

# Course Name: Client Side Scripting Lang. (22519)

## Question Bank

### Unit – I Basics of JavaScript Programming (Marks: 12)

Remember level	Understand level	Apply level
4	4	4

**2 marks**

1. State the features of Javascript
2. Write a javascript program to check whether entered number is prime or not.
3. List & explain datatypes in JavaScript
4. Write a simple calculator program using switch case in JavaScript.
5. Describe property Getters & Setter.
6. List the comparison operators in Java script.
7. Write a Java script to create person object with properties firstname, lastname, age, eyecolor, delete eyecolor property and display remaining properties of person object
8. State the ways to display the output in JavaScript.
9. List the logical operators in JavaScript with description.
10. Write JavaScript to create a object "student" with properties roll number name, branch, year. Delete branch property and display remaining properties of student object.

### Sample paper

11. State the use of dot syntax in JavaScript with the help of suitable example.
12. List and explain Logical operators in JavaScript
13. Give syntax of and explain the use of “with” statement/clause in JavaScript using suitable example.
14. State use of getters and setters
15. Write a JavaScript that displays first 20 even numbers on the document window.

**4 marks**

16. Write a javascript program to validate user accounts for multiple set of user ID and password (using switch case statement).
17. Explain getter and setter properties in Java script with suitable example
18. Write a JavaScript for loop that will iterate from 1 to 15. For each iteration, it will check if the current number is odd or even and display a message to the screen.

Sample Output:

"1 is odd"

"2 is even"

19.

Write a Java script program which computes, the average marks of the following students then, this average is used to determine the corresponding grade.

Student Name	Marks
Sumit	80
Kalpesh	77
Amit	88
Tejas	93
Abhishek	65

The grades are computed as follows :

Range	Grade
<60	E
<70	D
<80	C
<90	B
<100	A

Write a JavaScript that displays first 20 even numbers on the document window.

Differentiate between For-loop and For-in loop.

### Sample paper

20. Write a JavaScript program which compute, the average marks of the following students

Then, this average is used to determine the corresponding grade.

Student Name	Marks
Advait	80
Anay	77
Manyata	88
Saanvi	95
Saachi	68

The grades are computed as follows:

Range	Grade
<60	F
<70	D
<80	C
<90	B
<100	A

21. Write a JavaScript program that will display list of student in ascending order

according to the marks & calculate the average performance of the class.

Student Name	Marks
Amit	70
Sumit	78
Abhishek	71

22. Explain Object creation in JavaScript using 'new' keyword with adding properties and methods with example.

23. Write a program to print sum of even numbers between 1 to 100 using for loop

24. Write a javascript to checks whether a passed string is palindrome or not. **6 Marks.**

## Unit – II Array, Function and String (Marks :14)

Remember level	Understand level	Apply level
2	4	8

**2marks**

1. Write a JavaScript that initializes an array called “Fruits” with names of five fruits. The script then displays the array in a message box.
2. Write a JavaScript function that checks whether a passed string is palindrome or not
3. Write a JavaScript function to count the number of vowels in a given string.
4. Write a function that prompts the user for a color and uses what they select to set the background color of the new webpage opened.
5. Develop JavaScript to convert the given character to Unicode and vice versa.
6. State and explain any two properties of array object
7. Write a JavaScript function to insert a string within a string at a particular position
8. Write a Java script that initializes an array called flowers with the names of 3 flowers. The script then displays array elements.
9. Write Javascript to call function from HTML.
10. Write the use of `charAt()` and `indexOf()` with syntax and example.
11. Write a Java Script code to display 5 elements of array in sorted order.
12. State the use of method in JavaScript with the help of suitable example.
13. Write a program using sort method of array object.
14. Write a JavaScript that initializes an array called Colors with the names of Colors and display the array elements.
15. Explain calling a function with arguments in JavaScript with example.

