

END SEMESTER EXAMINATION - MARCH 2026**SEMESTER 6 : INTEGRATED M.Sc. PROGRAMME COMPUTER SCIENCE - DATA SCIENCE****COURSE : 21UP6CRMCP20EL : FULL STACK PROGRAMING TECHNIQUES***(For Regular 2023 Admission and Supplementary 2022/ 2021 Admissions)*

Time : Three Hours

Max. Weightage: 30

PART A**Answer any 8 Questions**

1. List any four methods provided by the JavaScript `math` object.
2. Write the syntax for creating a new MongoDB database.
3. List any two significant differences between 'state' and 'props' in React.
4. List any four reserved words in JavaScript.
5. Name the parameters accepted by the `createElement()` method in React.
6. State the need of specifying `upsert: true` in updating MongoDB collections.
7. State the use of underscore (`_`) in REPL.
8. Differentiate between a tag and an element in HTML.
9. Define REPL in node.js.
10. List any two examples of online HTML editors.

(1 x 8 = 8 Weight)**PART B****Answer any 6 Questions**

11. With an example, explain how HTML contents can be grouped together.
12. With a sample program, explain how lists of lists are rendered in React.
13. With a sample CSS code, explain how font-size and font-style are set.
14. With the syntax and an example, explain `for` loop and `for ... in` loop in JavaScript.
15. With suitable examples, describe the various ways to insert documents into a collection.
16. With an example, define an arrow function in React.
17. With an example, explain how a custom module in node.js can be created and included in another script.
18. Explain how to skip a part of the loop conditionally in JavaScript.

(2 x 6 = 12 Weight)**PART C****Answer any 2 Questions**

19. With a sample program, explain how props are managed using functional components.
20. With an example for each, explain the process of inserting and displaying data in MongoDB from python.
21. Write a JavaScript program to multiply two matrices.
22. Prepare a detailed note on any five HTML tags. Also explain their attributes.

(5 x 2 = 10 Weight)