

Total No. of Questions : 8]

**PC-1810**

SEAT No. :

[Total No. of Pages : 2

**[6353] - 129**

**TE-(Information Technology Engineering)  
Web Application Development  
(2019 Pattern) (Semester - II) (314453A)**

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) Answer Q1 or Q2 , Q3 or Q4, Q5 or Q6 and Q7 or Q8
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right side indicate full marks.
- 4) Assume Suitable data if necessary.

- Q1)** a) Explain event binding and property binding in angular with example [6]  
b) What is MVC? Explain MVC architecture in detail [6]  
c) Explain any 2 Hooks in React JS with example [6]

**OR**

- Q2)** a) What is TypeScript? Write typescript program which will find maximum and minimum number from array [6]  
b) Compare functional component with class component [6]  
c) What is Pipe? Explain with example [6]

- Q3)** a) What is NoSQL? Explain different features of MongoDB [5]  
b) Write a code using ExpressJS to illustrate the concept of routes [6]  
c) Explain the concept of Event Loop with suitable diagram [6]

**OR**

**P.T.O.**

**Q4)** a) What is API? Explain REST HTTP API's in detail [5]

b) Write code to create collection, display and search data in mongoDB using NodeJS [6]

c) Explain File system module NodeJS. Write program to perform append and delete operation on file [6]

**Q5)** a) List and Explain any 3 widgets in jQuery Mobile [6]

b) What is Mobile-First and Mobile Web? List different Mobile Devices [6]

c) What is navigation? Write code to navigate from one page to another in jQuery Mobile [6]

**OR**

**Q6)** a) Compare jQuery with jQuery Mobile [6]

b) Write jQuery Mobile code to hide button once it is clicked [6]

c) What is content? Write code to create content in JQuery Mobile page [6]

**Q7)** a) Explain working of Elastic Load Balancer in detail [6]

b) What are the different components of VPC? [5]

c) What is elastic beanstalk and how it works? [6]

**OR**

**Q8)** a) What are different AWS Storage types [6]

b) What is cloud computing? Enlist benefits of cloud computing [5]

c) What is elastic beanstalk and how it works? [6]

