



# INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500 043

## COMPUTER SCIENCE AND ENGINEERING

### TUTORIAL QUESTION BANK

<b>Course Name</b>	:	<b>Angular JavaScript</b>
<b>Branch</b>	:	Computer Science and Engineering
<b>Year</b>	:	2018 – 2019
<b>Course Faculty</b>	:	Ms.CH Srividya, Assistant Professor Ms. E Uma Shankari, Assistant Professor Ms. B Ramya Sree, Assistant Professor

### OBJECTIVES

To meet the challenge of ensuring excellence in engineering education, the issue of quality needs to be addressed, debated and taken forward in a systematic manner. Accreditation is the principal means of quality assurance in higher education. The major emphasis of accreditation process is to measure the outcomes of the program that is being accredited.

In line with this, Faculty of Institute of Aeronautical Engineering, Hyderabad has taken a lead in incorporating philosophy of outcome based education in the process of problem solving and career development. So, all students of the institute should understand the depth and approach of course to be taught through this question bank, which will enhance learner's learning process.

S. No.	Questions	Course Learning Outcomes
<b>UNIT-I</b>		
<b>Part-A (Short Answer Questions)</b>		
1	What are HTML tags? How does the tags switch a format on differ from those which switch it off?	Understand
2	What is the need of dynamic web pages?	Remember
3	What is the difference between a static web page and a dynamic web page?	Remember
4	Describe the different ways that styles can be added to a page.	Understand
5	What is dynamic html?	Remember
6	Define functions, arrays and objects in Java script.	Understand
7	Give the use of onload and onclick event with example.	Understand
8	How to Validate data by using javascript.	Remember
9	Explain about different objects in javascript.	Remember
10	Explain about type Selector	Remember
11	How to Group Selectors using CSS.	Understand
12	Explain about Anchor tag with example.	Remember
13	Give the use of onload and onclick event with example	Understand
14	List the different kinds of webpages?	Understand

15	Write a simple program in java script that displays the line of text “Welcome to Java Script Programming”.	Remember
16	Illustrate the difference between div and span tag with example.	Remember
17	What are global variables? How are these variable declared and what are the problems associated with using them.	Remember
18	What is the difference between bgcolor and background attribute in HTML?	Remember
19	What is variable typing?	Remember
20	List the difference between java and Javascript?	Remember
<b>Part –B (Long Answer Questions)</b>		
1.	Develop the code using JavaScript for student information system. Student registration number should not be negative, if that is the case it should display a message using popup window.	Remember
2.	Illustrate concept and properties of CSS with an example.	Understand
3.	Explain the following input components in HTML forms with proper syntax of the corresponding HTML tags. a) Text Input b) Selectable list with multiple selection option c) Radio Buttons.	Remember
4.	Explain how functions can be written in JavaScript with an example	Understand
5.	Explain about Frames with suitable example.	Understand
6.	Explain about the Different ways to apply styles to HTML document by using CSS?	Understand
7.	How to embed JavaScript with HTML page?	Understand
8.	Explain about exception handling in java script.	Remember
9.	Write a Java script program to define a user defined function for sorting the values in an array.	Apply
10.	Explain about Class Selector with Example.	Understand
11.	Design a web page for a library system, page should be in such a way that it should contain all book details- details include fields like Book name, Author name, ISBN and no. of copies available. The web page design should be performed using CSS	Remember
12.	Design and create the page(s) for accepting the values of name and marks in a table then display them in the descending order of the marks.	Remember
13.	Write a java script program to sum the multiple s of 3 and 5 under 1000	Remember
14.	Explain how functions can be written in JavaScript with an example	Understand
15.	Write a javascript code for validating a registration form.	Remember
16.	Explain the objects in javascript?	Understand
17.	Write about Data Validation in javascript about example?	Understand
18.	Create a HTML document for a company home page and explain	Understand
19.	Create a HTML document that contains at least 200 words of text. The text of every starting word in the sentence should be blue, every last word in the sentence should be green and nouns should be yellow.	Understand
20.	Explain in detail about CSS border and CSS outline.	Understand
<b>Part –C (Critical Thinking Questions)</b>		
1.	Write a script that inputs three integers from the user and displays sum, average, product, smallest and largest of these numbers in an alert dialog	Understand
2.	How to apply your own style for HTML document using CSS	Understand
3.	A simple calculator application that takes two numbers and an operator (+, -, *, /, %) from an HTML page and returns the result page with the operation performed on the operands.	Understand

