0796 INFORMATION AND COMMUNICATION TECHNOLOGIES 1

JUNE 2022

ADVANCED LEVEL

Centre Number	
Centre Name	
Candidate Identification No.	
Candidate Name	

Mobile phones are NOT allowed in the examination room
MULTIPLE CHOICE QUESTION PAPER

One and a Half hours

INSTRUCTIONS TO CANDIDATES

Read the following instructions carefully before you start answering the questions in this paper. Make sure you have a soft HB pencil and an eraser for this examination.

1. USE A SOFT HB PENCIL THROUGHOUT THE EXAMINATION.

2. DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

Before the examination begins:

3. Check that this question booklet is headed "**Advanced Level – 0796** Information and Communication Technologies 1"

4. Fill in the information required in the spaces above.

5. Fill the information required in the spaces provided on the answer sheet using your HB pencil:

Candidate Name, Exam Session, Subject Code and Candidate Identification Number.

Take care that you do not crease or fold the answer sheet or make any marks on it other than those asked for in these instruction.

How to answer the questions in this examination

6. Answer ALL the 50 questions in this Examination. All questions carry equal marks.

7. Each question has FOUR suggested answers: **A, B, C** and **D**. Decide on which answer is correct. Find the number of the question on the Answer Sheet and draw a horizontal line across the letter to join the square brackets for the answer you have chosen.

For example, if **C** is your correct answer, mark **C** as shown below:

[A] [B] [C] [D]

8. Mark only one answer for each question. If you mark more than one answer, you will score a zero for that question. If you change your mind about an answer, erase the first mark carefully, then mark your new answer.

9. Avoid spending too much time on any one question. If you find a question difficult, move on to the next question. You can come back to this question later.

10. Do all rough work in this booklet, using the blank spaces in the question booklet.

11. At the end of the examination, the invigilator shall collect the answer sheet first and the question booklet.

DO NOT ATTEMPT TO LEAVE THE EXAMINATION HALL WITH IT

1. Which of the following is the fastest memory medium in the computer?
   A Hard disk.
   B ROM.
   C SRAM.
   D DRAM.

2. Frequently used instructions by the CPU are stored in the:
   A Hard disk.
   B ROM.
   C RAM.
   D Cache memory.

3. The suitable computer to execute many programs for hundreds of users at the same time, performing relatively simple operations and transactions is:
   A Mainframe.
   B Supercomputer.
   C Personal computer.
   D Microcomputer.

4. The maximum number of characters that can be represented by a computer that operates a 4 bits system is
   A 8
   B 16
   C 32
   D 4

5. _____ is a network device that combines multiple signals for transmission on a single channel.
   A Multiplexer.
   B Demultiplexer.
   C Router.
   D MODEM.

6. Critical path of the PERT chart is:
   A the shortest path to complete the project.
   B the average path to complete the project.
   C the path which takes the longest time to complete the project.
   D the path which takes the shortest time to complete the project.

7. The formal way to close a project is to
   A Get the stakeholders to accept that the project is complete.
   B The project manager and his workers accepts that the project is complete
   C Paying all the workers and return all tools
   D Ensure that all tasks have been executed.

8. A laptop performance can be improved by?
   A Increase the CPU speed.
   B Using utility software.
   C Increase the resolution power.
   D Increase the RAM size.

9. An operation code with *n* bits will imply that there are _____ possible distinct operations.
   A 2n
   B 2^n
   C n/2
   D n^2

10. The main purpose of a digital certificate is to:
    A Authenticate the source of a file.
    B Ease award of certificates through Internet.
    C Make certificates available online for other users to confirm.
    D To make certificates difficult to reproduce.

11. The binary equivalent of the octal number 625 is
    A 110010101
    B 110011101
    C 110001101
    D 110000101

12. An operation that is executed a number of times at different places in your algorithm can be extracted out and made into:
    A Function.
    B Control structure.
    C Iteration.
    D Module.

13. A variable type which can conveniently store different elements of the same type under a single name is called
    A A record.
    B A queue.
    C An array.
    D A stack.

14. A software subject to copyright that users can download from the Internet and use for free is:
    A Open source.
    B Freeware.
    C Shareware.
    D Utility software.

15. The use of _____ makes it easier to organize files in a logical way.
    A File extension.
    B File name.
    C Folder.
    D File Path

16. A system that can predict weather conditions is:
    A Decision support system.
    B Expert system.
    C Transaction support system.
    D Geographical Information System.

17. The memory device that holds current date and time on your computer is called:
    A DRAM.
    B Clock.
    C ROM.
    D CMOS.

18. Which of the following is a characteristic of broadband?
   A   Completely safe from intruders
   B   It has a dial up connection.
   C   High speed.
   D   Cost varies from day to day.

19. A real-time operating system is used in:
   A   Controlling access to a network printer.
   B   Providing services to all users of the network at the same time.
   C   Managing the access to system files in a computer.
   D   Controlling the fuel injection system of an automobile engine.

20. An airline reservation system is an example of
   A   Batch processing.
   B   Real time processing.
   C   On line processing.
   D   Time sharing processing.

21. Data redundancy is a database anomaly that:
   A   deletes data that has not been used for long.
   B   Causes unnecessary duplication of data.
   C   Forbids data of a particular type.
   D   Selects data that occur too often.