### **Sample paper**

16. Describe all the tokens of the following statements :
  - i. `document.bgColor`
  - ii. `document.write()`
17. State the use of following methods.
  - i. `charCodeAt()`
  - ii. `fromCharCode()`
18. Differentiate between `prompt()` and `alert()` methods.
19. State and explain any two properties of array object.
20. Write a JavaScript that initializes an array called “Fruits” with names of five fruits. The script then displays the array in a message box.
21. Enlist and explain the use of any two Intrinsic JavaScript functions.
22. Write syntax of and explain `prompt` method in JavaScript with the help of suitable example
23. Write a JavaScript function to insert a string within a string at a particular position

24. Write a JavaScript function that checks whether a passed string is palindrome or not.

**4 marks**

25. Differentiate between concat() and join() methods of array object.

26. Write a javascript program to demonstrate java intrinsic function.

27. Write and explain a string functions for converting string to number and number to string.

28. Differentiate between concat( ) & join( ) methods of array object.

29. Write a JavaScript function to check the first character of a string is uppercase or not.

30. Write a JavaScript function to merge two array & removes all duplicate values.

31. Write a JavaScript program that will remove the duplicate element from an array.

32. Write a javascript function that accepts a string as a parameter and find the length of the string. Write the use of charAt() and indexOf() with syntax and example

33. Differentiate between concat() and join() methods of array object

34. Write a JavaScript that will replace following specified value with another value in string.

a. String = "I will fail" Replace "fail" by "pass"

35. Write a Java Script code to display 5 elements of array in sorted order

36. Write the use of charCodeAt() and fromCharCode() method with syntax and example.

37. Write JavaScript code to perform following operations on string. (Use split() method)

Input String: "Sudha Narayana Murthy"

Display output as

First Name: Sudha

Middle Name: Narayana

Last Name: Murthy

38. Explain splice() method of array object with syntax and example.

39. Differentiate between push() and join() method of array object with respect to use, syntax, return value and example.

40. Differentiate between concat() and join() methods of array object.

### **Sample paper**

41. Write a JavaScript function to count the number of vowels in a given string

42. Write a JavaScript that find and displays number of duplicate values in an array.

43. Write a function that prompts the user for a color and uses what they select to set the background color of the new webpage opened .

44. Develop JavaScript to convert the given character to Unicode and vice versa.

**6 marks**

45. Write a javascript function to generate Fibonacci series till user defined limit.

46. Develop javascript to convert the given character to unicode and vice-versa.

### Unit -III Form and Event Handling (Marks: 10)

Remember level	Understand level	Apply level
2	4	4

**2 marks**

1. Explain following form events : (i) onmouseup (ii) onblur
2. Enlist any four mouse events with their use.
3. Write a Java script to design a form to accept values for user ID & password.

**4 marks**

4. Write a javascript program to calculate add, sub, multiplication and division of two number (input from user). Form should contain two text boxes to input numbers of four buttons for addition, subtraction, multiplication and division.
5. Write a JavaScript function that will open new window when the user will clicks on the button.  
.
6. Write a Java script to modify the status bar using on MouseOver and on MouseOut with links. When the user moves his mouse over the links, it will display “MSBTE” in the status bar. When the user moves his mouse away from the link the status bar will display nothing.

**6 marks**

7. Write HTML code to design a form that displays two textboxes for accepting two numbers, one textbox for accepting result and two buttons as ADDITION and SUBTRACTION. Write proper JavaScript such that when the user clicks on any one of the button, respective operation will be performed on two numbers and result will be displayed in result textbox.
8. Write a javascript to create option list containing list of images and then display images in new window as per selection.
9. Explain how to evaluate Radiobutton in JavaScript with suitable example
10. Write a HTML script which displays 2 radiobuttons to the users for fruits and vegetable and 1 option list. When user select fruits radio button option list should present only fruits names to the user & when user select vegetable radio button option list should present only vegetable names to the user.
11. Describe how to evaluate checkbox selection. Explain with suitable example.
12. Write a HTML script which displays 2 radio buttons to the users for fruits and vegetables and 1 option list. When user select fruits radio button option list should present only fruits

names to the user & when user select vegetable radio button option list should present only vegetable names to the user

13. Write HTML script that will display dropdown list containing options such as Red, Green, Blue & Yellow. Write a JavaScript program such that when the user selects any options. It will change the background colour of webpage.