4.	Write a CSS rule that makes all text 1.5 times larger than the base font of the system and colors it green	Understand
5.	Write a script that reads a series of strings and outputs in an HTML TEXTAREA only those strings beginning with the letter "b".	Understand
6.	Write a Javascript code to display the calendar by getting the year from the user	Understand
7.	Explain different String manipulation functions with example code?	Understand
8.	Write a script that calculates the product of the odd integers from 1 to 15 and then outputs HTML text that displays the results.	Understand
9.	Write a javascript to display the denomination of the amount deposited in the bank in terms of 100's, 50's, 20's, 10's, 5's, 2's & 1's. (Eg: If deposited amount is Rs.163, the output should be 1-100's, 1-50's, 1- 10's, 1-2's & 1-1's)	Understand
10.	State the order of evaluation of the operators in the following JavaScript statements and show the value of x after each statement is performed. $X=2\%2+2*2-2/2$ ; $X=(3*9*(3+(9*3/(3))))$ ;	Understand

**Part-A (Short Answer Questions)**

**UNIT-II**

1.	What is Angular JS?	Remember
2.	What is the Template in Angular JS?	Remember
3.	What is the scope in Angular JS?	Remember
4.	What are the advantages of using Angular.js framework?	Remember
5.	List the major browsers Supported by Angular js?	Remember
6.	What is MVC?	Remember
7.	What are the advantages of Angular JS?	Remember
8.	What are the disadvantages of Angular JS?	Remember
9.	Is JavaScript necessary for Angular JS?	Remember
10.	Can I use Angular JS with node js?	Understand
11.	What is data binding?	Remember
12.	What are the services in Angular JS?	Remember
13.	List the Angular JS Directives?	Understand
14.	What are the expressions in Angular JS?	Understand
15.	What is Deep Linking?	Remember
16.	What is MVW?	Remember
17.	List the features of Angular JS?	Remember
18.	What is the purpose of ng-model and ng-bind?	Understand
19.	What is Angular JS Controller?	Remember
20.	What is Angular JS Module?	Understand

**Part –B (Long Answer Questions)**

1.	Explain the architecture of Angular JS.	Remember
2.	Difference between Angular JS and Java Script expressions?	Remember
3.	What are Angular Expressions?	Understand
4.	What are the attributes can be used during creation of a new AngularJS Directives?	Remember
5.	What does SPA (Single Page Application) mean? How can we implement SPA with Angular?	Remember
6.	What is Angular Expression? How do you differentiate between Angular expressions and JavaScript expressions?	Understand
7.	Explain ng-bind directive with Example.	Understand

8.	Write a Sample “hello world” program using Angular JS.	Remember
9.	What are the main features of Angular	Remember
10.	What is difference between angular and Angular JS?	Understand
11.	Explain briefly about Angular JS features?	Remember
12.	Write about Angular JS numbers with example?	Remember
13.	Write about Angular JS strings with example?	Remember
14.	Explain about different types of ng attributes?	Understand
15.	Explain the features of node JS?	Remember
16.	Write about different concepts used in NodeJS with architecture?	Understand
17.	Write the steps used for creating NodeJS application?	Remember
18.	Explain about core features in Angular JS?	Understand
<b>Part –C (Critical Thinking Questions)</b>		
1.	Explain about Angular JS arrays with example?	Understand
2.	Explain about Angular JS objects with example?	Understand
3.	Differentiate Angular JS objects and Javascript Objects in detail?	Remember
4.	Explain about MVC architecture in detail?	Understand
5.	Explain how Angular JS Integrates with HTML?	Understand
6.	What are the steps used for creating Angular JS Application?	Remember
7.	Write about ng-app and ng-init directives with syntax?	Remember
8.	How to create new directives in angular JS?	Remember
9.	Explain about ng-model and ng-bind with syntax?	Remember
10.	How to invoke directives in AngularJS?	Understand
<b>UNIT-III</b>		
<b>Part-A (Short Answer Questions)</b>		
1	How Angular module Works?	Remember
2	Define Ng-repeat Directive.	Understand
3	Define Ng-init Directive .	Remember
4	Define Ng-controller Directive.	Remember
5	Define Ng-app Directive.	Understand
6	Define Ng-model Directive.	Remember
7	Define Ng-bind Directive.	Understand
8	Define Directives In Angular Js.	Remember
9	What Are The Controllers In Angular Js?	Remember
10	Define ng-show and ng-hide.	Remember
11	What is Controller module. Explain with syntax?	Remember
12	What are the different variables used with the ng-repeat directive?	Understand
13	What are Angular Modules?	Remember
14	Explain ng-click directive.	Remember
15	What is \$rootScope? How is it different from the scope?	Understand
16	What does the ng-repeat directive do in Angular JS?	Remember
17	Explain Directive scopes?	Understand
18	Define Ng-app Directive?	Remember

