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MINISTRE DES ENSEIGNEMENTS
SECONDAIRES



MINISTRY OF SECONDARY
EDUCATION

CENTRE REGION

CENTRE REGIONAL MOCK EXAMINATION	SUBJECT CODE NUMBER 0796	PAPER NUMBER 1
	INFORMATION AND COMMUNICATION TECHNOLOGY	
CANDIDATE NAME: CANDIDATE NUMBER: CENTRE NUMBER:		
ADVANCED LEVEL	DATE: Monday 25 March 2024	

Time Allowed: 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 eraser for this examination.

1. Use a soft HB pencil throughout the examination
2. Do not open the booklet until you are told to do so.

Before the examination

3. Check that this questions paper is headed 'Advanced Level INFO AND COMMUNICATION TECHNOLOGY P1 796'
4. Insert the information required in the space provided.
5. Without opening the booklet, pull out your answer sheet carefully from inside the front cover of this booklet. Take care that you do not erase or fold the answer sheet or make any mark on it other than those asked for in this instructions.
6. Insert the information required in the space provided on the answer sheet using your HB pencil.

Candidate Name, Centre Number and Name, Candidate Number, Subject Code Number and Paper Number.

7. Answer all the 50 questions in the examination. All question carry equal marks.
8. Non-programmable calculators are allowed.
9. 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 sheet and draw a horizontal line across the letter to join the square brackets for the answer you have chosen. For example if B is your correct answer, mark as shown below:
[A] ☒ [C] [D]
10. 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 that mark carefully, then mark your new answer.
11. Avoid spending too much time on any one question. You can come to these questions later.
12. Do all rough work in this booklet, using where necessary, and the blank spaces in the question booklet.
13. Mobile phones are not allowed in the examination room.
14. 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.

1. Which of the following is an example of a computer crime?

- a) Using social media
- b) Writing a computer program
- c) Unauthorized access to a computer system
- d) Installing antivirus software

2. Which type of software is responsible for controlling and managing hardware resources in a computer system?

- a) Application software
- b) System software
- c) Utility software
- d) Middleware

3. What is the primary purpose of a Database Management System (DBMS) in an information system?

- a) Manage hardware components
- b) Facilitate communication between users
- c) Organize and retrieve data
- d) Provide security features

4. Which type of information system is designed to support the day-to-day operational activities of an organization?

- a) Decision Support System (DSS)
- b) Executive Information System (EIS)
- c) Transaction Processing System (TPS)
- d) Management Information System (MIS)

5. What is identity theft in the context of computer crime?

- a) Stealing physical identification cards
- b) Using someone else's identity to commit fraud or other crimes
- c) Changing one's online username
- d) Hacking into government databases

6. What is the term for the process of converting plaintext into unreadable gibberish to secure information during transmission?

- a) Authentication
- b) Encryption
- c) Decryption
- d) Intrusion detection

7. What is the purpose of the Internet Protocol (IP) in computer networking?

- a) Ensuring reliable data transmission
- b) Establishing secure connections
- c) Assigning unique addresses to devices on a network
- d) Managing network hardware

8. What is the term for a unique address assigned to a web page or resource on the Internet?

- a) IP address
- b) DNS address
- c) URL (Uniform Resource Locator)
- d) MAC address

9. What is the function of the BIOS (Basic Input/Output System) in a computer system?

- a) Renders graphics and images
- b) Manages network protocols
- c) Boots the operating system and provides low-level system control
- d) Executes application software

10. What is the purpose of the CPU cache in a computer system?

- a) Stores frequently accessed data for faster processing
- b) Manages network connections
- c) Provides power to the CPU
- d) Executes instructions

11. What does the term "bandwidth" refer to in the context of data communication?

- a) The width of a data cable
- b) The speed of data transmission
- c) The size of data files
- d) The distance between devices

12. What is the purpose of the MAC address in data communication?

- a) Identifying devices on a network
- b) Transmitting data between devices
- c) Assigning IP addresses
- d) Encrypting data transmissions

13. What is the defining characteristic of fifth-generation computers?

- a) Use of vacuum tubes
- b) Artificial intelligence and natural language processing
- c) Introduction of microprocessors
- d) Integration of transistors

14. The concept of a stored-program computer, where instructions and data are stored in the same memory, was introduced by:

- a) Alan Turing
- b) Charles Babbage
- c) John von Neumann
- d) Ada Lovelace

15. What significant advancement in computing occurred in the 2000s, allowing for massive parallel processing and advancements in artificial intelligence?

- a) Quantum computing
- b) Cloud computing
- c) Neural networks
- d) Blockchain technology

16. Which of the following scheduling strategies aims to minimize the turnaround time?

- a) First-Come, First-Served (FCFS)
- b) Shortest Job Next (SJN) or Shortest Job First (SJF)
- c) Round Robin (RR)
- d) Priority Scheduling

17. What is the primary goal of speaker identification in speech recognition systems?

- a) Converting speech into text
- b) Recognizing the language being spoken
- c) Identifying the speaker's voice
- d) Analyzing background noise

18. Which factor is known to challenge the accuracy of speech recognition systems the most?

- a) Inconsistent pronunciation
- b) Background noise
- c) Monotone speech
- d) Limited vocabulary

19. What is the primary function of a Magnetic Stripe Reader as an automatic input device?

- a) Capturing images
- b) Reading and processing barcodes
- c) Scanning fingerprints
- d) Reading data encoded on magnetic stripes

20. Which unit is used to measure the frequency of electronic signals, such as the clock speed of a processor?

- a) Hertz (Hz)
- b) Byte (B)
- c) Kilogram (kg)
- d) Ampere (A)

21. In the context of simulation, what is the purpose of computer modeling?

- a) Generating 3D graphics for video games
- b) Representing real-world systems using mathematical equations
- c) Programming virtual reality environments
- d) Designing computer hardware components

22. Which type of storage is characterized by its fast data access times but is volatile and loses data when power is turned off?

