Roll No. ------------------

**MCA-21**

**Advanced Web Technology**

(MCA)

6th Semester Examination 2024 (Dec.)

**TIME: 2 Hours Max Marks: 70**

Note: This paper is of Seventy (70) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein.***Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.***

**SECTION – A**

**Long-answer - type questions**

**Note: Section ‘A’ contains Five (05) long-answer-type questions of Nineteen (19) marks each. Learners are required to answer any two (02) questions only. (2×19=38)**

1. Differentiate between physical and logical HTML tags with examples.
2. How can you use external and embedded CSS together in a web page?
3. Write a JavaScript program to calculate the factorial of a number using a loop.
4. What is the significance of DOM in VBScript? How does it handle errors?
5. What are the main features of XML, and how is it different from HTML?

**SECTION – B**

**Short – answer – type questions**

**Note: Section ‘B’ contains eight (08) short- answer type questions of Eight (08) marks each. *Learners are required to answer any Four (04) questions only.* (4×8=32)**

1. Describe the concept of image mapping in HTML. How can it be used to create interactive web pages? Provide a detailed example.
2. Discuss the role of classes and IDs in CSS. Explain how they can be used to style elements selectively and provide examples.
3. What are the advantages of using JavaScript for form validation?
4. What are control structures in VBScript, and how are they utilized?
5. What is the role of XSLT in XML? How does it transform XML data into other formats?
6. How does ASP handle database connectivity? Discuss the steps involved in connecting to a database.
7. What are frames in HTML? Highlight their advantages and disadvantages.
8. What are the differences between <div> and <span> tags in CSS? Why are they used?