) Crop harvest 4) Meteorological devices

17. In topology all the connections are established through a main cable.

- 1) Star 2) Bus 3) Mesh 4) Ring

18. Which of the following example is used in Microwaves?

- 1) TV remote controllers 2) Telephone network
3) Wi-Fi 4) Satellite communication

19. Which of the following is an example for data processing?

- 1) Calculating the account balance using banking software after a cash withdrawal
2) Copying a file from a USB drive to a hard disk of a computer
3) Installing sound editing software in personal computer
4) Scanning a letter using a scanner

20. Consider the following statements

A – Used for scientific and engineering function and to solve complex mathematical problems

B – For an examiner to prepare an exam paper away from home

C – Used in large scale business

A, B, C respectively

1) A: Mainframe computer B: Personal computer C: Super computer

2) A: Super computer B: Lap top computer C: Mainframe computer

3) A: Super computer B: Microcomputer C: Mini computer

4) A: Mainframe computer B: Microcomputer C: Super computer

21. Which of the following technology is used in inkjet printer?

1) Laser 2) Toner 3) Heat 4) Cartridge

22. Which of the following are true about the secondary memory of a computer system?

A – Data is not erased even if the computer is switched off

B – solid state devices can be used as secondary memory

C – Secondary memory is the part of the CPU memory

1) A and B only 2) A and C only 3) B and C only 4) All A, B and C

23. Which generation considered as birth of operating systems?

1) 2nd generation 2) 3rd generation 3) 4th generation 4) 5th generation

24. Which is an example for simplex mode?

1) Walkie Talkie 2) Telephone conversation 3) Watching TV 4) discussion

25. Which of the following is used in ATM to print the receipts?

1) Thermal printer 2) Laser printer 3) Inkjet printer 4) Dot matrix printer

26. Which of the following is commonly used in architectural designs?

1) Flatbed scanner 2) Plotter 3) Multimedia projector 4) Printer

27. Which of the following is not an example for scanner?

1) ATM 2) Flatbed scanner 3) MICR 4) Touch screen

28. The CPU checks First to see whether the required data is available for processing

1) RAM 2) Register 3) Cache 4) Secondary memory

29. Which of the following is an example for education website?

1) www.moe.lk 2) www.edupub.gov.lk

3) www.nenasala.lk 4) www.amazon.com

30. Which of the following characteristics is the fourth generation computers?
- 1) Portable 2) high heat 3) consumes high electricity 4) High efficiency
31. Which of the following is the largest?
- 1) 1001100_2 2) 1001010_2 3) 1010101_2 4) 1100000_2
32. Which of the following is correct during program execution in CPU?
- 1) Instructions and data are brought from the main memory.
 - 2) Instructions are brought from the main memory and data are brought from the secondary memory
 - 3) Instructions are brought from the secondary memory and data are brought from the main memory
 - 4) Instructions and data are brought from the secondary storage.
33. The commands booting up instructions are stored in
- 1) ROM 2) RAM 3) Register 4) Secondary memory
34. Which of the following is fastest data transmission medium?
- 1) Coaxial cable 2) Fiber optics
 - 3) Shielded twisted pair 4) Unshielded twisted pair
35. Network Interface Card(NIC) is located on
- 1) CPU 2) RAM 3) Mother board 4) Hard disk
36. Which device is acts as a data translator in computer network?
- 1) Router 2) Wi-Fi 3) Telephone lines 4) Modem
37. Which of the following network is the combination of several Local Area Networks?
- 1) LAN 2) WAN 3) PAN 4) MAN
38. Which one of the following is incorrect regarding Local Area Networks?
- 1) Geographically distributed in a small area
 - 2) Generally owned by a single person or an organization
 - 3) Consist of many shared data communications media with various interfaces
 - 4) Generally consist of topologies: Bus, Star and Ring
39. Which of the following is used to control the data and instruction transmission between internet and computer network?
- 1) Server 2) Firewall 3) Switch 4) Hub
40. Who is considered as the first programmer?
- 1) Blaise Pascal 2) Charles Babbage 3) Lady Augusta 4) Howard Aiken

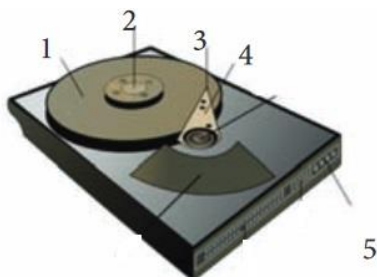
PART II

Answer all questions

01. 01. Convert the binary number 11001101_2 to decimal. Show your calculations.
02. Classify the computers according to their size?
03. Write two services provided by the Government to Citizen by using ICT.
04. State whether the following statements are True/False
- Ada Augusta is considered as the first lady programmer.
 - Non-impact printer does not strike head against a ribbon.
05. What is the bio metric device used to record the employee's arrival and departure time in the office premises?
06. Telemedicine is a method of providing medical care remotely
- List one advantage of telemedicine in addition to the remote accessibility
 - List one challenge in using Telemedicine
07. Match the columns A and B appropriately

A	B
Keyboard	Topology
Analog computer	Plotter
Mesh	Speedo meters
Output Device	Qwerty

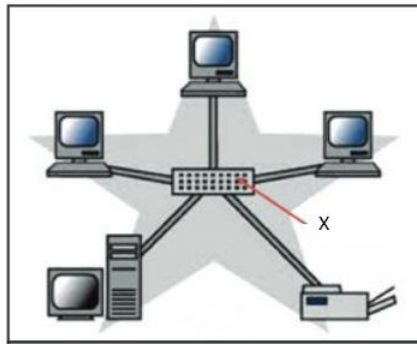
08. G.C.E (A/L) students obtain their results via education website. When the index number is entered in to the system, the system validates it. If it is valid, then the results will be displayed on the screen. Write the input, process and output for this scenario.
09. What do you mean by firewall?
10. Write down the components of CPU. (2 x 10 = 20 marks)
02. a) Give 2 examples for volatile memory and non-volatile memory?
- b) Hard disk is made of several components.



- The above figure shows the hard disk components and Identify the labelled 1 – 5.
- Give the function of label 3?

(4+5+1 = 10 marks)

03. Network topology is the pattern of connection in designing computer network



- 1) Identify the above topology.
- 2) Give two devices that suite to the “X”?
- 3) What are the two differences between the above two devices, states in question 2?
- 4) Give two advantages of computer network?
- 5) What are the three types of computer network?

(4 + 2 + 2 + 2 + 3 = 10 marks)

04. a) Transmitting the data and information is called data communication

- 1) What are the basic components required for the data communication?
- 2) Give three examples for guided data transmission medium.
- 3) What is meant by sever computer and client computer?

(1+5+1+5+2 = 5 marks)

b) Computer ports are connected to the mother board

- 1) is used to connect the keyboard and mouse to the computer system.
- 2) is used to connect the computer to the network router.
- 3) is used to connect the digital TVs and multimedia projector.
- 4) is used to connect the printer to the computer system
- 5) is used to connect the input and output devices to the computer system

(1x 5 = 5 marks)

05. Write the short notes about the followings

- a) Services provided by the LMS for the students
- b) 5th generation computers
- c) Features of distance learning

(4+3+3 = 10 marks)