KERALA AGRICULTURAL UNIVERSITY
B.Tech.(Agrl. Engg.) 2022 & Previous Admissions
III Semester Final Examination - February 2024

Sacs.2111   **Web Designing and Internet Applications (1+1)**   **Marks: 50**
Time: 2 hours

I   **Answer the following**   **(10x1=10)**
  1.   Which program is used by web clients to view the web pages?
  2.   What is the name of the location address of the hypertext documents?
  3.   What will be the output of the following code snippet?

```
var a = 1;
var b = 0;
while (a <= 3)
{
  a++;
  b += a * 2;
  print(b);
}
```

Fill in the blanks
  4.   Javascript is an …………… language.
  5.   The ……………. attribute is used to identify the values of variables.
State True or False
  6.   WebSockets enable real-time communication between a web page and a server, allowing for bidirectional data exchange.
  7.   The "localStorage" object in JavaScript allows for the persistent storage of key-value pairs in a user's browser.
  8.   JavaScript is a server-side scripting language used for handling client-side interactions and enhancing the user experience on web pages.
  9.   Responsive design ensures that a website looks and functions consistently across different devices and screen sizes.
  10. Cross-site Scripting (XSS) is a database connectivity technique used to link databases with web pages.

II   **Write short notes on ANY FIVE of the following**   **(5x2=10)**
  1.   What is the primary goal of "Responsive Design" in web design?
  2.   How does the use of semantic HTML elements contribute to better adherence to web standards?
  3.   What is the purpose of the "textarea" tag in HTML forms?
  4.   Which HTML tag is used to define the structure of an HTML document and contains metadata?
  5.   Write a one-line JavaScript code snippet that utilizes the **prompt** function to ask the user for their name and assigns the input to a variable named **userName**.
  6.   What is the purpose of connection string in asp.net?
  7.   How does a web page establish a connection with a backend database for dynamic data retrieval?

III   **Answer ANY FIVE of the following.**   **(5x4=20)**
  1.   List out the Components of Web Design?
  2.   What are the primary goals and objectives of the website?
  3.   Write a notes on Five Golden rules of web designing.

4. Design a simple navigation bar using HTML tags. Include at least three navigation links. Apply basic styling to make it visually appealing.
5. How does the global nature of the World Wide Web impact the design considerations for a website?
6. Compare and contrast **for** and **while** loops in JavaScript. When would you prefer using one over the other?
7. How can JavaScript be used to enhance a rollover image? Provide a code snippet illustrating how JavaScript can be employed to create dynamic changes or additional effects during image rollovers.

IV   **Write an essay on ANY ONE of the following**   **(1x10=10)**
1. Enhance the HTML form created earlier by adding JavaScript validation. Validate that the text input is not empty, and at least one checkbox or radio button is selected before submitting the form.
2. Explain the process of establishing a connection between a web page and a database. What are the key components involved in ensuring a secure and efficient connection?

****