### ASP.NET QUESTIONS FOR INTERVIEW

- 1. What is .NET Framework? What are its main components?
- 2. Explain the difference between .NET Framework, .NET Core, and .NET 5.
- 3. What is C#? How does it relate to .NET?
- 4. What are the basic features of C#?
- 5. What is the Common Language Runtime (CLR)?
- 6. What is an assembly in .NET?
- 7. What are namespaces in C#? Why are they used?
- 8. Explain the difference between value types and reference types in C#.
- 9. What is object-oriented programming (OOP)? Explain the four pillars of OOP.
- 10. What is inheritance? How is it implemented in C#?
- 11. What is polymorphism? Explain with examples.
- 12. What is encapsulation? Why is it important in OOP?
- 13. What is abstraction? How is it achieved in C#?
- 14. What are interfaces in C#? How are they different from abstract classes?
- 15. What is a delegate in C#? How is it different from an interface?
- 16. What is a lambda expression in C#? How is it used?
- 17. What is LINQ (Language Integrated Query)?
- 18. What is exception handling in C#? How is it done using try-catch blocks?
- 19. Explain the concept of garbage collection in .NET. How does it work?
- 20. What are the different access modifiers in C#? Explain each one.

# SQL QUESTIONS FOR INTERVIEW

- 1. What is SQL?
- 2. What is a Database Management System (DBMS)?
- 3. What are the different types of SQL commands?
- 4. Explain the difference between SQL, MySQL, and SQL Server.
- 5. What are the basic SQL data types?
- 6. What is a table in SQL?
- 7. How do you create a table in SQL?
- 8. What is a primary key?
- 9. How do you define a primary key in a table?
- 10. What is a foreign key?
- 11. How do you define a foreign key in a table?
- 12. What is a SELECT statement?
- 13. How do you retrieve all records from a table in SQL?
- 14. Explain the WHERE clause in SQL.
- 15. What is the difference between the WHERE and HAVING clauses?

- 16. How do you filter results using the WHERE clause?
- 17. What is the ORDER BY clause used for?
- 18. How do you sort query results in ascending and descending order?
- 19. What is the LIMIT clause used for?
- 20. What is the difference between the DISTINCT and GROUP BY clauses?
- 21. What is an aggregate function in SQL?
- 22. Explain the difference between COUNT, SUM, AVG, MIN, and MAX functions.
- 23. What is a JOIN in SQL?
- 24. Explain different types of joins in SQL (INNER JOIN, LEFT JOIN, RIGHT JOIN, FULL JOIN).
- 25. What is a subquery?
- 26. How do you write a subquery in SQL?
- 27. What is a UNION operator?
- 28. How do you use the UNION operator in SQL?
- 29. What is normalization in databases?
- 30. Explain the concept of ACID properties in database transactions.
- 31. What is a lambda expression in C#? How is it used?
- 32. What is LINQ (Language Integrated Query)?
- 33. What is exception handling in C#? How is it done using try-catch blocks?
- 34. Explain the concept of garbage collection in .NET. How does it work?
- 35. What are the different access modifiers in C#? Explain each one.

### Javacscript QUESTIONS FOR INTERVIEW

- 1. What is JavaScript?
- 2. What are the basic data types in JavaScript?
- 3. How do you declare variables in JavaScript?
- 4. What is the difference between var, let, and const?
- 5. How do you comment in JavaScript?
- 6. What is the difference between == and === operators?
- 7. What is a function in JavaScript? How do you define a function?
- 8. What is the difference between function declarations and function expressions?
- 9. What is scope in JavaScript?
- 10. What is hoisting in JavaScript?
- 11. Explain the concept of closures in JavaScript.
- 12. What are JavaScript callbacks? How are they used?
- 13. What are arrow functions in JavaScript? How do they differ from regular functions?
- 14. What is an array in JavaScript? How do you declare and manipulate arrays?
- 15. What is an object in JavaScript? How do you create and access object properties?
- 16. How do you iterate over arrays and objects in JavaScript?
- 17. What is the DOM (Document Object Model)?

