

GENERAL CERTIFICATE OF EDUCATION BOARD

General Certificate of Education Examination

JUNE 2025

ADVANCED LEVEL

Centre Number	
Centre Name	
Candidate Number	
Candidate Name	

Mobile phones are NOT allowed in the examination room.

MULTIPLE CHOICE QUESTION PAPER

Duration: 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.

- DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.
- USE A SOFT HB PENCIL THROUGHOUT THE EXAMINATION.

Before the examination begins:

- Check that this question booklet is headed "0796 Information and Communication Technologies 1"
- Fill in the information required in the spaces provided above.
- Fill in the information required in the spaces provided on the answer sheet using your HB pencil:
Candidate Number and Name, Centre Number and Name.
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

- Answer ALL the 50 questions in this Examination. All questions carry equal marks.
- Electronics calculators are not allowed
- 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]
- 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.
- 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.
- Do all rough work in this booklet, using, where necessary, the blank spaces in the question booklet.
- At the end of the examination, the invigilator shall collect the answer sheet first and then the question booklet after. DO NOT ATTEMPT TO LEAVE THE EXAMINATION HALL WITH IT.

Turn Over

1. The device that is used to automatically capture information about drugs in a pharmacy is called
 - A magnetic ink character recognition.
 - B optical mark reader.
 - C barcode reader.
 - D optical character recognition.
2. A device that limits access to a private network is
 - A gateway.
 - B firewall.
 - C router.
 - D bridge.
3. Information retrieval is faster from
 - A floppy disk.
 - B magnetic tape.
 - C CD-ROM.
 - D hard disk.
4. Which of these groups contains graphic file extensions?
 - A JPG, CPX, GCM.
 - B GIF, TCE, AVI.
 - C TCP, JPG, BMP.
 - D JPG, GIF, TIFF.
5. Weather forecasting can be done using
 - A decision support system.
 - B management information system.
 - C artificial Intelligence.
 - D executive information system.
6. A magnetic tape stores data _____ while a CD-ROM stores data _____.
 - A sequentially, randomly.
 - B serially, circularly.
 - C directly, randomly.
 - D directly, sequentially.
7. The transmission of a group of bits, one after another through a single wire is known as
 - A full-duplex.
 - B parallel.
 - C synchronous.
 - D serial.
8. The components in the motherboard communicate through the
 - A registers
 - B cache
 - C bus
 - D control unit
9. When the hub of a LAN gets bad, which of the following devices can be used to replace it?
 - A Gateway.
 - B NIC.
 - C Bridge.
 - D Switch.
10. A programming paradigms is characterised by
 - A language used.
 - B type of programming structures involved.
 - C environment used to program.
 - D methods used to program.
11. A network cable is directly connect to a computer through the
 - A router.
 - B network interface card.
 - C universal Serial bus.
 - D switch.
12. One strategy to implement a new system in SDLC is
 - A prototyping.
 - B waterfall.
 - C piece-meal.
 - D design.
13. The duration of a project can be determined by
 - A counting the steps used in the project.
 - B counting the number of tasks involved.
 - C calculating the duration of tasks on the longest path.
 - D determine the number of workers.
14. The longest path in a project, not necessarily with the highest number of tasks is known as the
 - A determinant
 - B lag path
 - C critical path
 - D slack path
15. The calculation of the cost of a project is carried out in the _____ phase of SDLC.
 - A design.
 - B investigation.
 - C analysis.
 - D implementation.
16. A student installed open source software in his/her laptop. One possible reason for this is
 - A it is never blocked during access
 - B it is free to use
 - C can be modified by user
 - D many users can use it.
17. The formula $=\$C2*\$B\$3-K1$ is found in a spreadsheet cell F2. If the formula is copied, then the formula in F5 shall be
 - A $=\$C2*\$B\$3-K4$.
 - B $=\$C5*\$B\$5-K4$.
 - C $=\$C5*\$B\$3-K4$.
 - D $=\$C2*\$B\$3-K5$.
18. A database has three related tables. Which of the following is true about the tables?
 - A The tables all have corresponding records.
 - B The tables must have the same number of fields.
 - C There should be a key that is common between the linked tables.
 - D They should be a one-to-many relationships.
19. Which of the following is not possible with spreadsheet?
 - A Link cells of different sheets.
 - B Insert pictures.
 - C Draw objects e.g. circles.
 - D Create relationships.

