|  |  |
| --- | --- |
| QN=1 | In the Von Neumann architecture, what is the purpose of the "accumulator"? |
| a. | It stores intermediate results during computation. |
| b. | It manages memory allocation for running processes. |
| c. | It controls the flow of instructions within the CPU. |
| d. | It handles input and output operations simultaneously. |
| e. |  |
| f. |  |
| ANSWER: | A |
| MARK: | 2 |
| UNIT: | 1 |
| LO: | CLO1 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=2 | What is the role of the Control Unit in the Von Neumann model? |
| a. | It performs arithmetic and logical operations. |
| b. | It manages the flow of data between the CPU and the memory. |
| c. | It stores temporary data for quick access. |
| d. | It handles input and output operations. |
| e. |  |
| f. |  |
| ANSWER: | B |
| MARK: | 1 |
| UNIT: | 1 |
| LO: | CLO1 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=3 | Which term describes the phenomenon where the speed of a computer's memory access lags behind the speed of the CPU, in the Von Neumann architecture? |
| a. | Memory bottleneck |
| b. | Turing latency |
| c. | Von Neumann lag |
| d. | Processing gap |
| e. |  |
| f. |  |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | 1 |
| LO: | CLO1 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=4 | In the Von Neumann architecture, what role does the "instruction register" play during the fetch-execute cycle? |
| a. | It stores the result of arithmetic and logical operations. |
| b. | It holds the memory address of the next instruction to be executed. |
| c. | It manages the interrupts from external devices. |
| d. | It controls the clock cycle of the CPU. |
| e. |  |
| f. |  |
| ANSWER: | B |
| MARK: | 2 |
| UNIT: | 1 |
| LO: | CLO1 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=5 | In which computer generation did the concept of microprogramming and cache memory become prominent? |
| a. | First Generation |
| b. | Second Generation |
| c. | Third Generation |
| d. | Fourth Generation |
| e. |  |
| f. |  |
| ANSWER: | C |
| MARK: | 1 |
| UNIT: | 1 |
| LO: | CLO1 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=6 | What is the decimal equivalent of the binary number 11011011.01? |
| a. | 219 |
| b. | 219.75 |
| c. | 219.5 |
| d. | 219.25 |
| e. |  |
| f. |  |
| ANSWER: | D |
| MARK: | 1 |
| UNIT: | 2 |
| LO: | CLO2 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=7 | What is the octal representation of the decimal fraction 0.625? |
| a. | 0.5 |
| b. | 0.75 |
| c. | 0.6 |
| d. | 0.47 |
| e. |  |
| f. |  |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | 2 |
| LO: | CLO2 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=8 | Convert the hexadecimal number A3C7 to its binary equivalent. |
| a. | 1010001111000111 |
| b. | 11001011110001 |
| c. | 10100111000111 |
| d. | 11100011111001 |
| e. |  |
| f. |  |
| ANSWER: | A |
| MARK: | 2 |
| UNIT: | 2 |
| LO: | CLO2 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=9 | If a hexadecimal number is 2F6A, what is its octal equivalent? |
| a. | 21752 |
| b. | 10732 |
| c. | 27552 |
| d. | 52732 |
| e. |  |
| f. |  |
| ANSWER: | C |
| MARK: | 2 |
| UNIT: | 2 |
| LO: | CLO2 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=10 | When a real number is stored in a computer, which representation provides the highest precision? |
| a. | Fixed-point |
| b. | Floating-point |
| c. | Binary-coded decimal (BCD) |
| d. | Gray code |
| e. |  |
| f. |  |
| ANSWER: | B |
| MARK: | 1 |
| UNIT: | 3 |
| LO: | CLO3 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=11 | In ASCII, what is the decimal code for the non-printable character ‘backspace’? |
| a. | 7 |
| b. | 8 |
| c. | 13 |
| d. | 27 |
| e. |  |
| f. |  |
| ANSWER: | B |
| MARK: | 1 |
| UNIT: | 3 |
| LO: | CLO3 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=12 | Which audio file format is specifically designed for high-resolution audio and can support bit depths up to 32 bits? |