- 18. How do you select elements in the DOM using JavaScript?
- 19. What are events in JavaScript? How do you handle events?
- 20. What is event delegation in JavaScript?
- 21. What is asynchronous programming in JavaScript?
- 22. What are promises in JavaScript? How do you use them?
- 23. What is async/await in JavaScript? How does it work?
- 24. What are closures in JavaScript? Can you give an example?
- 25. Explain the concept of prototypes in JavaScript.
- 26. What is the this keyword in JavaScript? How is it used?
- 27. What are JavaScript modules? How do you export and import modules?
- 28. What are some common methods of string manipulation in JavaScript?
- 29. How do you handle errors in JavaScript?
- 30. What tools and techniques do you use for debugging JavaScript code?

### Angular QUESTIONS FOR INTERVIEW

- 1. What is Angular?
- 2. What are the key features of Angular?
- 3. What is the difference between AngularJS and Angular?
- 4. Explain the architecture of an Angular application.
- 5. What is TypeScript? Why is it used in Angular?
- 6. How do you create a new Angular project using Angular CLI?
- 7. What are components in Angular? How do you create a component?
- 8. Explain the role of templates in Angular.
- 9. What is data binding in Angular? Explain the different types of data binding.
- 10. What are directives in Angular? Explain the difference between structural and attribute directives.
- 11. What is interpolation in Angular?
- 12. What is property binding in Angular?
- 13. What is event binding in Angular?
- 14. What are services in Angular? How do you create a service?
- 15. Explain the concept of dependency injection in Angular.
- 16. What is a module in Angular? Why are modules used?
- 17. What is Angular CLI? How does it help in Angular development?
- 18. What is routing in Angular? How do you implement routing in an Angular application?
- 19. What is lazy loading in Angular routing?
- 20. What are Angular forms? How do you implement template-driven forms and reactive forms?
- 21. What are pipes in Angular? Explain with examples.

- 22. What is Angular Material? How do you use Angular Material components in an Angular application?
- 23. What is Angular HttpClient? How do you make HTTP requests in Angular?
- 24. What is Angular testing? How do you write unit tests and end-to-end tests in Angular?
- 25. What are Angular lifecycle hooks? Explain some commonly used lifecycle hooks.
- 26. Explain the concept of ViewChild and ContentChild in Angular.
- 27. What is Angular Ivy? How does it improve performance in Angular applications?
- 28. What is the difference between nglf and ngShow/ngHide?
- 29. Explain the difference between ngOnInit and constructor in Angular components.
- 30. What are some best practices for Angular development?

# React QUESTIONS FOR INTERVIEW

- 1. What are functional components in React?
- 2. How do you create a functional component in React?
- 3. What are the benefits of using functional components over class components in React?
- 4. Explain the useState() hook in React. How do you use it to manage state in functional components?
- 5. What is the useEffect() hook in React? How do you use it for side effects in functional components?
- 6. What are the rules of hooks in React? Why is it important to follow them?
- 7. Explain the useReducer() hook in React. How is it different from useState()?
- 8. What are custom hooks in React? How do you create and use them?
- 9. Explain the useCallback() hook in React. When and why would you use it?
- 10. What is the useContext() hook in React? How do you use it to consume context in functional components?
- 11. What is useMemo() hook in React? How do you use it to memoize values?
- 12. What is useRef() hook in React? How do you use it to create mutable values that persist across renders?
- 13. Explain the concept of functional programming in React.
- 14. What are pure components in React? How do they relate to functional components?
- 15. How do you handle component lifecycle events in functional components?
- 16. What are the differences between class components and functional components in React in terms of lifecycle methods?
- 17. Explain the concept of higher-order components (HOCs) in React. How do you implement them in functional components?
- 18. What are forward refs in React? How do you use them with functional components?
- 19. What is error boundary in React? How do you implement error boundaries with functional components?

20. How do you handle routing in React with functional components?