**1 ANS**

**Clousure: Clousure can simply defined as converting a stateless function to a stateful function.Function which returns another function, it is going to be an inner function of the outside function.**

**The inside function will have the accessibility to the variables of outside function.The inside function will maintsin the state between successive functions.**

**Disadvantage of Clouser:**

**When the memory is allocated for a closure,till the script block is completed that memory will not be released.It maintains the state,hence memory would not be cleared.**

**Example:**

**<script>**

**function outerFunction() {**

**let a = 100;**

**return function innerFuntion() {**

**let b = 200;**

**return a + b ;**

**}**

**}**

**Let fun = outerFunction();**

**Console.log(fun);**

**</script>**

**2ANS**

**In Shallow copy, only one memory is assigned to both the reference variables and a copy of the original object is stored and only the reference address is finally copied. Shallow copy can cause data inconsistency.**

**In Deep copy, the copy of the original object and the repetitive copies both are stored,it does not affect the other copy if any changes are made to the original and viceversa. Deep copy makes a copy of all the members of the old object, allocates separate memory location for the new object and then assigns the copied members to the new object.**

**3ANS**

**The destructuring assignment syntax is a JavaScript expression that makes it possible to unpack values from arrays, or properties from objects, into distinct variables.**

**Delete keyword is used to remove properties from an object.**

**Object destructuring allows user to create variables from object property names, and the variable will contain the value of the property name.**

**4ANS**

1. **It reduces a lot of code and makes it more readable.**
2. **The greatest advantage of having contextual “this”, no longer need to “bind” functions any more.**
3. **Most modern browsers support Arrow Functions.**
4. **Common language between front end and back end**
5. **is easier extendable**
6. **is more generic**
7. **Can be used in multiple cases**

**Example**

**const addTwo = num => num + 2**

**5ANS**

**Functions such as map(), filter(), and reduce() are called as Higher order functions, which performs particular tasks.**

**Both map and filter are going to return an array.**

**map():**

**map is going to return every element from an array.If we want to perform an action on every element and return then we use map function.**

**filter() :**

**If we want to return an element based on a particular condition and filter all the elements from a particular condition then we go for filter function.**

**reduce():**

**This function returns a single value from a set of elements in an array.**

**6ANS**

**The event loop is a mechanism that allows JavaScript to perform non-blocking operations. When an asynchronous task is started, the event loop will start running. Once the task is completed, the event loop will again check for any other tasks that need to be performed.**

**7ANS**

**Components are the main building block for Angular applications.**

**Each component consists of:**

* **An HTML template that declares what renders on the page.**
* **A TypeScript class that defines behavior.**
* **A CSS selector that defines how the component is used in a template.**
* **Optionally, CSS styles applied to the template.**

1. **Modules : Modules are aimed for modularity. The module wraps a part of the system and provides a compilation context for components, services, etc. The purpose of a module is to declare each thing you create in Angular and group them together.**
2. **Components: A component is a piece of the screen: visually and logically. Components usually have .js, .html and .css files.  
   HTML gives the structure, CSS (or SCSS) gives the style, and JavaScript (or TypeScript) gives the interactivity.**

**8ANS**

**Minimum Coding Required:**

**It allows the developer to carry forward the development task without having to code much. Thus, lessening the chances of errors in code and boosting the development process.**

**Two-Way Data Binding:**

**The technology offers projection of the models to the application's view, which allows this projection to be seamless while requiring minimal efforts from the developer's end.**

**Easy Testing:**

**The built-in testing tool allows a developer to start from scratch and test each application component without facing any hurdle in the way.**

**Robustness, Platform independent, and multiple browser support are reasons why AngularJS development is better for web development.**

**9ANS**

**A Single page application is a single page that continuously interacts with the user by dynamically rewriting the current page rather than loading entire new pages from a server.**

**Advantages:**

* **The dynamic loading of content on single page web applications creates a natural, fluid user experience, making the applications feel like native desktop or mobile applications.**
* **Quick Loading Time.**
* **Seamless User Experience**
* **Ease in Building Feature-rich Apps.**
* **Uses Less Bandwidth.**
* **Uses a Lot of Browser Resources.**
* **Security Issues.**

**10ANS**

**Data Binding is the important concept of Angular.It Allow us to define the communication between component and view.Data Binding is passed from component to view and from view to the component.**

**String Interpolation:**

**This data binding is one-way in the sense that, the Model’s property can only updated from the Model side and the View is updated or the Model’s variables are kept up to date from the View. The data flow is in one direction either from Model-to-View or View-to-Model. One-way data binding is unidirectional.**

## **Property Data Binding:**

**Interpolation is a special syntax that Angular converts into property binding [pair of square bracket]. It’s alternative to property binding.Property binding is which will help to bind values to the properties of HTML elements.**

## **Event Data Binding:**

**A user expects a UI to respond to her/his actions on the page. Every such action would trigger an event on the page and the page has to respond by listening to these events like clicks, keystrokes, change events, etc.**

## **Two way Data Binding:**

**The combination of property binding and the event binding is called the two way data binding. two-way databinding, automatic synchronization of data happens between the Model and the View.change is reflected in the both components.Whenever changes in the model it will reflected immedietly in the view component.**