19	Define Ng-repeat directive.	Remember
20	Define Ng-controller directive.	Understand
<b>Part –B (Long Answer Questions)</b>		
1	What are the most common directives used in AngularJS applications?	Remember
2	What does the ng-repeat directive do in Angular JS?	Remember
3	What are different variables used with the ng-repeat directive?	Remember
4	What are Angular Modules?	Remember
5	Can Angular JS have multiple ng-app directives in a single page.	Remember
6	Explain the use of Ng-If, Ng-Switch, And Ng-Repeat directives.	Understand
7	Explain about Controllers with Example.	Understand
8	Create class timetable using Angular JS.	Understand
9	How do you share data between controllers.	Understand
10	Explain Module And Controller In Angular JS.	Understand
11	Explain Module And Controller In Angular JS.	Remember
12	Distinguish between this vs \$scope in Angular JS controllers.	Understand
13	Create class timetable using Angular JS.	Understand
14	Explain ng-show directive with an example.	Remember
15	What are directives? How to create and use custom Directive in AngularJS.	Remember
16	Explain the use of Ng-If, Ng-Switch, And Ng-Repeat directives.	Understand
17	Explain about Controllers with Example.	Understand
18	How to Loop through items returned by a function with ng-repeat?	Understand
19	How to build a Custom directive. Explain with an example?	Understand
20	What is an ng-table directive? Explain with an example.	Remember
<b>Part –C (Critical Section Questions)</b>		
1	How to disable a HTML element using ng-disabled directive.Explain with an example.	Understand
2	How do you hide an HTML element via a button click in AngularJS?	Understand
3	How to find index of an object in array using findindex() method in AngularJS. Explain with an example?	Understand
4	Explain about \$scope object and how to attach properties to the \$scope object.	Understand
5	Write a program to display student info using tables in angularJS?	Understand
6	How to Specify a Controller using ng-Controller Directive. Explain with an Example?	Remember
7	How to attach an object to the \$scope inside controller Directive .Explain with an example?	Remember
8	How to Handle Click event of a Button using ng-Controller .Explain with an example?	Understand
9	Can we use Controller in external files. Explain with an example.	Remember
10	How to Create a Nested Controllers explain with an example?	Understand
<b>UNIT-IV</b>		
<b>Part-A (Short Answer Questions)</b>		
1	What are the Filters in Angular JS?	Remember
2	What is Data Binding in Angular JS?	Remember

3	What is One-Way Data Binding?	Remember
4	What are the binding directives in AngularJS?	Remember
5	List out the components of filters.	Remember
6	State the syntax for currency filter.	Understand
7	State the syntax for Date filter.	Understand
8	What Is Ng-Bind-Template directive in Angular?	Remember
9	What Is Ng-Non-Bindable directive in Angular?	Remember
10	State the syntax for limitTo filter.	Understand
11	State the syntax for OrderBy filter.	Understand
12	Define Filter.	Remember
13	State the syntax for LowerCase filter.	Remember
14	State the syntax for UpperCase filter.	Remember
15	Define a data model with example.	Understand
16	Explain Filter Filter.	Remember
17	What is an \$dirty directive?	Remember
18	What is an \$invalid directive?	Remember
19	What is an \$error directive?	Remember
20	State two-way binding.	Remember
<b>Part –B (Long Answer Questions)</b>		
1	Explain briefly about Currency and Date Filters.	Remember
2	Explain briefly about AngularJS Custom Filters.	Remember
3	How to Filter an array based on user Input?	Remember
4	Explain Uppercase Filter?	Remember
5	Explain data binding in AngularJS.	Understand
6	Explain ng-bind and ng-bind-html directives.	Remember
7	Explain briefly about JSON.	Understand
8	Explain briefly about limitTo, lowercase and number filetrs.	Understand
9	What is the difference between one-way binding and two-way binding?	Understand
10	How to create Angular JS filter which outputs HTML	Understand
11	Explain about one-way data binding in AngularJS.	Understand
12	Explain about Two-way data binding in AngularJS.	Understand
13	How to add filters to directives. Explain with an example.	Remember
14	How are validations implemented in AngularJS?	Understand
15	How To Perform Email Validation In Angular?	Understand
16	How To Perform Pattern Validation In Angular?	Understand
17	How To Perform Minimum & Maximum Field Length Validations In Angular?	Understand
18	How To Perform Mandatory Input Field Validation In Angular.	Understand
19	How To Perform Number Validation In Angular.	Understand
20	How can we add filters to Expressions?	Remember
21	Explain Angular JS for form validation with example?	Understand
<b>Part –C (Critical Section Questions)</b>		
1	Implement Email Validation In Angular with an example.	Understand