| a. | MP3 |
| b. | WAV |
| c. | FLAC |
| d. | OGG |
| e. |  |
| f. |  |
| ANSWER: | B |
| MARK: | 1 |
| UNIT: | 3 |
| LO: | CLO3 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=13 | Which color space is commonly used for image compression and transmission on the internet? |
| a. | RGB |
| b. | CMYK |
| c. | HSV |
| d. | YCbCr |
| e. |  |
| f. |  |
| ANSWER: | D |
| MARK: | 1 |
| UNIT: | 3 |
| LO: | CLO3 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=14 | In Boolean algebra, what is the result of the “exclusive OR” (XOR) operation between the binary numbers 10101101 and 11011010? |
| a. | 01110111 |
| b. | 00100111 |
| c. | 11110111 |
| d. | 10011100 |
| e. |  |
| f. |  |
| ANSWER: | A |
| MARK: | 2 |
| UNIT: | 3 |
| LO: | CLO3 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=15 | What is the purpose of the "Carry flag" in computer arithmetic? |
| a. | To indicate an overflow in signed integer addition |
| b. | To signal the need for rounding in floating-point operations |
| c. | To track the sign of the result in subtraction |
| d. | To store the most significant bit of the result |
| e. |  |
| f. |  |
| ANSWER: | A |
| MARK: | 2 |
| UNIT: | 3 |
| LO: | CLO3 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=16 | In the OSI model, which layer is responsible for providing encryption and decryption services for data security? |
| a. | Transport Layer (Layer 4) |
| b. | Presentation Layer (Layer 6) |
| c. | Application Layer (Layer 7) |
| d. | Network Layer (Layer 3) |
| e. |  |
| f. |  |
| ANSWER: | B |
| MARK: | 1 |
| UNIT: | 6 |
| LO: | CLO4 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=17 | Within the OSI model, where does the MultiProtocol Label Switching (MPLS) technology primarily operate? |
| a. | Data Link Layer (Layer 2) |
| b. | Network Layer (Layer 3) |
| c. | Transport Layer (Layer 4) |
| d. | Session Layer (Layer 5) |
| e. |  |
| f. |  |
| ANSWER: | B |
| MARK: | 1 |
| UNIT: | 6 |
| LO: | CLO4 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=18 | What is the primary function of the "scheduler" in an operating system? |
| a. | To allocate CPU time to processes |
| b. | To manage memory resources |
| c. | To handle file input and output |
| d. | To control access to peripheral devices |
| e. |  |
| f. |  |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | 7 |
| LO: | CLO5 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: |  |
| EDITOR: |  |
| REFERENCE: |  |

|  |  |
| --- | --- |
| QN=19 | Which operating system played a crucial role in the development of personal computing and introduced concepts like the graphical user interface (GUI)? |
| a. | MS-DOS |
| b. | Windows 3.1 |
| c. | Macintosh System Software |
| d. | AmigaOS |
| e. |  |
| f. |  |
| ANSWER: | C |
| MARK: | 1 |
| UNIT: | 7 |
| LO: | CLO5 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=20 | When representing an algorithm using a flowchart, what does a diamond-shaped symbol typically represent? |
| a. | Start or end of the algorithm |
| b. | Input or output operation |
| c. | Decision or conditional statement |
| d. | Process or computation step |
| e. |  |
| f. |  |
| ANSWER: | C |
| MARK: | 0.5 |
| UNIT: | 8 |
| LO: | CLO6 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=21 | In algorithm analysis, what is the purpose of the "Big-O" notation? |
| a. | To represent the worst-case time complexity of an algorithm |
| b. | To denote the average-case performance of an algorithm |
| c. | To specify the best-case scenario for an algorithm |
| d. | To indicate the space complexity of an algorithm |
| e. |  |
| f. |  |
| ANSWER: | A |
| MARK: | 2 |
| UNIT: | 8 |
| LO: | CLO6 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=22 | If a binary search is performed on a sorted array with 15 elements, how many iterations are needed in the worst-case scenario to find the target element? |
