

Sir Akoua

CAMEROON GENERAL CERTIFICATE OF EDUCATION BOARD

General Certificate of Education Examination

795 COMPUTER SCIENCE 1

JUNE 2013

ADVANCED LEVEL

Centre No. & Name	
Candidate No.	
Candidate Name	

795 COMPUTER SCIENCE 1: 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 – 795 Computer Science 1"
4. Insert the information required in the spaces above.
5. Insert the information required in the spaces provided on the answer sheet using your HB pencil:
Candidate Name, Exam Session, Centre Number, Candidate Number and Subject Code.
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. Non programmable calculators are allowed.
8. 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]

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, where necessary, the blank spaces in the question booklet.
12. Mobile phones are **NOT** allowed in the examination room.
13. **You must not take this booklet out of the examination room. All question booklets and answer sheets will be collected at the end of the examination.**

Turn Over

1. Which of the following can be a computerized information system?
 - A A library system.
 - B An industrial inspection.
 - C A stock control system.
 - D All of the above.

2. Which of the following is NOT often used during car assembly?
 - A CAD/CAM system.
 - B Stock control and order processing.
 - C Microprocessor.
 - D Simulation and modeling.

3. Which term means arranging a person's work environment so that he/she works most efficiently?
 - A Ethics.
 - B Human Resources.
 - C Ergonomics.
 - D Green PC.

4. Which of the following file formats represents a graphics file format?
 - A JPEG.
 - B MPEG.
 - C HTML.
 - D DOC.

5. You are called upon by the an examination Board to choose a device that can be used to mark multiple choice questions. Which of the following will you choose?
 - A MCR.
 - B OMR.
 - C MICR.
 - D MIMD.

6. As far as computer networks are concerned the acronym, NIC stands for:
 - A Network integrated card.
 - B Network interface card.
 - C Network internal.
 - D Network identification card.

7. Which of the following is true as far as the Microsoft WINDOWS operating system is concerned?
 - A It provides a graphical user interface.
 - B It can be used for multi-tasking.
 - C Permits command line operations.
 - D All of the above.

8. Which of the following storage media is least suitable for direct access?
 - A CD ROM.
 - B Magnetic tape.
 - C Floppy disk.
 - D Hard disk.

9. As far as processor scheduling strategies are concerned, the acronym SJF stands for
 - A Smartest Job First.
 - B Simplest Job First.
 - C Shortest Job First.
 - D Similar jobs first.

10. A computer word is:
 - A A group of bits that can be treated together but in any order within a computer.
 - B A sequence of bits that can be used together in a byte.
 - C A group of characters that can be treated together as a string.
 - D A group of bits that can be processed together as a unit.

11. Which of the following data structure works on the "LIFO" principle?
A Stacks.
B Queues.
C Deque.
D Hash tables.
12. Which of the following is NOT a program translator?
A Debugger.
B Compiler.
C Interpreter.
D Assembler.
13. Which of the following is NOT normally considered in complexity analysis of algorithms?
A Best case.
B Worst case.
C Average case.
D Null case.
14. One of the following is an object-oriented and platform-independent programming language. It is:
A C++.
B JAVA.
C VISUAL BASIC.
D APL.
15. One main advantage of machine language programming is that:
A Its execution is fast.
B It is a simple programming language.
C It is machine friendly.
D All of the above.
16. The difference between memory and storage is that data in memory is _____ and that in storage is _____.
A Permanent, Temporary.
B Temporary, Permanent.
C Fast, temporal.
D Temporal, fast.
17. The language that a computer can understand and execute is called a(n):
A Machine language.
B Assembly language.
C Object-oriented language.
D High-level language.
18. An operating system:
A Links a program with the subroutines it references.
B Provides a layered user interface to the hardware.
C Enables a programmer use software procedures.
D Can develop other operating systems.
19. A large number of computers connected over a wide geographical area is called
A LAN.
B MAN.
C WAN.
D PAN.
20. The communication link between the CPU, memory and peripherals is called a(n):
A Bus.
B Card.
C Media.
D Interface.
21. Database management systems are intended to:
A Eliminate all data redundancy.
B Establish relationships among records in different files.
C All of the above.
D None of the above.

