GENERAL CERTIFICATE OF EDUCATION BOARD

General Certificate of Education Examination

0796 INFORMATION AND COMMUNICATION TECHNOLOGIES 1

JUNE 2023 **ADVANCED LEVEL**

Centre No.	
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 "**0796 Information and Communication Technologies 1**"
4. Fill in the information required in the spaces above.
5. Fill in 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 instructions.

How to answer the questions in this examination

6. Answer **ALL** the **50** questions in this Examination. All questions carry equal marks.
7. **Electronics calculators are not allowed**
8. Each question has FOUR suggested answers: **A, B, C** and **D**. Decide which answer is appropriate. 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]
9. 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.
10. 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.
11. Do all rough work in this booklet using the blank spaces in the question booklet.
12. **At the end of the examination, the invigilator shall collect the answer sheet first and then the question booklet. DO NOT ATTEMPT TO LEAVE THE EXAMINATION HALL WITH IT.**

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1. The stored program concept states that:
   A data is stored in the memory.
   B instruction and data are stored in the same memory.
   C programs must be stored in the hard disk.
   D a computer must have hard disk and memory.

2. Unwanted mails are known as:
   A spam.
   B filter.
   C cookies.
   D mailer daemon.

3. A company is running a new computer system alongside the manual system. This is
   A piecemeal implementation.
   B change over implementation.
   C parallel implementation.
   D double entry implementation.

4. The critical path is useful in project management in that it:
   A eliminates failure of a project.
   B shows the tasks that must be executed.
   C determines the duration of the project.
   D helps to determine the exact project cost.

5. When we play an online game we are not:
   A using software as a service.
   B doing cloud computing.
   C outsourcing software.
   D using local operating system.

6. A system that is capable of being run across different platforms is said to be:
   A reliable.
   B portable.
   C efficient.
   D resilient.

7. The component that encrypts details of a network to outsiders is:
   A firewall.
   B domain name server.
   C router.
   D gateway.

8. An organization responsible for establishing standards for computing devices is:
   A ACM
   B BCS
   C IEEE
   D UFO

9. A software with full license to use, share but not to sell is:
   A shareware.
   B freeware.
   C demo ware.
   D firmware.

10. In a complete mesh topology of n nodes, each node is directly connected to_____ other nodes
   A n-1
   B n(n-1)
   C n-2
   D n+1

11. A file format that cannot handle text data type is
   A HTML
   B TIFF
   C PDF
   D XLS

12. An event that represents the completion of a group of related tasks in a project is called:
   A critical task.
   B milestone.
   C floating task.
   D threshold point.

13. Why would a company choose to outsource the production of its own system?
   A They may not have the expertise.
   B To attract sponsorship.
   C To serve as publicity.
   D It will receive the contribution of customers.

14. A scenario in which two cars in opposite directions on a one-way bridge and none is ready to reverse is known in computing as:
   A deadlock.
   B full duplex.
   C demultiplexing.
   D spooling.

15. A major mode of operation of a virus is:
   A it makes a network to be slow.
   B it attaches itself to a program and executes when the program runs.
   C it appears as a useful file.
   D it multiplies and fills up memory without harming content.

16. The product $1111_2 \times 11_2$ is:
   A 101010
   B 100100
   C 101101
   D 110101

17. In SDLC, feasibility studies is carried out in order to:
   A find out if all technical and financial resources will be available.
   B evaluate current system.
   C exhibit vulnerability of current system.
   D come out with the terms of reference.

18. The following is a server side scripting language:
   A Java script.
   B CSS.
   C PHP.
   D HTML.

19. In mobile app development, XML is used to:
   A connect the activity to the database.
   B link the app to the online store.
   C define the activity layout.
   D give program instructions to app buttons.

20. Below is the correct format of an email address:
   A user_name@DomainName.
   B user_name@Website.info.
   C mark john@yahoo.com.
   D user_name@Website.com/info.

21. The tag that does not define a section of a page:
   A
   B <section>
   C <header>
   D <frame>

22. USB stick uses a/an:
   A optical storage.
   B magnetic storage.
   C solid state storage.
   D flash storage.

23. A processor architecture that processes multiple instructions at once:
   A RISC
   B MIMD
   C ALU
   D SISD

24. Which of the following is true about DVD?
   A It uses tracks and sectors to store data.
   B A write head is used to store data in it.
   C Data is stored in binary form.
   D Data is stored in more than one layer.