| a. | 4 |
| b. | 15 |
| c. | 7 |
| d. | 3 |
| e. |  |
| f. |  |
| ANSWER: | A |
| MARK: | 0.5 |
| UNIT: | 8 |
| LO: | CLO6 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=23 | In Bubble Sort, what is the purpose of each pass through the array? |
| a. | To find the minimum element |
| b. | To move the largest element to its correct position |
| c. | To compare adjacent elements and swap them if necessary |
| d. | To divide the array into smaller subarrays |
| e. |  |
| f. |  |
| ANSWER: | C |
| MARK: | 2 |
| UNIT: | 8 |
| LO: | CLO6 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=24 | Which concept in OOP allows a class to have multiple methods with the same name but different parameter lists? |
| a. | Inheritance |
| b. | Polymorphism |
| c. | Encapsulation |
| d. | Abstraction |
| e. |  |
| f. |  |
| ANSWER: | B |
| MARK: | 1 |
| UNIT: | 9 |
| LO: | CLO7 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=25 | In OOP, what is the purpose of the "super" keyword? |
| a. | To reference the superclass of a subclass |
| b. | To invoke a static method |
| c. | To specify the access modifier |
| d. | To initialize a static variable |
| e. |  |
| f. |  |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | 9 |
| LO: | CLO7 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=26 | In the context of software engineering, what does the term "SDLC" stand for? |
| a. | Software Development and Lifecycle |
| b. | System Design and Logic Construction |
| c. | Software Development Lifecycle |
| d. | System Deployment and Licensing |
| e. |  |
| f. |  |
| ANSWER: | C |
| MARK: | 1 |
| UNIT: | 10 |
| LO: | CLO8 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=27 | In the context of software engineering, what is the purpose of version control systems like Git? |
| a. | To manage project finances |
| b. | To track changes in source code and coordinate work among multiple developers |
| c. | To optimize database queries |
| d. | To automate software testing |
| e. |  |
| f. |  |
| ANSWER: | B |
| MARK: | 0.5 |
| UNIT: | 10 |
| LO: | CLO8 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=28 | Which software development methodology prioritizes customer satisfaction through continuous delivery and collaboration? |
| a. | Scrum |
| b. | Waterfall |
| c. | RAD (Rapid Application Development) |
| d. | Spiral |
| e. |  |
| f. |  |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | 10 |
| LO: | CLO8 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=29 | During requirements analysis, what is the purpose of constructing use case diagrams? |
| a. | To represent the flow of control in the system |
| b. | To illustrate the relationships among classes |
| c. | To capture interactions between actors and the system |
| d. | To depict the deployment of software components |
| e. |  |
| f. |  |
| ANSWER: | C |
| MARK: | 2 |
| UNIT: | 10 |
| LO: | CLO8 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=30 | What type of testing involves assessing the behavior of a system or component without knowing the internal details of its implementation? |
| a. | White-box testing |
| b. | Black-box testing |
| c. | Grey-box testing |
| d. | Alpha testing |
| e. |  |
| f. |  |
| ANSWER: | B |
| MARK: | 1 |
| UNIT: | 10 |
| LO: | CLO8 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=31 | In a doubly linked list, what is the purpose of having both a "next" pointer and a "previous" pointer in each node? |
| a. | To enable traversal in both directions |
| b. | To improve insertion time complexity |
| c. | To allow for circular linking |
| d. | To reduce memory overhead |
| e. |  |
| f. |  |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | 11 |
| LO: | CLO9 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=32 | What is the time complexity for inserting an element at the end of a singly linked list with n nodes? |
| a. | O(1) |
| b. | O(n) |
| c. | O(log n) |