- a) SSD (Solid State Drive)
- b) HDD (Hard Disk Drive)
- c) RAM (Random Access Memory)
- d) DVD (Digital Versatile Disc)

23. What is the primary disadvantage of magnetic tape storage compared to other storage technologies?

- a) High cost
- b) Slow access times
- c) Limited storage capacity
- d) Vulnerability to magnetic fields

24. What is the purpose of analyzing the time complexity of an algorithm?

- a) To determine the number of instructions in the algorithm
- b) To estimate the running time of the algorithm as a function of input size
- c) To evaluate the quality of the algorithm's code
- d) To check for syntax errors in the algorithm

25. What is a SQL query used for in the context of databases?

- a) Managing database transactions
- b) Designing database schemas
- c) Retrieving and manipulating data in a database
- d) Connecting to external databases

26. In the Entity-Relationship (ER) model, what does an entity represent?

- a) A database table
- b) A database query
- c) A user interface element
- d) A real-world object or concept

27. Which of the following is a correct way to declare a variable in C?

- a) `variable = 10;`
- b) `int variable = 10;`
- c) `variable := 10;`
- d) `int 10 = variable;`

28. What is the purpose of the "return" statement in a C function?

- a) To terminate the program
- b) To print a value to the console
- c) To return a value from the function
- d) To declare a variable

29. What does the "scanf" function do in C programming?

- a) Prints output to the console
- b) Reads input from the user
- c) Performs mathematical calculations
- d) Declares variables

30. Which of the following is a primitive data type in most programming languages?

- a) Array
- b) Class
- c) Integer
- d) Function

31. Which data type is commonly used to store textual data in programming?

- a) Integer
- b) Char
- c) String
- d) Boolean

32. What is the primary purpose of defragmenting a hard drive?

- a) Removing viruses
- b) Organizing files and improving access speed
- c) Upgrading hardware components
- d) Installing new software

33. What is the purpose of running disk cleanup tools as part of computer maintenance?

- a) Removing unused files and temporary data
- b) Installing new operating systems
- c) Adjusting display settings
- d) Upgrading RAM capacity

34. Which data capture method involves the use of sensors to detect and record physical events?

- a) Barcode scanning
- b) Magnetic stripe reading
- c) Video surveillance
- d) Keypunching

35. What is the primary advantage of automatic data capture methods over manual data entry?

- a) Lower cost
- b) Increased accuracy and speed
- c) Reduced need for training
- d) Enhanced creativity in data input

36. What is the primary goal of the "Maintenance" phase in the SDLC?

- a) Developing new software features
- b) Enhancing system performance
- c) Identifying project goals and scope
- d) Ensuring the ongoing health and usability of the system

37. What is prototyping in the context of the SDLC?

- a) Creating a small-scale model of the final system to gather feedback
- b) Writing the final code for the software
- c) Conducting performance testing on the system
- d) Designing user interfaces

38. What is the purpose of the HTML <head> element?

- a) Defining the main content of the web page
- b) Including metadata, links, and scripts
- c) Creating hyperlinks
- d) Styling the web page

39. Which attribute is used in the tag to specify the source (URL) of an image?

- a) alt
- b) src
- c) imgsrc
- d) url

40. Which data representation format is commonly used for transmitting multimedia over the internet?

- a) JPEG
- b) ASCII
- c) XML
- d) PDF

41. What is ASCII used for in data representation?

- a) Representing images
- b) Encoding characters as numerical values
- c) Creating 3D models
- d) Compressing data files

42. What is the output of an AND gate if both inputs are 1 (HIGH)?

- a) 0 (LOW)
- b) 1 (HIGH)
- c) Depends on other factors
- d) Undefined

43. What is the purpose of a XOR gate in digital circuits?

- a) Performing addition
- b) Performing subtraction
- c) Implementing multiplication
- d) Performing exclusive OR operation

44. What is the project scope in project management?

- a) The timeline for the project
- b) The budget of the project

- c) The detailed description of what the project will deliver
- d) The project team members

45. What is the triple constraint in project management?

- a) Time, cost, and quality
- b) Scope, risk, and resources
- c) Stakeholders, communication, and planning
- d) Budget, schedule, and team

46. What is the binary representation of the decimal number 25?

- a) 11001
- b) 10101
- c) 11111
- d) 10001

47. How many bits are in a nibble?

- a) 4
- b) 8
- c) 16
- d) 32

48. What is the hexadecimal equivalent of the binary number 110110?

- a) 5A
- b) 36
- c) D6
- d) 1B

49. Which feature allows you to apply a consistent look and feel to a PowerPoint presentation?

- a) Themes
- b) Animations
- c) Slide transitions
- d) SmartArt

50. What does the term "WYSIWYG" stand for in the context of word processing?

- a) What You See Is What You Get
- b) Words Yield Success in Writing Yearly Goals
- c) Writing Your Story with Important Graphics
- d) Word Your Sentences Intelligently, With Graphics