### **Sample paper**

14. Write HTML Script that displays textboxes for accepting Name, middlename, Surname of the user and a Submit button. Write proper JavaScript such that when the user clicks on submit button i) all textboxes must get disabled and change the color to “RED”. and with respective labels. 3 ii) Constructs the mailID as .@msbte.com and displays mail ID as message. (Ex. If user enters Rajni as name and Pathak as surname mailID will be constructed as [rajni.pathak@msbte.com](mailto:rajni.pathak@msbte.com))

## UNIT-IV Cookies and Browser Data (Marks: 08)

Remember level	Understand level	Apply level
2	2	4

2 marks

1. Differentiate between session cookies and persistent cookies.

### Sample paper

2. Write a JavaScript that identifies a running browser.
3. State and explain what is a session cookie?

4 marks

4. Design a webpage that displays a form that contains an input for user name and password. User is prompted to enter the input user name and password and password become value of the cookies. Write the javascript function for storing the cookies.
5. Write a javascript program to create read, update and delete cookies.
6. Explain how to create and read Persistent Cookies in JavaScript with example.
7. Write HTML code to design a form that displays two buttons START and STOP. Write a JavaScript code such that when user clicks on START button, real time digital clock will be displayed on screen. When user clicks on STOP button, clock will stop displaying time. (Use Timer methods)

### Sample paper

8. Write a JavaScript that displays all properties of window object. Explain the code .
9. Write the syntax of and explain use of following methods of JavaScript Timing Event. a. setTimeout() b. setInterval()
10. Generate college Admission form using html form tag .
11. Write a JavaScript that creates a persistent cookies of Itemnames. Write appropriate HTML script for the same.

6 marks

12. Describe, how to read cookie value and write a cookie value. Explain with example
13. Write a webpage that displays a form that contains an input for username & password. User is prompted to enter the input & password & password becomes the value of the cookie.
14. Write a JavaScript function for storing the cookie. It gets executed when the password changes.
15. Write a webpage that displays a form that contains an input for Username and password. User is prompted to enter the input and password and password becomes value of the cookie. Write The JavaScript function for storing the cookie . It gets executed when the password changes.

## UNIT-V Regular Expression, Rollover and Frames (Marks :14)

Remember level	Understand level	Apply level
2	6	6

**4 marks**

1. Describe regular expression. Explain search () method used in regular expression with suitable example.
2. Explain text rollover with suitable example.
3. Write a Java script that displays textboxes for accepting name & email ID & a submit button. Write Java script code such that when the user clicks on submit button (1) Name Validation (2) Email ID validation
4. Write a script for creating following frame structure

FRAME 1	
FRAME 2 • FRUITS • FLOWERS • CITIES	FRAME 3

Write the JavaScript code for below operations:

Name, Email & Pin Code should not be blank.

Pin Code must contain 6 digits & it should not be accept any characters.

Name :	<input type="text"/>
Email :	<input type="text"/>
Pin code :	<input type="text"/>
	<input type="button" value="Submit"/>

**2 marks**

5. Write a javascript program to changing the contents of a window.
6. Write a javascript syntax to accessing elements of another child window.

**4MARKS**

7. Write a JavaScript program that will display current date in DD/MM/YYYY format.
8. Describe Quantifiers with the help of example.
9. Describe text Rollover with the help of example



10. Write HTML code to design a form that displays textboxes for accepting UserID and Aadhar No. and a SUBMIT button. UserID should contain 10 alphanumeric characters and must start with Capital Letter. Aadhar No. should contain 12 digits in the format nnnn nnnn nnnn. Write JavaScript code to validate the UserID and Aadhar No. when the user clicks on SUBMIT button
11. Write a Java script that displays textboxes for accepting name & email ID & a submit button. Write Java script code such that when the user clicks on submit button (1) Name Validation (2) Email ID validation

### **Sample paper**

12. Construct regular expression for validating the phone number in following format only : (nnn)-nnnn-nnnn OR nnn.nnnn.nnnn
13. Design the frameset tag for following frame layout :

