

Time: 2½ hrs.

Marks:75

- Note:**
1. All questions are compulsory with internal choice.
 2. Draw neat diagrams wherever necessary.
 3. Figures to the right indicate full marks.

- Q.1 Answer the following (any four) (20)**
- (a) Explain event loop in NodeJs.
 - (b) Explain HTTP module in NodeJs.
 - (c) Explain embedded data model of MongoDB.
 - (d) How to insert document in MongoDB using deleteOne() and deleteMany() function.
 - (e) Explain MongoDB compass.
 - (f) Explain routing in NodeJs
- Q.2 Answer the following (any four) (20)**
- (a) Explain features of AngularJs.
 - (b) Explain data binding in AngularJs.
 - (c) What is controller in AngularJS? Explain with suitable examples.
 - (d) Explain the get() method of REST API in ExpressJs. Give example.
 - (e) Explain following AngularJs directive with examples.
 1. ng-bind
 2. ng-repeat
 - (f) Write a program to create and implement division module using controller in AngularJs.
- Q.3 Answer the following (any four) (20)**
- (a) Explain class getter and setter in dart programming with suitable example.
 - (b) What is widget in flutter? Explain image widget.
 - (c) Explain control structures in dart programming
 - (d) Explain conditional operators of dart programming in detail.
 - (e) Define function in dart programming. How to create function and return expression of function in dart programming
 - (f) Explain layouts in flutter.
- Q.4 Answer the following (any three) (15)**
- (a) Explain following AngularJs directive with examples.
 1. ng-model
 2. ng-show
 - (b) What is middleware function in ExpressJs? Explain with suitable examples.
 - (c) Explain stateful and stateless widgets in flutter.
 - (d) How to update document in MongoDB using updateOne() and updateMany() function.
 - (e) Explain arithmetic operators of dart programming in detail.
 - (f) What is NodeJs? How NodeJs uses asynchronous programming?