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M.C.A. EXAMINATION, 2026

(Fourth Semester)

(From 2021-22 Onwards)

(Re-appear Only)

ANGULAR JS AND NODE JS

Time : 2 *Hours*] [*Maximum Marks :* 40

Before answering the question-paper, candidates must ensure that they have been supplied with correct and complete question-paper. No complaint, in this regard will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. **1** is compulsory. All questions carry equal marks.

(Compulsory Question)

1. (a) State any *two* core features of AngularJS. **2**

(b) What is the purpose of Node Package Manager (NPM) ? **2**

(c) Define the scope in AngularJS. **2**

(d) What do you mean by Event Emitter in Node.js ? **2**

Unit I

2. Explain the MVC architecture in AngularJS with a neat diagram. **8**

3. Discuss the role of directives in AngularJS with examples of ng-model and ng- repeat. **8**

Unit II

4. Explain Dependency Injection in AngularJS. How are services created and used ? **8**

5. Describe Scope life-cycle and inheritance in AngularJS with suitable examples. **8**

Unit III

6. What are Node.js modules ? Explain the difference between core modules and local modules with examples. **8**

7. Discuss the role of Buffers and Streams in Node.js. Give examples of reading and writing files. **8**

Unit IV

8. Explain database connectivity in Node.js using MySQL. Discuss the steps to insert and update records. **8**

9. How can Express framework be used to serve static HTML pages ? Explain with an example. **8**

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