

# P P SAVANI UNIVERSITY

Fourth Semester of B. Tech. Examination

December 2022

SECE2100 Introduction to JavaScript

01.12.2022, Thursday

Time: 01:00 p.m. To 03:30 p.m.

Maximum Marks: 60

## Instructions:

1. The question paper comprises of two sections.
2. Section I and II must be attempted in separate answer sheets.
3. Make suitable assumptions and draw neat figures wherever required.
4. Use of scientific calculator is allowed.

### SECTION - I

|       |  |      |    |     |
|-------|--|------|----|-----|
| Q - 1 | MCQ/Short Question/Fill in the Blanks (Any Five)                                       | [05] | CO | BTL |
| (i)   | What is User defined function in JavaScript?   | 2    | 1  |     |
| (ii)  | What is the use of // in JavaScript?   | 1    | 2  |     |
| (iii) | What is the use of &= in JavaScript?   | 1    | 2  |     |
| (iv)  | List any 5 keyword available in JavaScript.  | 2    | 1  |     |
| (v)   | What is the use of onAbort?  | 2    | 1  |     |
| (vi)  | What is screen object?   | 3    | 1  |     |
| (vii) | Write a JavaScript code to check whether a given number is positive, negative or zero. | 5    | 6  |     |

|           |  |      |   |   |
|-----------|--|------|---|---|
| Q - 2 (a) | Explain String operator and logical operator with suitable example.    | [05] | 2 | 2 |
| Q - 2 (b) | Differentiate between Client-side scripting and Server-side scripting. | [05] | 4 | 4 |

### OR

|           |  |      |   |   |
|-----------|--|------|---|---|
| Q - 2 (a) | Explain variable in JavaScript with suitable example.                                      | [05] | 2 | 2 |
| Q - 2 (b) | Explain importance of Const in JavaScript with example.                                    | [05] | 1 | 2 |
| Q - 3 (a) | Which are the conditional statements in JavaScript? Explain any two with suitable example. | [05] | 1 | 1 |
| Q - 3 (b) | Explain this keyword with in JavaScript with example.                                      | [05] | 1 | 1 |

### OR

|           |  |      |   |   |
|-----------|--|------|---|---|
| Q - 3 (a) | List out data types in JavaScript. Explain any two with suitable example.              | [05] | 2 | 2 |
| Q - 3 (b) | Explain Local variable in function with suitable example.                              | [05] | 2 | 1 |
| Q - 4     | Attempt Any One.   | [05] |   |   |
| (i)       | Define loop. List available loop in JavaScript. Explain any one with suitable example. | 3    | 1 |   |
| (ii)      | Write JavaScript Program to Check whether a given number is Armstrong Number or not.   | 4    | 6 |   |

### SECTION - II

|       |   |      |   |  |
|-------|---|------|---|--|
| Q - 1 | Answer the Following: (MCQ/Short Question/Fill in the Blanks)   | [05] |   |  |
| (i)   | What is the purpose of innertext property?                      | 4    | 1 |  |
| (ii)  | What is the use of console.error?                               | 3    | 1 |  |
| (iii) | Write a JavaScript code to generate alert message in browser.   | 2    | 6 |  |
| (iv)  | What is the use of [^...]?                                      | 2    | 2 |  |
| (v)   | List Window object methods.                                     | 1    | 1 |  |
| (vi)  | What is DOM?  | 3    | 1 |  |
| (vii) | What is the return value of an every( ) in context of an array? | 3    | 2 |  |

|                  |   |             |          |          |
|------------------|---|-------------|----------|----------|
| <b>Q - 2 (a)</b> | What is user defined object? Explain user defined object with suitable example.                     | <b>[05]</b> | <b>2</b> | <b>3</b> |
| <b>Q - 2 (b)</b> | What is BOM? List browser objects. Explain any one browser object.                                  | <b>[05]</b> | <b>2</b> | <b>1</b> |
| <b>OR</b>        |   |             |          |          |
| <b>Q - 2 (a)</b> | List inbuilt object in JavaScript. Brief any two with suitable example.                             | <b>[05]</b> | <b>1</b> | <b>1</b> |
| <b>Q - 2 (b)</b> | List window object property. Explain any two with suitable example.                                 | <b>[05]</b> | <b>1</b> | <b>1</b> |
| <b>Q - 3 (a)</b> | State difference between for loop and foreach loop in context of array in JavaScript.               | <b>[05]</b> | <b>4</b> | <b>4</b> |
| <b>Q - 3 (b)</b> | Explain usage of innerHTML property in context of DOM with suitable example.                        | <b>[05]</b> | <b>5</b> | <b>5</b> |
| <b>OR</b>        |   |             |          |          |
| <b>Q - 3 (a)</b> | State difference between var and const in array with suitable example.                              | <b>[05]</b> | <b>2</b> | <b>4</b> |
| <b>Q - 3 (b)</b> | Which are the methods of document object for finding elements? Brief any two with suitable example. | <b>[05]</b> | <b>2</b> | <b>2</b> |
| <b>Q - 4</b>     | Attempt any one/two.  | <b>[05]</b> |          |          |
| <b>(i)</b>       | Write a JavaScript code to perform sorting on array using compare function.                         |             | <b>3</b> | <b>6</b> |
| <b>(ii)</b>      | Demonstrate properties of an array with suitable example.   |             | <b>2</b> | <b>5</b> |

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CO : Course Outcome Number

BTL : Blooms Taxonomy Level

Level of Bloom's Revised Taxonomy in Assessment

|             |               |           |
|-------------|---------------|-----------|
| 1: Remember | 2: Understand | 3: Apply  |
| 4: Analyze  | 5: Evaluate   | 6: Create |