

**2111040102020002**  
**EXAMINATION MARCH-APRIL 2024**  
**MASTER OF COMPUTER APPLICATION**  
**(SECOND SEMESTER)**  
**FRONT END TECHNOLOGIES (COURSE-202)-LEVEL 2**

[Time: As Per Schedule]

[Max. Marks:70]

**Instructions:**

- 1. Fill up strictly the following details on your answer book**
  - a. Name of the Examination : **MASTER OF COMPUTER APPLICATION (SECOND SEMESTER)**
  - b. Name of the Subject : **FRONT END TECHNOLOGIES (COURSE-202)- LEVEL 2**
  - c. Subject Code No : **2111040102020002**
2. Sketch neat and labelled diagram wherever necessary.
3. Figures to the right indicate full marks of the question.
4. All questions are compulsory.

Seat No:

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Student's Signature

**Q.1 (A) Answer the Following Questions. ( Any 2 ) 10**

1. What is CANVAS in HTML? Explain it in detail.
2. Explore the role of multimedia elements like `<video>` and `<audio>` in HTML5. Discuss the various attributes and options available for embedding video and audio content in web pages and explain how HTML5 multimedia elements have revolutionized online media delivery.
3. What is CSS Flexbox? Explain CSS Flexbox with example.

**(B) Explain JavaScript DOM with example. 4**

**Q.2 Answer the following Questions.( Any 2 ) 14**

1. What is Grid system in Bootstrap? Explain it with few examples.
2. Investigate Bootstrap's support for image styling and responsive image scaling. Describe how you would use Bootstrap's image classes to apply

rounded corners, thumbnail styling, and responsive image resizing to images in a web page.

3. Discuss the concept of responsive utilities in Bootstrap and their role in designing adaptive user interfaces. Explain how you would use Bootstrap's responsive utility classes to control the visibility and alignment of content based on viewport size.

**Q.3 (A) Answer the following Questions. (Any 2) 10**

1. What is Traversing? Explain it with example.
2. Explain JQuery selector in detail with example.
3. Explore the concept of event handling in JQuery and its importance in creating interactive web application. Discuss different event types supported by JQuery, such as click, hover, and submit events, and explain how event delegation can improve performance and code organization. Provide any one example illustrating event handling techniques in JQuery.

**(B) What is Traversing? Explain it with example. 4**

**Q.4 (A) Answer the following Questions. (Any 2) 10**

1. Explain **JSON.stringify ()** method. Provide a code example.
2. How can we retrieve data from webserver using JSON? Explain it with example.
3. List various JSON data types. Explain how you can process JSON arrays giving example.

**(B) Write JavaScript to sort single dimensional array. 4**

**Q.5 (A) Answer the following Questions (Any 2) 10**

1. What is AngularJS Services? Explain any one with example
2. Explain ng-repeat with example.
3. What is a \$scope and root\$scope in AngularJS? Explain it with example.

**(B)** Explain ng-init directive with example.

**4**

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