# Front-End Design and Development – Marking Guide

01. Which of the following is a front-end programming language?  
Answer: C) HTML  
Marks: 4

02. CSS stands for Cascading Style Sheets.  
Answer: True  
Marks: 4

03. Which of the following is used to structure content on a web page?  
Answer: B) HTML  
Marks: 4

04. JavaScript is mainly used for styling the web page.  
Answer: False  
Marks: 4

05. Which CSS property is used to change the background color of an element?  
Answer: B) background-color  
Marks: 4

06. The <div> tag is used to define an inline element in HTML.  
Answer: False  
Marks: 4

07. Match the front-end technologies/tools to their correct descriptions:  
Answer: 1-B) HTML – Structure  
2-D) CSS – Presentation  
3-C) JavaScript – Interactivity  
4-A) React.js – UI Framework  
Marks: 8

08. What is the primary role of CSS in front-end web development?  
Answer: c. To style and visually format the web page elements  
Marks: 4

09. In front-end development, why is HTML considered as foundational technology?  
Answer: b. Because it defines the structure and content of web pages  
Marks: 4

10. What is the function of the DOM in front-end development?  
Answer: c. It represents the structure of a web page for dynamic interaction  
Marks: 5

11. Which property would you use to horizontally center a div using CSS?  
Answer: B) margin: auto;  
Marks: 5

12. Method to change the text content of an element with id 'title'?  
Answer: D) Both A and B  
Marks: 5

13. CSS media query for screens smaller than 600px?  
Answer: B) @media screen and (max-width: 600px) {}  
Marks: 5

14. CSS rule to hide navigation menu under 768px screen width?  
Answer: A) @media screen and (max-width: 768px) { display: none; }  
Marks: 5

15. What should you do to fix slow page load due to large images?  
Answer: B) Compress or optimize the image files for faster loading  
Marks: 5

16. Why design breaks on larger screens?  
Answer: B) The layout is not flexible or doesn't use relative units  
Marks: 5

17. Button works in some browsers only – most likely cause?  
Answer: B) The button's functionality relies on browser-specific features  
Marks: 5

18. Efficient way to implement theme switching?  
Answer: B) Use CSS @media queries to detect the system's preferred theme  
Marks: 5

19. Best way to optimize JavaScript performance?  
Answer: A) Minimize and bundle JavaScript files  
Marks: 5

20. JavaScript code to validate an email field?  
Answer: B) var email = document.getElementById('email').value;  
var regex = /^[a-zA-Z0-9.\_-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,6}$/;  
if (!regex.test(email)) { alert("Invalid email format!"); }  
Marks: 5

21. First step in setting up a React SPA?  
Answer: B) Create a new React project using create-react-app  
Marks: 5