Generated Question Paper

Section A: Objective Questions

- **COMPUTER SCIENCE EXAMINATION**
- **INSTRUCTIONS:**
- * This examination consists of 10 multiple-choice questions.
- * Choose the correct answer for each question.
- * Each question carries equal marks.
- * Do not attempt to answer a question if you are not sure of the correct answer.
- * Use a pen or pencil to mark your answer in the space provided.
- **SECTION A**
- **QUESTIONS 1-10**
- **QUESTION 1**

What is the primary function of the CPU's Arithmetic Logic Unit (ALU)?

- a) To store data and instructions
- b) To control the flow of data between components
- c) To perform arithmetic and logical operations
- d) To manage the computer's memory
- **ANSWER:** c) To perform arithmetic and logical operations
- **QUESTION 2**

Which of the following is an example of a non-volatile memory device?

- a) RAM (Random Access Memory)
- b) ROM (Read-Only Memory)
- c) Cache Memory
- d) Virtual Memory
- **ANSWER:** b) ROM (Read-Only Memory)
- **QUESTION 3**

What is the purpose of the section in an HTML document?

- a) To display the document's title
- b) To define the document's metadata
- c) To specify the document's styles
- d) To contain the document's content
- **ANSWER:** b) To define the document's metadata

QUESTION 4

What is the difference between a Hypertext link and an Anchor?

- a) A Hypertext link is used to connect to another web page, while an Anchor is used to create a link within the same web page.
- b) A Hypertext link is used to create a link within the same web page, while an Anchor is used to connect to another web page.
- c) A Hypertext link is used to display an image, while an Anchor is used to create a link to a different web page.
- d) A Hypertext link is used to create a link to a different web page, while an Anchor is used to display an image.
- **ANSWER:** a) A Hypertext link is used to connect to another web page, while an Anchor is used to create a link within the same web page.

QUESTION 5

What is the purpose of encryption in computer security?

- a) To protect against unauthorized access to data
- b) To improve the performance of a computer system
- c) To detect and prevent malware attacks
- d) To create a backup of important data
- **ANSWER:** a) To protect against unauthorized access to data

QUESTION 6

Which of the following is an example of a cybercrime?

- a) Hacking into a secure computer system
- b) Creating a virus to infect other computers
- c) Stealing sensitive information from a database
- d) All of the above
- **ANSWER:** d) All of the above

QUESTION 7

What is the purpose of a Flowchart in programming?

- a) To create a visual representation of an algorithm
- b) To debug a program
- c) To optimize a program's performance
- d) To create a user interface
- **ANSWER:** a) To create a visual representation of an algorithm

QUESTION 8

What is the difference between a Decimal number system and a Binary number system?

- a) A Decimal number system uses 10 digits, while a Binary number system uses 2 digits.
- b) A Decimal number system uses 2 digits, while a Binary number system uses 10 digits.
- c) A Decimal number system is used for arithmetic operations, while a Binary number system is used for logical operations.
- d) A Decimal number system is used for logical operations, while a Binary number system is used for arithmetic operations.
- **ANSWER:** a) A Decimal number system uses 10 digits, while a Binary number system uses 2 digits.

QUESTION 9

What is the purpose of a Protocol in computer networking?

- a) To ensure the secure transfer of data between devices
- b) To manage the flow of data between devices
- c) To provide a common language for communication between devices
- d) To optimize the performance of a network
- **ANSWER:** c) To provide a common language for communication between devices

QUESTION 10

What is the purpose of a Firewall in computer security?

- a) To protect against unauthorized access to a network
- b) To detect and prevent malware attacks
- c) To create a backup of important data
- d) To optimize the performance of a computer system
- **ANSWER:** a) To protect against unauthorized access to a network

Section B: Subjective Questions

COMPUTER SCIENCE SUBJECTIVE QUESTION PAPER
SECTION A: SHORT QUESTIONS
PART 1
1. What is the difference between volatile and non-volatile memory? Explain with an example.
2. Describe the concept of encryption and decryption. How are they used in computer security
3. What is a flowchart? Explain the different types of flowchart symbols and their uses.
4. Define a hyperlink. How is it used in web development?
5. What is the purpose of the head section in an HTML document?
6. Explain the concept of binary number system. How is it used in computer programming?
PART 2
1. What is the difference between a compiler and an interpreter? Explain with an example.
2. Describe the concept of data privacy. How is it ensured in computer systems?
3. What is a network topology? Explain the different types of network topologies.
4. Define a Boolean expression. Explain the different types of Boolean operators.

5. What is the purpose of a database management system? Explain with an example.
6. Explain the concept of cybercrime. How can it be prevented?
PART 3
1. What is the difference between a client-server model and a peer-to-peer model? Explain with an example.
2. Describe the concept of algorithm efficiency. How is it measured?
3. What is the purpose of a firewall in computer security? Explain with an example.
4. Define a protocol. Explain the different types of protocols used in computer networks.
5. Explain the concept of cloud computing. How is it used in modern computing?
6. What is the purpose of a web browser? Explain the different types of web browsers.
SECTION B: LONG QUESTIONS
QUESTION 1
Explain the concept of computer networks. Describe the different types of computer networks and their uses. How do they enable communication between different devices? (16 marks)
QUESTION 2
Describe the concept of database management systems. Explain the different types of database models and their uses. How do they enable efficient data storage and retrieval? (16 marks)

QUESTION 3

Explain the	concept	of computer	security.	Describe	the	different	types	of	security	threats	and	their
prevention m	nethods. I	How can enc	ryption an	nd decrypti	on b	e used to	ensur	e d	ata secu	rity? (16	mar	ks)