25. The ALU is responsible for ___instructions
   A fetching.
   B decoding.
   C executing.
   D storing.

26. A command structure mostly used in declarative programming languages is:
   A SELECT...FROM...WHERE...
   B IF...THEN...ELSE...
   C WHILE...DO...
   D FOR...DO...

27. The quality of a dot matrix printer is given in:
   A pixels.
   B dots per inch.
   C characters per second.
   D bits per inch.

28. When you buy from an online marketing platform (e.g Amazon), which of the following is **NOT** true:
   A you are doing e-banking.
   B you are doing e-commerce.
   C you have to reveal your identity.
   D you are doing e-trading.

29. A memory that needs frequent refreshing in order not to lose its contents is:
   A Cache.
   B DRAM.
   C SRAM.
   D RAM.

30. A device used for reading product information such as price from the code on the product is:
   A optical mark reader.
   B magnetic ink character recognition.
   C barcode reader.
   D scanner.

31. It uniquely identifies a computer in the internet.
   A MAC address.
   B NIC address.
   C Web host address.
   D Internet protocol address.

32. A malware that multiplies and makes a network slow is:
   A Virus
   B Trojan horse
   C Worm
   D Spyware

33. Which model of system development is not suitable to accommodate changes?
   A Spiral model.
   B Incremental model.
   C Waterfall model.
   D Evolving prototype.

34. Communication in a ring topology is comparable to which mode of data transmission:
   A simplex.
   B full duplex.
   C serial data transmission.
   D half duplex.

35. The equivalence of the decimal expression 512.125 in binary is
A 1000000000.001
B 1100000011.011
C 1000010001.101
D 1100000001.001

36. The logic expression $\overline{A.B + \bar{A}.\bar{B}}$. simplifies to
A A+B
B $\bar{A} + \bar{B}$
C $\bar{A}B + A\bar{B}$
D $\bar{A} + \bar{C}$

37. A multiuser OS is one that permits:
A multiple user accounts.
B multiple access terminals.
C many computers to use it.
D use of it for many purposes.

38. The ring topology is said to be better than the bus and star in that:
A it has less cabling.
B it guarantees privacy.
C it does not allow for collision.
D it is easier to set up.

39. The routines that are used for booting are found in the?
A RAM
B SDRAM
C ROM
D HARD DRIVE

40. Between streaming video and email which of the following is NOT true?
A There is synchronous data transmission for email.
B There is asynchronous data transmission for streaming video.
C Video needs higher bandwidth to watch.
D Both email and video can be read at any time.

41. _____ is a function of an OS.
A File enlargement.
B Booting the computer.
C Process control.
D Software processing.

42. A sorting algorithm that compares two adjacent items and then swaps them, is
A insertion sort.
B selection sort.
C merge sort.
D bubble sort.

43. In algorithms, the statement $x \leftarrow x + 1$
A produces a syntax error.
B means increase current value in x by 1.
C means adding 1 to variable x changes nothing.
D Replaces x+1 by x.

44. Why do local cable TV distributors use coaxial cables instead of twisted pair cables?
A Twisted pair is expensive.
B Twisted pair cables are slow.
C Twisted pair cables are prone to signal attenuation at long distance.
D Twisted pair cables depreciate faster.

45. A graphical model showing the different tasks in a project and the relationships binding them is:
A Gantt chart.
B relational Model.
C flow chart.
D project model.

46. An Information System used by sales persons is
A MIS
B DSS
C TPS
D ESS

47. A technology that adds virtual features to real situation is
A augmented reality.
B virtual reality.
C simulation.
D virtual modelling.

48. An error that makes a program's meaning or behaviour to change from that intended by the programmer is
A syntax error.
B semantic error.
C system error.
D lexical error.

49. A method of programming which focuses only on the results is
A declarative programming.
B procedural programming.
C object oriented programming.
D imperative programming.

50. Which of the following is **NOT** the rule of a project manager?
A Resources allocation.
B Ensuring project completes on time.
C Risk assessment.
D Ensuring project completes within budget.

STOP
GO BACK AND CHECK YOUR WORK