22. Which of the following is the highest level in a hierarchy of data organization?
- A Field.
 - B Database.
 - C Data file.
 - D Index file.
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23. How are computer systems designed ? By
- A Simplifying the requirements of the system.
 - B Breaking up the system into smaller self-contained cooperating subsystems.
 - C Breaking up the system into independent non-cooperating subsystems.
 - D Breaking up the system from its bottom parts.
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24. Two main measures of the efficiency of an algorithm are:
- A Processor and memory complexity.
 - B Capacity and time complexity.
 - C Time and space complexity.
 - D Data and space complexity.
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25. Which of the following is a linear data structure?
- A Trees.
 - B Graphs.
 - C Arrays.
 - D None of the above.
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26. A light pen is an example of
- A A pointing device.
 - B Input-output device.
 - C Input device.
 - D Peripheral device.
-
27. In positive logic, the logic state 1 corresponds to:
- A Negative voltage.
 - B Higher voltage.
 - C Zero voltage.
 - D Average voltage.
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28. A NOR gate is ON only when all its inputs are:
- A ON.
 - B Positive.
 - C High.
 - D Off.
-
29. A light pen is an example of a (can):
- A Pointing device.
 - B Input-output device.
 - C Input device.
 - D Peripheral device.
-
30. Which of the following is most important in relation to privacy of computer data?
- A Data integrity.
 - B Data access control.
 - C System failure.
 - D Physical security.
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31. Which of the following is NOT a main purpose of an operating system?
- A To mask hardware details from users.
 - B To provide a graphical user interface.
 - C To ease use of hardware resources.
 - D To share hardware resources among many users.
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32. Linux operating systems are said to be:
- A Multi-user ipads.
 - B Multi-user Microsoft Windows.
 - C Multi-tasking iPods.
 - D Multi-user and multi-tasking.
33. A multiplexer:
- A Separates a single stream of signals into separate streams.
 - B Combines separate streams of signals into a single stream.
 - C Maintains separate streams of signals within a single stream.
 - D Recombines single streams of signals into new separate streams.
34. A record data structure is:
- A A collection of objects of possibly different data types that are processed together.
 - B A collection of objects of the same data type.
 - C A collection of objects which must not be of the same data type.
 - D A collection of objects which must be of the same data type and processed separately.
35. What is the purpose of software presentation tools?
- A To design good web pages for an audience.
 - B To design good software packages for an audience.
 - C To provide a good multi-media experience to an audience.
 - D To give a good delivery of information to an audience.
36. Which of the following gives correct phases of program compilation?
- A Syntax analysis and compilation.
 - B Lexical analysis and interpretation.
 - C Syntax analysis and code generation.
 - D Code generation and documentation.
37. Which of the following is NOT true of recursive functions in program development?
- A A recursive function always calls itself directly.
 - B A recursive function may call itself indirectly.
 - C Recursive function calls use internal stack structures.
 - D Recursive function calls use more memory space than equivalent iterative functions.
38. Establishing how a system may be structured and built is known as:
- A System analysis.
 - B System design.
 - C System prototyping.
 - D System implementation.
39. Which of the following is NOT desirable in algorithms for parallel tasks?
- A Concurrency.
 - B Non-determinism.
 - C Synchronization.
 - D Deadlock.
40. Which of the following normally has an embedded system?
- A Inventory control system.
 - B A stock control system.
 - C A microwave oven.
 - D A payroll system.
41. Which of the following is NOT a mechanism that could be used in detecting or preventing computer crime?
- A Encapsulation.
 - B Encryption.
 - C Firewalls.
 - D A payroll system.

42. _____ is the name of a hypermedia file.

- A Filename. FTP
- B Filename. URL
- C Filename. HTML
- D Filename. pdf

43. A tuple in a database is:

- A A field.
- B A record.
- C An entity.
- D A relation.

44. In relational database management systems, what is a relation?

- A A set of attributes.
- B An object.
- C A table.
- D A field.

45. When data found in multiple lists is updated only in some lists, this causes:

- A Data integrity.
- B Double entry.
- C Data redundancy.
- D Data inconsistency.

46. When using the extended ASCII character set, how many bits will be used in storing the word "TECHNOLOGY"?

- A 96
- B 1316
- C 800
- D 80

47. Which one of the following is NOT a sort algorithm?

- A Binary sort.
- B Bubble sort.
- C Insertion sort.
- D quick sort.

48. Which logic gate does the following truth table represent?

A	B	Out put
0	0	1
0	1	0
1	0	0
1	1	0

- A AND
- B NAND
- C XOR
- D NOR

49. The machine instruction cycle is:

- A Fetch – process – decode.
- B Fetch execute – process.
- C Fetch – decode – execute.
- D Fetch – execute – decode.

50. Suppose you have the algorithmic statement:

WHILE ($x > 0$) DO "Instruction" ENDWHILE

If at the beginning variable x is less than zero then:

- A "Instruction" will be done just once.
- B "Instruction" will never be done.
- C "Instruction" will be done forever.
- D "Instruction" will be done exactly x times.