

MCA/D-21**24173****ADVANCED WEB TECHNOLOGY****Paper–MCA–20-35(ii)**

Time Allowed : 3 Hours]

[Maximum Marks : 75

Note : Attempt **five** questions in all. Question No. **1** is compulsory. Attempt other four questions selecting **one** question from each Unit. All questions carry equal marks.

Compulsory Question

1. (a) What is meant by Client-side programming? 5×3=15
- (b) What is the difference between services and controllers?
- (c) How can you install Node.js?
- (d) What is meant by Keywords in a search engine?
- (e) What are the various drawbacks of rigid layout in SEO?

UNIT–I

2. What are the various events and event methods in jQuery? Explain using suitable examples. 15
3. (a) Discuss the various jQuery Ajax methods using suitable examples. 7½
- (b) Explain various ways to detect the browser. 7½

UNIT–II

4. How can you perform end-to-end testing of a Website using AngularJS? Explain in detail. 15
5. What is a Custom directive? How can you create a complete custom directive? Explain by creating a full-scale directive. 15

UNIT–III

6. (a) What are the various ways to connect Node JS with Database? Explain in detail. 7½

(b) How can you create Web servers using Node JS? Explain in brief.

7½

7. What are the various events that can be handled using Node JS? Explain the Node JS event model in detail along with its implementation. 15

UNIT-III

8. Explain the following w.r.t. SEO : 15

(i) Page Rank of Google

(ii) Content Management System

(iii) Cookies.

9. (a) What are the various elements that are to be taken care of while optimizing a Webpage? 7½

(b) What type of problems may arise due to optimization of a Website? Explain. 7½