



VIT[®]
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act 1956)

School of Computer Science and Engineering

Fall Semester 2023-24

Continuous Assessment Test – II

SLOT C1+TC1

Programme Name & Branch : M.Tech. (Integrated), MIC & MID

Course Name & code: Advances in Web Technologies, MDI3001

Class Number (s): 0104218, 0104217

Faculty Name (s): Dr.Mukku Nisanth Kartheek, Dr.V.Arulkumar

Exam Duration: 90 Min.

Maximum Marks: 50

Q. No.	Question
1.	a) Design and draw a hierarchy for an XML Schema for movies, each movie should include the title, actors, directors, duration, certificate and rating. b) For each element in the hierarchy decide on the element type and relationship. c) Write a DTD file to define the above data type and schema. d) Implement a few instances of the XML above schema. (10 Marks)
2.	Design a webpage for playing a snake game using HTML, CSS, JavaScript and jQuery. In the game of Snake, the player uses the arrow keys to move a "snake" around the board. As the snake finds food, it eats the food, and thereby grows larger. The game ends when the snake either moves off the screen or moves into itself. The goal is to make the snake as large as possible before that happens. (10 Marks)
3.	a) Can a static website serve as a web application and is Google a website or a web application. Justify your answer. (5 Marks) b) Is artificial intelligence useful in Web application(s)? Explain. (5 Marks)
4.	How can you design your website to be a responsive website viewable on multiple devices and screen resolutions? Explain with an example, how you can display different images for different devices. (10 Marks)
5.	You are asked to develop a web application that displays the statistics for various cricketers. Create a JSON file for storing cricketer's data that includes name, age, state, teams and country etc. Use AJAX to asynchronously load the JSON data and dynamically update the DOM based on user interactions. Additionally, incorporate a visually appealing design to present the cricketer's statistics. (10 Marks)