| d. | O(n^2) |
| e. |  |
| f. |  |
| ANSWER: | B |
| MARK: | 2 |
| UNIT: | 11 |
| LO: | CLO9 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=33 | In a binary tree, what is the term for a node that has no children? |
| a. | Leaf node |
| b. | Root node |
| c. | Internal node |
| d. | Subtree node |
| e. |  |
| f. |  |
| ANSWER: | A |
| MARK: | 0.5 |
| UNIT: | 12 |
| LO: | CLO9 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=34 | In the context of indexed files, what is the purpose of a primary index? |
| a. | To provide a unique identifier for each record |
| b. | To speed up retrieval of records based on a non-key field |
| c. | To maintain the physical order of records in the file |
| d. | To facilitate efficient searching and retrieval of records |
| e. |  |
| f. |  |
| ANSWER: | D |
| MARK: | 0.5 |
| UNIT: | 13 |
| LO: | CLO10 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=35 | In a hashed file, what is the purpose of a hash function? |
| a. | To generate a random sequence of characters for each record |
| b. | To convert the record key into a fixed-size hash code |
| c. | To encrypt the contents of the file for security |
| d. | To determine the physical location of each record on disk |
| e. |  |
| f. |  |
| ANSWER: | B |
| MARK: | 0.5 |
| UNIT: | 13 |
| LO: | CLO10 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=36 | In the context of database transactions, what is the significance of the "ACID" properties? |
| a. | To ensure data confidentiality and security |
| b. | To facilitate distributed database management |
| c. | To guarantee the reliability and consistency of transactions |
| d. | To optimize database query performance |
| e. |  |
| f. |  |
| ANSWER: | C |
| MARK: | 1 |
| UNIT: | 14 |
| LO: | CLO11 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=37 | In an entity-relationship diagram (ERD), what does a diamond shape represent? |
| a. | An attribute |
| b. | A relationship between/among entities |
| c. | A primary key |
| d. | A weak entity |
| e. |  |
| f. |  |
| ANSWER: | B |
| MARK: | 2 |
| UNIT: | 14 |
| LO: | CLO11 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=38 | What is a foreign key in a relational database? |
| a. | A key used for indexing purposes |
| b. | A field that can be null in a database table |
| c. | A key used to link tables together |
| d. | A unique identifier for each record in a table |
| e. |  |
| f. |  |
| ANSWER: | C |
| MARK: | 1 |
| UNIT: | 14 |
| LO: | CLO11 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=39 | What is the purpose of normalization in a relational database? |
| a. | To increase redundancy in data |
| b. | To decrease data integrity |
| c. | To organize data to minimize redundancy and anomalies |
| d. | To speed up query performance |
| e. |  |
| f. |  |
| ANSWER: | C |
| MARK: | 1 |
| UNIT: | 14 |
| LO: | CLO11 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=40 | What is the primary goal of the security principle known as "Confidentiality"? |
| a. | Ensuring that data is accurate and reliable |
| b. | Preventing unauthorized access to sensitive information |
| c. | Detecting and responding to security incidents |
| d. | Ensuring that data is available when needed |
| e. |  |
| f. |  |
| ANSWER: | B |
| MARK: | 1 |
| UNIT: | 16 |
| LO: | CLO12 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=41 | In the context of security, what does the term "Non-Repudiation" mean? |
| a. | Ensuring that data is accurate and reliable |
| b. | Preventing unauthorized access to sensitive information |
| c. | Verifying the identity of individuals or entities involved in a transaction |
| d. | Detecting and responding to security incidents |
| e. |  |
| f. |  |
| ANSWER: | C |
| MARK: | 2 |
| UNIT: | 16 |
| LO: | CLO12 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=42 | In the context of security goals, what does the term "Integrity" refer to? |