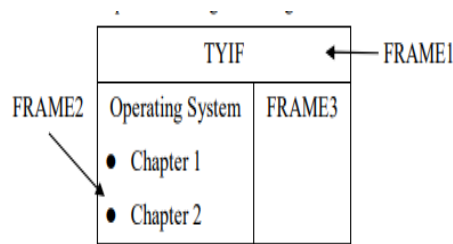
FRAME1
FRAME2
FRAME3

**4 marks**

### **Sample paper**

14. State what is regular expression. Explain its meaning with the help of a suitable example.
15. Write a webpage that accepts Username and adharcard as input texts. When the user enters adharcard number ,the JavaScript validates card number and displays whether card number is valid or not. (Assume valid adhaar card format to be nnnn.nnnn.nnnn or nnnn-nnnn-nnnn).
- 16 .Write a JavaScript function to check whether a given value is valid IP value or not
17. Write a JavaScript program to create rollover effect for three images.
18. Write a javascript program to validate email ID of the user using regular expression.
19. Describe regular expression. Explain search () method used in regular expression with suitable example.
20. Explain test() and exec() method of Regular Expression object with example.
21. Explain open() method of window object with syntax and example.
22. Write a javascript program to design HTML page with books information in tabular format, use rollovers to display the discount information
23. Explain text and image rollover with suitable example,

24. Write a JavaScript for creating following frame structure :



Chapter 1 & Chapter 2 are linked to the webpage Ch1 HTML & Ch2.html respectively. When user click on these links corresponding data appears in FRAME3.

### Sample paper

25. Write a javascript to open a new window and the new window is having two frames. One frame containing button as “click here !”, and after clicking this button an image should open in the second frame of that child window.

26. When user clicks MUSIC button, music.html webpage will appear in Frame 3. When user clicks DANCE button, dance.html webpage will appear in Frame 4. Write a script for creating following frame structure Frame I contains three buttons SPORT, MUSIC and DANCE that will perform following action: When user clicks SPORT button, sport.html webpage will appear in Frame 2.

	FRAME 1	
SPORT	MUSIC	DANCE
FRAME 2	FRAME 3	FRAME 4

## Unit 6: Menus, Navigation and Webpage Protection (Marks :12)

Remember level	Understand level	Apply level
2	4	6

1. Create a slideshow with the group of three images, also simulate next and previous transition between slides in your Java script
2. Write a Javascript to create a pull – down menu with three options [Google, MSBTE, Yahoo] once the user will select one of the options then user will be redirected to that site.
3. Describe frameworks of JavaScript & its application.
4. Describe how to link banner advertisement to URL with example.
5. Develop a JavaScript program to create Rotating Banner Ads.
6. Write HTML script that will display dropdown list containing options such as Red, Green, Blue and Yellow. Write a JavaScript program such that when the user selects any options. It will change the background colour of webpage.
7. Write a JavaScript for the folding tree menu.

**2 marks**

8. State any four properties of Navigator object.
9. State the method to put message in web browser status bar?

**4marks**

10. Write a javascript program to link banner advertisements to different URLs.
11. Describe browser location object.
12. Write a JavaScript program that will create pull-down menu with three options. Once the user will select the one of the options then user will redirected to that website.
13. State any two properties and methods of location object.
14. What is Status bar and how to display moving message on the status line of a window using JavaScript?
15. Write a JavaScript program that creates a scrolling text on the status line of a window.

### Sample paper

16. List ways of protecting your web page and describe any one of them.
17. Create a slideshow with the group of three images, also simulate next and previous transition between slides in your Java Script.

18. Write a Java script to modify the status bar using on MouseOver and on MouseOut with links. When the user moves his mouse over the link, it will display “MSBTE” in the status bar. When the user moves his mouse away from the link the status bar will display nothing.

**6marks**

19. Describe how to link banner advertisement to URL with example.

20. Write a JavaScript to create a pull-down menu with four options [AICTE, DTE, MSBTE, GOOGLE]. Once the user will select one of the options then user will be redirected to that site.

21. Develop a JavaScript program to create Rotating Banner Ads.

22. Write a javascript to create a pull-down menu with three options [Google, MSBTE, Yahoo] once the user will select one of the options then user will be redirected to that site

23. Write a JavaScript for the folding tree menu

24. Write a javascript program to create a silde show with the group of six images, also simulate the next and previous transition between slides in your javascript.

**6 marks**

### **Sample paper**

25. Write HTML Script that displays dropdownlist containing options NewDelhi, Mumbai, Bangalore. Write proper JavaScript such that when the user selects any options corresponding description of about 20 words and image of the city appear in table which appears below on the same page.

26. Create a slideshow with the group of four images, also simulate the next and previous transition between slides in your JavaScript.