Semester V (B. Tech)

Jaypee University of Engineering & Technology, Guna
T-2(Odd Semester 2023)
21B14CI742 – Full Stack Development

Maximum Duration: 1 Hour 30 Minutes

Maximum Marks: 25

Notes:
1. This question paper has 3 questions.
2. Write relevant answers only.
3. Do not write anything on question paper (Except your Er. No.).

	Marks	**CO No.**
	[10]	**CO3**

Q1. Consider the following JavaScript code:

```javascript
const counter=function () {
  let count=101;
  return function () {
    let ucount=201;
    count++;
    ucount++;
    console.log (count, ucount);
  }
}
let fun=counter ();
fun ();
fun ();
```

What is the expected output when the code is executed? Also explain step by step how the code behaves and how the values of count and ucount change with each invocation of the fun() function.

Q2. Determine whether each of the statements is **true or false** and explain whether it accurately represents JavaScript concepts or if there are any inaccuracies. Support your analysis with detailed justifications by providing JavaScript code. **[10] CO3**

    (i) A const variable in JavaScript can have an 'undefined' value.

    (ii) 'script' tags can be used multiple times in a web page.

    (iii) In JavaScript, variables declared without the 'var', 'let', or 'const' keyword are implicitly assigned to the global scope.

(iv) A callback function is intended to be executed at a later time or under certain conditions.

(v) JavaScript functions are first-class objects.

Q3. Explain the purpose and usage of the HTML5 <article> and [05] <section> tags. How do these elements differ in their roles within a web page structure? Provide examples to illustrate their usage.

CO2