| a. | Protecting data from unauthorized disclosure |
| b. | Ensuring that data is accurate, consistent, and unaltered |
| c. | Detecting and responding to security incidents |
| d. | Safeguarding against system failures and disasters |
| e. |  |
| f. |  |
| ANSWER: | B |
| MARK: | 1 |
| UNIT: | 16 |
| LO: | CLO12 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=43 | In an asymmetrical encryption system, which key is kept secret and known only to the owner? |
| a. | Public key |
| b. | Private key |
| c. | Symmetric key |
| d. | Shared key |
| e. |  |
| f. |  |
| ANSWER: | B |
| MARK: | 1 |
| UNIT: | 16 |
| LO: | CLO12 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=44 | What is the purpose of digital signatures in asymmetrical encryption? |
| a. | To encrypt data for secure transmission |
| b. | To verify the authenticity and integrity of a message |
| c. | To generate a symmetric key for efficient encryption |
| d. | To decrypt data for secure reception |
| e. |  |
| f. |  |
| ANSWER: | B |
| MARK: | 1 |
| UNIT: | 16 |
| LO: | CLO12 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=45 | What is the primary goal of "Natural Language Processing" (NLP) in AI? |
| a. | Enabling computers to understand and generate human language |
| b. | Enhancing the speed of data processing in computers |
| c. | Developing machines with emotional intelligence |
| d. | Creating algorithms for visual perception in machines |
| e. |  |
| f. |  |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | 18 |
| LO: | CLO12 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=46 | What does the term "Phreaking" refer to in the context of hacking? |
| a. | Hacking into phone systems to manipulate the phones or make free calls |
| b. | Exploiting vulnerabilities in web servers |
| c. | Creating malware for financial gain |
| d. | Gaining unauthorized access to government databases |
| e. |  |
| f. |  |
| ANSWER: | A |
| MARK: | 2 |
| UNIT: | 16 |
| LO: | CLO12 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=47 | What is the purpose of a "weighted edge" in a graph? |
| a. | It represents the presence or absence of a relationship between vertices. |
| b. | It indicates the direction of the relationship between vertices. |
| c. | It assigns a numerical value to the relationship between vertices. |
| d. | It is used to label vertices in the graph. |
| e. |  |
| f. |  |
| ANSWER: | C |
| MARK: | 1 |
| UNIT: | 12 |
| LO: | CLO9 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=48 | In the context of software design, what is the significance of the "Software Architecture"? |
| a. | It focuses on coding individual functions and procedures. |
| b. | It defines the overall structure and organization of the software system. |
| c. | It is a tool for project management. |
| d. | It involves testing the software against user requirements. |
| e. |  |
| f. |  |
| ANSWER: | B |
| MARK: | 1 |
| UNIT: | 10 |
| LO: | CLO8 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=49 | What is the primary advantage of UDP (User Datagram Protocol) over TCP (Transmission Control Protocol)? |
| a. | UDP provides error checking and correction. |
| b. | UDP is connection-oriented, ensuring reliable data delivery. |
| c. | UDP has lower overhead and is faster for certain applications. |
| d. | UDP is more secure in terms of data transmission. |
| e. |  |
| f. |  |
| ANSWER: | C |
| MARK: | 1 |
| UNIT: | 6 |
| LO: | CLO4 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |

|  |  |
| --- | --- |
| QN=50 | In TCP, what mechanism is used to control the flow of data between the sender and the receiver? |
| a. | Windowing |
| b. | Sliding |
| c. | Routing |
| d. | Congestion avoidance |
| e. |  |
| f. |  |
| ANSWER: | A |
| MARK: | 1 |
| UNIT: | 6 |
| LO: | CLO4 |
| MIX CHOICES: | Yes |
| CREATOR-REVIEWER: | Longnq9 - TraPT4 |
| EDITOR: |  |
| REFERENCE: | Foundations of Computer Science |