20. A programming structure that carries out repeated execution of a set of instruction is
 A branch.
 B decision.
 C loop.
 D sequence.
-
21. Which of the following is true about synchronous transmission of data?
 A All bits are sent simultaneously.
 B Timing of streaming is by a clock.
 C A group of bits is sent at a time through single cable.
 D Many lines are used to transmit a byte of bits.
-
22. Parallel transmission is not suitable for long distance transmission because
 A the signals will lose strength fast.
 B the bits might become mixed up.
 C transmission speed of some lines may change but strength maintain.
 D some lines will be underused.
-
23. A security measure that limits information access and disclosure only to authorised users is referred to as
 A confidentiality.
 B integrity.
 C availability.
 D authenticity.
-
24. When a node in a ring network breaks down the
 A nodes that connect directly to it stop functioning.
 B the whole network fails.
 C the token continues to run.
 D other nodes continue to function.
-
25. Which of the following is the best action that can speed up communication in a network?
 A Reduce the cable distance between nodes.
 B Step-up the RAM size of the computers
 C Reduce the number of devices in the network
 D Use wireless communication and not cable
-
26. A software that provides the environment between the user and computer system is known as
 A utility software.
 B language translator.
 C operating system.
 D compiler.
-
27. A file format is used to describe
 A how files are displayed in the computer.
 B how files function in the computer.
 C arrangement of data inside a file.
 D the way files are created by the computer.
-
28. Which of the following affect the integrity of data?
 A The number of people who access the data.
 B The number of programs accessing the data.
 C The technology of the storage medium.
 D The speed of transmission of the data.
-
29. The phenomenon that limits a group of people from making use of digital technology is known as
 A digital divide.
 B technology separation.
 C digital illiteracy.
 D digital disability.
-
30. When people deceive people using networks and collect money without compliance it is known as
 A hacking.
 B phishing.
 C cracking.
 D scamming.
-
31. Program execution time would be minimize if the programs are written in
 A assembly language.
 B high level language.
 C machine language.
 D 4G language.
-
32. The main function of a spyware is
 A protects our computers from intruders.
 B gathers information from a computer and send to another person in a network.
 C It takes records of activities in a computer and propose actions to avoid failure.
 D takes video of the computer environment.
-
33. The design of special equipment to reduce health problems in computer users is known as
 A digital design.
 B carpal Tunnel Syndrome.
 C ergonomics
 D tendonitis
-
34. The complexity of an algorithm defines
 A time and space
 B time and cost.
 C space and cost.
 D time and scope.
-
35. The right for people to know what information other organisations store about you is defined by
 A laws on cyber security.
 B data protection act.
 C ethics.
 D legacy.
-
36. An action that can lead to faster access to files in the system can be
 A use of external storage
 B use of antivirus software
 C use of a common folder for files
 D defragmentation of the hard disk
-
37. What topology is used to describe a network with a central controller?
 A Star.
 B Bus.
 C Mesh.
 D Ring.
-

38. A system that gives information on cars position as it moves about a city is known as
 A geographic information system
 B expert system
 C management information system
 D monitoring system
39. An organization implements a system in one department and later implements it in all other departments. This type of implementation is
 A pilot.
 B piece meal.
 C parallel.
 D direct.
40. When an organizational intranet gives control access to another intranet, the system becomes
 A a shareware.
 B a web.
 C an internet.
 D an extranet.
41. When data is stored on one large table, it is likely going to be characterized by:
 A consistency.
 B logic.
 C redundancy.
 D coherence.
42. Normalisation of database involves
 A removing errors from the database.
 B reducing the number of tables.
 C creating smaller linked tables.
 D using database in a network.
43. If a number of attributes partially depends on a composite key, we improve our database by
 A eliminating the key.
 B reinforcing referential integrity.
 C creating a new table of these attributes and the key.
 D merge all the dependent attributes.
44. A car control module that manages the electronics system is a type of
 A automation.
 B embedded system.
 C expert system.
 D monitoring system.
45. The use of computers to show how a given model functions is known as
 A modelling.
 B smart animation.
 C prototyping.
 D simulation.
46. A system that records the items bought and produce a bill in a supermarket is called?
 A Transaction processing system.
 B Management information system.
 C Data entry system.
 D Business system.
47. The device that splits bits over several lines of transmission is
 A Modem.
 B Switch.
 C Multiplexer.
 D Demultiplexer.
48. What determines the amounts of bits to be transmitted at a time?
 A Motherboard.
 B Switch.
 C Bus size.
 D Ram.
49. The best location to temporally store an instruction that is repeatedly used by the CPU is
 A RAM.
 B ROM.
 C register.
 D cache.
50. A system building approach that repeatedly refines a model until an acceptable product is realised is
 A prototyping.
 B SDLC.
 C spiral.
 D V-Shaped.

STOP

GO BACK AND CHECK YOUR WORK