

Total No. of Printed Pages:02

**B.C.A. Semester - VI
EXAMINATION MAY 2023
Web Frame Works**

[Time:2 Hours]

[Max. Marks:60]

- Instructions:** 1) All question are compulsory.
2) Figure to the **right** indicate full marks.

(5×1=5)

Q.1) A) Answer the following:

- a. What do you understand by full stack JavaScript?
- b. State one use of node.JS REPL.
- c. What is a middleware function?
- d. What is the significance of ngRoute module of AngularJS?
- e. Name the global variable that is used to access the module directory.

(5×1=5)

B) Fill in the blanks:

- a) function specific to Node.js executes JavaScript based on supplied argument.
- b) MongoDB equivalent for a RDBMS table is
- c) is a main entry point of an Express application.
- d) is a premier JavaScript web server?
- e) is a set of rules and instructions for creating models.

Q.2) A) List the components of MEAN stack.

2

B) Write node.JS code snippet to read file contents using a call back function.

3

C) Explain the use of Event Emitters with a suitable example.

5

Q.3) A) List any two features of Mongoose node module.

2

B) Write a note on Node Package Manager.

3

C) Consider the following MongoDB collection: **Product**

5

```
{
  {
    "name": "Redpi 51",
    "type": "Mobile",
    "qty": 20
  }
  {
    "name": "Vio 123",
    "type": "Mobile",
    "qty": 25
  },
  {
    "name": "Earphone",
    "type": "Accessories",
    "qty": 30
  }
}
```

Write MongoDB commands for:

- i) Retrieving documents with 'qty' larger than 25.
- ii) Retrieving product names with type "Mobile".

- Q.4) A) JavaScript is a non-blocking language. Comment. 2
- B) Write code snippet to create a simple mongoose schema and to save a document to the database. 3
- C) Explain the use of AngularJS controllers with an example. 5
- Q.5) A) Name the mechanisms for passing URI parameters. 2
- B) Discuss the calling conventions used in Node.JS programming. 3
- C) Explain the structure of a typical Express Application. 5
- Q.6) A) State any two uses of app.use () method in Express. 2
- B) Write AngularJS code snippet to demonstrate two-way data binding. 3
- C) Write a note on AngularJS directives. 5