BOWEN UNIVERSITY IWO, OSUN STATE
COLLEGE OF COMPUTING AND COMMUNICATION STUDIES
COMPUTER SCIENCE PROGRAMME
B. SC. DEGREE FIRST SEMESTER EXAMINATION   SESSION: 2022/2023
COURSE CODE: IFT 309   COURSE TITLE: WEB APPLICATION DEVELOPMENT
COURSE CREDIT: 3   DATE: TIME ALLOWED: 2 HOURS 30 MINUTES
INSTRUCTION: Answer any four questions

Question #1
a) Provide an overview and discussion of the CSS box model. 4marks
b) What are JavaScript variables? 4marks
c) List and elaborate on the five (5) types of positioning methods employed for elements in CSS. 10marks
d) Clarify the concept of the Document Object Model (DOM) and elaborate on its significance in web development. 2marks

Question #2
a) Describe the difference between 'let', 'const', and 'var' in JavaScript.   4marks
b) Provide a tabular format detailing four strengths and weaknesses of HTML. 4mark
c) Provide a concise discussion on the Grid Module and outline the six properties of the Grid Container   6marks
d) Visually represent and discuss the workings of CSS in a diagram. 6marks.

Question #3
a) Elucidate the meanings of the following terms: (i) Hypertext Transfer Protocol (HTTP), (ii) Representational State Transfer (REST), (iii) Uniform Resource Identifier (URI), (iv) Request verbs (HTTP verbs/ HTTP methods), (v) A request header, (vi) A request body, (vii) A response header, (viii) A response body   8marks
b) Elaborate on the significance of HTTPS and its role in enhancing the security of web applications. 2marks
c) Outline and explain the simple rules on how to use HTML5.   4marks
d) Explain Cross-Site Scripting (XSS) and how developers can prevent it. 6marks

Question #4
a) Provide a description and analysis of the FlexBox (Flexible Box) Module. 5marks
b) How do the roles of client-side and server-side scripting in web development differ and overlap?   5marks
c) Explain the two types of display values for HTML elements.   4marks
d) Provide a concise discussion on the Grid Module and outline the six properties of the Grid Container. 6marks

Question #5

a) Illustrate the structure an HTML webpage with an appealing header, user-friendly navigation bar, engaging main content with two paragraphs, and a polished footer. Implement external CSS for styling, including a header background and centered paragraph text.   6marks

b) Identify two Pros and Cons of JavaScript.   4marks

c) Outline and explain the structures of the three locations where style information can be found when utilizing CSS in web application development.   6marks

d) Write a JavaScript function that takes two parameters (a and b) and returns their sum.   4marks

Question #6

a) Justify the need for comments in JavaScript. 5marks

b) Provide an overview and elaborate on the fundamental guidelines for utilizing HTML5. 5marks

c) Elucidate the concept of JavaScript and discuss the various paradigms within JavaScript?   5marks

d) List and elucidate the structures of the three locations where JavaScript code can be inserted.   5marks