2	Implement adding of filters to expressions with an example.	Understand
3	Implement minimum field length validation in Angular with an example.	Understand
4	Implement maximum field length validation In Angular with an example.	Understand
5	Explain about Two-way data binding with an example?	Remember
6	Explain about One-way data binding with an example?	Remember
7	Implement number validation in Angular with an example?	Remember
8	Implement mandatory input field validation in Angular with an example?	Understand
9	Implement pattern validation in Angular with an example?	Understand
10	Explain data binding with an example?	Remember

### UNIT-V

#### Part-A (Short Answer Questions)

1	Explain Ng-click Directive.	Remember
2	Explain Ng-hide Directive.	Remember
3	List out types of validations.	Remember
4	Define ngDbclick in AngularJS.	Remember
5	List out features of DOM.	Understand
6	Define ng-mouseenter.	Remember
7	Define ng-mouseover.	Understand
8	What is Angular's prefixes \$ and \$\$?	Understand
9	Define ng-change.	Understand
10	Define ng-keypress.	Understand
11	Define ng-disabled Directive?	Understand
12	Define ng-show Directive?	Understand
13	List the functionalities of ng-blur, ng-change, ng-click?	Remember
14	List the functionalities of ng-copy, ng-cut, ng-dblclick?	Understand
15	Define \$event Object?	Understand
16	List the functionalities of ng-focus, ng-keydown, ng-keypress, ng-keyup?	Understand
17	List the functionalities of ng-mousemove, ng-mouseover, ng-mouseup, ng-paste?	Understand
18	List the functionalities of ng-mousedown, ng-mouseenter, ng-mouseleave?	Understand
19	Define input elements and select elements	Understand
20	Define button elements and textarea elements	Remember

#### Part -B (Long Answer Questions)

1	How are validations implemented in AngularJS?	Remember
2	Explain how Data type validation can be implemented?	Remember
3	Explain how Required filed validation can be implemented?	Remember
4	Explain how Date validation can be implemented?	Remember
5	Explain how Email validation can be implemented?	Understand
6	How do you hide an HTML element via a button click in AngularJS?	Remember
7	Explain double click event in AngularJS?	Understand
8	How to do email and Phone no. validation in Angular JS?	Understand
9	What is event handling in AngularJS	Understand

10	Explain ngClick And ngDbclick Directives In AngularJS?	Understand
11	How to differentiate the even and odd elements?	Understand
12	List types of mouse events and explain them?	Understand
13	Explain about mouse click events?	Remember
14	Explain about mouse move events?	Understand
15	Differentiate mouse click and mouse move events?	Understand
16	Explain briefly about ng-click Directive in Angular JS?	Understand
17	Explain briefly about \$event object?	Understand
18	Explain briefly about input controls in forms?	Understand
19	List out different CSS classes in Angular JS?	Understand
20	Explain ng-show Directive and ng-disabled Directive?	Remember
<b>Part –C (Critical Thinking Questions)</b>		
1.	Write a sample code to demonstrate mouse click events in Angular JS?	Remember
2.	Write a sample code to demonstrate mouse move events in Angular JS?	Remember
3.	Demonstrate sample code to implement check box, select box and radio buttons in forms?	Remember
4.	Design a sample Angular JS form application?	Remember
5.	What is the client side validation and write a sample code to implement client side validation using forms?	Understand
6.	Explain briefly about custom validation with an example?	Remember
7.	Implement Email validation with an example?	Understand
8.	Implement Date validation with an example?	Understand
9.	Implement Data type validation with an example?	Understand
10.	Implement Required filed validation with an example?	Understand

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