

B.Sc. Sem.-1 Examination**DSC-C-111****Computer Science****January-2024****Time : 2-00 Hours]****[Max. Marks : 50**

Q1 Explain the role of the Central Processing Unit (CPU) in a computer system, detailing its primary functions and how it interacts with other essential components to execute instructions. (10)

OR

Q1 Explain the concept of input and output in computer systems. Provide examples of both input and output devices. Discuss the role of device drivers in facilitating communication between the operating system and input/output devices. Finally, describe the importance of buffering in optimizing input/output operations, and provide a real-world scenario where buffering can significantly enhance performance. (10)

Q2 Explain the key differences between the Internet and the World Wide Web, highlighting their respective functions and contributions to the digital landscape. (10)

OR

Q2 Explain the key security considerations in e-commerce transactions, and discuss how businesses can ensure the confidentiality, integrity, and availability of customer data in online transactions. (10)

Q3 Create a simple HTML document for a personal webpage that includes the following elements:

1. A title for the webpage.
2. Heading with your name.
3. Two paragraphs introducing yourself and your interests.
4. An ordered list with three items highlighting your skills.
5. An image of your choice with an appropriate alt attribute.
6. A hyperlink to your favourite website.

Ensure proper HTML structure and use relevant tags for each element. Provide comments to explain the purpose of major sections in your code. Write input in answer sheet with output. (10)

OR

Q3 Create a basic HTML document with the following specifications:

- a. Title the document "My Web Page."
- b. Include a heading with the text "Introduction" using an appropriate heading tag.

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c. Create an unordered list with three items: "HTML," "CSS," and "JavaScript."

d. Insert an image with the source URL "image.jpg" and alt text "My Image."

e. Add a hyperlink with the text "Learn More" that links to "https://example.com."

Ensure your HTML code is properly structured, and your explanations are concise yet comprehensive. (10)

Q4 Explain the concept of CSS specificity and provide an example illustrating how it influences the styling of HTML elements in a webpage. (10)

OR

Q4 Explain the key differences between inline, internal, and external style sheets in CSS. Illustrate each type with a brief example and discuss when it is most appropriate to use each one in web development. (10)

Q5 **Attempt any ten out of twelve.** (10)

- 1) What does CPU stand for in computing?
- 2) Explain the purpose of an operating system.
- 3) Define the term "file extension" in the context of computing.
- 4) Describe the role of input and output devices in a computer.
- 5) Define the term "IP address" and explain its significance online.
- 6) Explain the concept of cookies on the internet.
- 7) What does HTML stand for?
- 8) How do you comment out code in HTML and CSS?
- 9) Name two popular email protocols used for sending and receiving emails.
- 10) What is the purpose of a firewall in the context of internet security?
- 11) What is the function of a computer motherboard?
- 12) Describe the function of a web browser in the context of the internet.

ALL THE BEST