

Register Number:

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| **ST. JOSEPH’S COLLEGE (AUTONOMOUS), BANGALORE-27** |
| **M.Sc. (COMPUTER SCIENCE) –II SEMESTER** |
| **SEMESTER EXAMINATION: APRIL 2022****(Examination conducted in July2022)****CS 8321: Advanced Web Technologies** |
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| **Time- 2 1/2 hrs** |  |  **Max Marks-70** |

**This paper contains 4 printed pages and 3 parts**

**PART A**

**Answer All the Questions. 15 \* 1=15**

1. Which of the following tag is used for inserting the largest heading in HTML?
a) head
b) <h1>
c) <h6>
d) heading
2. What is DOM in HTML?
a) Language dependent application programming
b) Hierarchy of objects in ASP.NET
c) Application programming interface
d) Convention for representing and interacting with objects in html documents
3. Which element is used to create multi-line text input?
a) text
b) textarea
c) submit
d) radio button
4. Which of the following CSS selector is used to specify a rule to bind a particular unique element?
a) tag
b) id
c) class
d) both class and tag
5. What will be the output of following CSS code snippet?

h1 {color: red text-decoration: underline; font-style: italic;}

a) color: red, text-decoration: underline works
b) only font-style: italic works
c) color: red, text-decoration: underline and font-style: italic all works
d) text-decoration: underline and font-style: italic works

1. Which of the following CSS property defines the space between cells in a table?
a) border-spacing
b) border-style
c) border
d) none of the mentioned
2. What will be the output of the following JavaScript code?

<p id="demo"></p>

<script>

var js = 10;

js \*= 5;

document.getElementById("demo").innerHTML = js;

</script>

a) 10
b) 50
c) 5
d) Error

8. What will be the output of the following JavaScript code snippet?

// JavaScript Equalto Operators

function equalto()

{

 int num=10;

 if(num===”10”)

 return true;

 else

 return false;

}

a) false
b) true
c) compilation error
d) runtime error

9. What will be the output of the following JavaScript code snippet?

int a=1;

if(a!=null) // JavaScript not equal to Operators

 return 1;

else

 return 0;

a) 0
b) 1
c) compiler error
d) runtime error

10. Which of the following is not a framework?
 a) JavaScript .NET
 b) JavaScript
 c) Cocoa JS
 d) jQuery

11. What are variables in Typescript?

1. A variable name should contain alphabets and numeric digits
2. It cannot contain spaces and special characters except underscore (\_) and dollar ($) sign
3. A variable name cannot begin with a digit
4. All

12. Which object oriented terms are supported by Typescript?

1. Modules
2. Classes
3. Interfaces
4. All of these

13. The . . . . . decorator allows us to define the pipe name that is globally available for use in any template in the across application.

1. pipeName
2. pipeDeco
3. Pipe
4. None

14. How would you display a list of Employees on a webpage along with where they were in the list?

1. Loop through and print the index
2. Loop through and print the employees
3. Loop through and print the index and the employee
4. Pass both the index and the employee to a web service

15. If you chain multiple pipes together, they are executed

1. in parallel
2. LIFO order
3. in the order in which you specify them
4. None of above

**PART B**

**Answer all FIVE. 5\*5=25**

16. a) Explain with attributes i)<a> ii)<img> iii)<p> iv) div v)<li>

 OR

 b) List the different selectors available in CSS and explain in detail.

17. a) What are method overriding in TypeScript? Explain with an example.

 OR

 b) What are Templates in Angular? Explain with suitable example.

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18. a) Explain PipeTransform interface.

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 OR

 b) What are Promises and Observables in Angular? Explain with an example.

19. a) Define Directives in Angular. Mention an Example of the Structural Directive.

 OR

 b) What Are Ngmodules? Differentiate Between Javascript Modules and Ngmodules

20. a) Why do web Service use ASP .NET?

 OR

 b) Briefly explain fire base call backs.

 **PART C**

**Answer any THREE. 3\*10=30**

21. Write a HTML code to design your Ist semester mark list.

22. a)Explain JavaScript Dialog boxes with an example. (7marks)

 b) What is namespace in Typescript? How to declare a namespace in Typescript?

 (3 marks)

23.Explain the @Component Decorator with an example.

24. Explain the building blocks of Angular with code.