Anurag University

III-B Tech I-Semester End Examinations, December-2022
Course: Web Programming With MEAN
(Common to AI & AIML)

Time: 3Hours   Max Marks: 60

Section –A (Short Answer type questions)
- **Answer all questions:**   (10 x 2 =20Marks)

1. Differentiate between 2-Tier and multi-Tier web Application Architectures?
2. Give names of various development stages in designing a MEAN Stack Architecture?
3. Define the Routes in Express?
4. What is the necessity of Importing Bootstrap for quick?
5. Pen down any 3 Rules of a REST API?
6. What do you mean by simple Mongoose Schema?
7. Cite any 3 basic Characteristics of Angular SPA?
8. Highlight the importance of Dynamic Front End with Angular?
9. Mention any 3 Angular Applications?
10. Name 2 Authentication issues in Angular App?

Section—B (Essay Answer type questions)
- **Answer all questions:**   (5 x 8 =40 Marks)

11. A) Explain how to design a flexible MEAN Architecture?
                    OR
    B) Analyze the purpose of introducing Node.js, Express, MongoDB and Angular in Full-stack Development?

12. A) Obtain a modified Express Project for MVC?
                                OR
    B) Look into building of Basic Controllers in Express?

13. A) Mechanism behind Reading Data from, Updating Data in, Adding Data to and Deleting Data from MongoDB is needed, in detail.
                                OR
    B) Generate a MongoDB database by using the MongoDB shell?

14. A) How do you build a Modular App using multiple nested components?
                                OR
    B) Illustrate the way of Embedding an Angular Application into Production?

15. A) Clear Description is needed in Creating an Authentication Service?
                                OR
    B) Create the Register and Login Pages in Angular Applications?