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| **Unit/**  **Question Number** | **Section** | **Question** | **Correct answer** | **Incorrect answer** | **Incorrect answer** | **Incorrect answer** |
| 1/1 | Introduction | Big data is… | …the efficient processing and analyzing of a large amount of data | …the planning of a database for large files | …the handling of websites with an extensive media overhead | …the planning of IT infrastructure for the transmission of large amounts of data |
| 1/2 | 1.1 | The word “internet” is a portmanteau of… | …”Interconnected Network.” | …”Internal Network.” | …”International Network.” | …”Implicit Network.” |
| 1/3 | 1.1 | What is meant by ‘core network’? | the heart of the Internet, which is not accessible to the user. | a particularly fast network structure of an intranet | the entire provider-side internet structure | a specially secured intranet |
| 1/4 | 1.1 | In what form did the internet first appear? | ARPAnet | CERN | MILnet | IEEE 802.11 |
| 1/5 | 1.2 | What does the functionality of a domain name system (DNS) involve? | the assignment of numeric IP addresses to classic alphabetic internet addresses | an allocation platform for domains | a public credit agency for web addresses | a provider system that assigns private IPv4 addresses |
| **Unit/**  **Question Number** | **Section** | **Question** | **Correct answer** | **Incorrect answer** | **Incorrect answer** | **Incorrect answer** |
| 2/1 | 2.1 | What does HTML stand for? | Hypertext Markup Language | Hyper Translation Markup Language | Hyper Transformation Markup Language | Hyper Transformation Mapping Language |
| 2/2 | 2.1 | What is the purpose of HTML? | describing how a web page should be structured | programming logic on a web page | performing the calculations necessary to display a web page | embedding data from a database in a web page |
| 2/3 | 2.1 | What is the primary functionality of a “class” attribute in HTML? | aggregation of HTML elements to simultaneously apply operations to all class elements | structuring a web page for responsive layouts | acting as a styling guideline for the “table” attribute in html | enabling client-side JavaScript calculations |
| 2/4 | 2.2 | What is the purpose of CSS? | describing of the concrete appearance of a web page | implementing of database queries on a web page | performing concrete calculations regarding the appearance of a website | holding data for further processing |
| 2/5 | 2.2 | What are the two parts of a CSS rule? | a selector and a corresponding declaration | an HTML attribute und corresponding ID | a selector and an identifier | a class name and a declaration |
| **Unit/**  **Question Number** | **Section** | **Question** | **Correct answer** | **Incorrect answer** | **Incorrect answer** | **Incorrect answer** |
| 3/1 | 3.1 | What is the primary goal of responsive web design? | the best possible adaptation of the website for different visual output devices | the lowest effort possible when designing a website | the highest possible degree of visual aesthetics for mobile websites | the highest possible controllability of the design by the designers |
| 3/2 | 3.2 | What is the purpose of the “mobile-first” approach? | addressing the mobile design first before tackling the desktop designs of a web page | only taking the resolution of mobile device into account when designing a web page | only develop a mobile web page | redesigning a desktop web page to create a separate mobile web page |
| 3/3 | 3.2 | How should the size of a grid system be defined in responsive web design? | by means of percentages | by means of fixed pixel values | as a static grid system | always as exactly 960 pixels |
| 3/4 | 3.2 | The responsive layout combines the positive features of which layout types? | adaptive and fluid layouts | fixed and adaptive layouts | fixed and fluid layouts | None of the above answers are correct. |
| 3/5 | 3.3 | What is the purpose of media queries? | enabling the switch between different CSS to be assigned to different output devices | integrating pictures into an HTML document by referring to external sources | resizing pictures in a web page by analyzing the corresponding HTML structure | enabling technology to allow client-site calculation procedures |
| **Unit/**  **Question Number** | **Section** | **Question** | **Correct answer** | **Incorrect answer** | **Incorrect answer** | **Incorrect answer** |
| 4/1 | Introduction | What is the core idea behind client-side programming? | Calculations are performed on the user's computer instead of the server itself. | Calculations are performed on a server, but displayed on a user's computer. | Relevant databases are installed on a user's computer. | A web page is executed exclusively on a user's computer. |
| 4/2 | 4.1 | Which essential advantage does client-side programming offer? | a reduced amount of data to be transferred | faster calculation for desired operations | local provision of database systems | locally-run web servers |
| 4/3 | 4.2 | What additional value does JavaScript provide in an HTML document? | It enables dynamic calculations in a web page during runtime. | It enables faster loading of a web page. | It enables irect conversion of a web page into an app. | It enables platform-independent execution of a web page. |
| 4/4 | 4.3 | Which functionality does JSON provide? | the exchange of data across multiple platforms | the development of Java applications | the inclusion of Java in a web page | the extension of a website with logical structures |
| 4/5 | 4.3 | What is an alternative to the platform-independent handling of data? | XML | CSS | jsNode | php |
| **Unit/**  **Question Number** | **Section** | **Question** | **Correct answer** | **Incorrect answer** | **Incorrect answer** | **Incorrect answer** |
| 5/1 | 5.1 | Where can one find concrete specifications for the testing of web applications? | IEEE 829-2008 | restful API standard | in JavaScript frameworks such as NodeJS | only in modern programming editors |
| 5/2 | 5.1 | What is JMeter? | a tool for measuring the performance of a website | a tool to automatically update a web page | a tool to measure the power consumption of a server | an indicator to show the currently installed server platform |
| 5/3 | 5.1 | Who provides a definition for the quality of a software? | DIN ISO standard 9126 | Amazon.com | Google.com | Apple.com |
| 5/4 | 5.2 | What is meant by a demilitarized zone (DMZ)? | a protected computer network located between two networks (e.g., a LAN and the internet) | taking special security precautions to protect the physical IT infrastructure | an authentication tool for accessing particularly sensitive data | an encryption architecture for WLAN networks |
| 5/5 | 5.2 | What does “DOS” stand for? | Denial of Service | Definition of Internet-Standards | Definition of Service | Detection of Sensitivity |
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