22. Why is it necessary for an organization to adopt a good password policy?
   A   Easy sharing of files across the network.
   B   Easy connection of computer to a network.
   C   To protect files against unauthorized use.
   D   Easy access of files on a computer.

23. Which one of the following monitors incoming network traffic to prevent unauthorized attacks?
   A   Data guard.
   B   Fireguard.
   C   Data shield.
   D   Firewall.

24. A network topology whose components are connected physically to the cable trunk is:
   A   Star topology.
   B   Ring topology.
   C   Bus topology.
   D   Mesh topology.

25. The logic gate with one input and one output is:
   A   NOT gate.
   B   AND gate.
   C   XOR gate.
   D   NAND gate.

26. Which of the following is **NOT** a feature of electronic commerce?
   A   Goods can be advertised and prices compared
   B   Transactions can be processed quickly.
   C   Customers are identified before buying.
   D   Services are available 24 hours a day.

27. Which of the following describes Instant Messaging?
   A   Sending messages through fax.
   B   e-mail communication.
   C   Making voice communication over Internet.
   D   Real-time text-based communication.

28. Quality Developer is a company that writes programs to do specific jobs for other companies. These programs are called?
   A   Custom-purpose software
   B   General-purpose software
   C   Off-the-shelf software
   D   Special-purpose software

29. One important role of interface in design is:
   A   It presents menus to users.
   B   It teaches users how to operate the machine
   C   It makes decoding of information easier.
   D   It hides the complexities of the machine.

30. The stream of bits used to control the flow of data in asynchronous communication is called.
   A   Error control bits.
   B   Parity bits.
   C   Start-stop bits.
   D   Clock.

31. $4AC_{16} + 9BF_{16}$ is equal to:
   A $E6B_{16}$
   B $A7BF_{16}$
   C CFC_{16}
   D $D6D_{16}$

32. The quality of sound from a speaker is best determined by
   A   Speakers.
   B   Sound card.
   C   Media player.
   D   Processor.

33. Which of the following about an end user license agreement is true?
   A   It gives full ownership of the software to the user.
   B   It gives the user the exclusive right to copy and sell the software to others.
   C   It gives the user the right to modify the software.
   D   It gives the user the right to install and run the software on a specified number of computers.

34. The rules governing the rights of data subjects are called?
   A   Data Privacy law.
   B   Copyright law.
   C   Data Protection legislation.
   D   Data Publicity Law.

_____ Turn Over

35. A malicious attempt such as to make a a web site unavailable to its intended users can be termed?
 - A Hacking.
 - B Spamming
 - C Denial of service
 - D Computer fraud

36. A tool in the Internet that assist users to locate resources in the World Wide Web is
 - A Protocol
 - B E-mail
 - C Web browser
 - D Search engine

37. Which one of the following is a good password policy for an organization?
 - A All passwords are changed regularly
 - B All passwords are never changed.
 - C All passwords are made up of less than four characters.
 - D All passwords are made up of less than four numbers.

38. Which one of the following statements about Internet connection services is true?
 - A Broadband connections are always-on while your computer is switched on.
 - B Dial-up connections are usually faster than broadband connections.
 - C You cannot use your telephone line to make calls while using a broadband connection.
 - D Dial-up connections are always-on while your computer is switched on.

39. One function of an operating system is:
 - A It retrieve information from a database
 - B It controls the allocation of hardware
 - C It is used for booting the computer.
 - D It processes data.

40. The 2's complement of the binary expression 1001 is
 - A 1001
 - B 0111
 - C 0110
 - D 0101

41. A format that best guarantees file quality is:
 - A BMP
 - B PNG
 - C TIFF
 - D JPEG

42. The recycler in the computer that recovers deleted files is an example of:
 - A Application software.
 - B General purpose software.
 - C Bespoke software.
 - D Utility software.

43. An abstract data structure that use FIFO is:
 - A List
 - B Queues
 - C Stack
 - D arrays

44. _____ is a property of a programming language.
 - A Syntax
 - B Interface
 - C Editor
 - D Comments

45. The appropriate action to take to determine why a software is failing to give the required result is
 - A Debugging
 - B Requirement analysis
 - C Compilation
 - D Feasibility study

46. A foreign key in a relation refers to a:
 - A Primary key of another table
 - B Key that is imported from other database
 - C Key field that can replace the primary key
 - D Field with no relation with other keys.

47. Which of the following is the best way to maintain a good posture when working with a computer?
 - A Sit well
 - B Make sure your feet touch the floor
 - C Take frequent breaks
 - D Make sure that your computer, desk and chair are positioned correctly

48. Which of the following is the descending order of data hierarchy
 - A database - record- file - field - byte -bit
 - B database - file - record - field - byte -bit
 - C database - record -file - field - byte -bit
 - D database - file - record - byte - field -bit

49. JavaScript can be embedded in an HTML page between?
 - A <style> and </style>.
 - B <html> and </html>.
 - C <script> and </script>.
 - D <body> and </body>.

50. The technique prefered to transfer large amount of data to and from a memory in a short time is:
 - A Programmed I/O
 - B Interrupt driven I/O
 - C Direct Memory Access.
 - D Non maskable interrupt driven I/O

GO BACK AND CHECK YOUR WORK