

Question Paper

Exam Date & Time: 20-Jun-2022 (02:00 PM - 05:00 PM)



MANIPAL INSTITUTE OF TECHNOLOGY
MANIPAL
(A constituent unit of MAHE, Manipal)

FOURTH SEMESTER B.TECH END SEMESTER EXAMINATIONS, JUNE 2022

DESIGN AND DEVELOPMENT OF WEB APPLICATIONS [ICT 4302]

Marks: 50

Duration: 180 mins.

A

Answer all the questions.

Instructions to Candidates:

Answer ALL questions Missing data may be suitably assumed

- 1) Write a complete program using HTML, CSS and JavaScript to display multiplication table of number n (read value of 'n' from user). Every third row must be in red color and other rows in blue color. A sample multiplication table if n=4 is shown in Fig Q1A. (5)
- A)

4	1	4
4	2	8
4	3	12
4	4	16
4	5	20
4	6	24
4	7	28
4	8	32
4	9	36
4	10	40

Fig. Q1A

- B) Write and explain three different ways of specifying JavaScript code in a web page document. (3)
- C) With a suitable example, differentiate between block and inline elements. (2)
- 2) Write complete Javascript code to read 'n' positive integer values from user, where value of 'n' is read from user. Store all 'n' values in an array named 'numbers'. From 'numbers' array copy all even numbers to array named 'even', all odd numbers to array named 'odd' all numbers which are multiples of 3 to array named 'threes'. (5)
- A)
- B) Define object. Also, Write and explain output of the following PHP code: (3)

```
< ?php
$object = new User;

print_r($object); echo "< br>";

$object->name = "Joe";

$object->password = "mypass";

print_r($object); echo "< br>";
```

```

$object->save_user();

class User
{
    public $name, $password;

    function save_user()
    {
        echo "Save User code goes here";
    }
}

?>

```

C) Write an HTML individual complete anchor tag examples for the following: (2)

a. Mail links b. Telephone links

3) Write complete single program using HTML and PHP to do the following: (5)

A) a. Read an integer value 'n' from user

b. Read 'n' different key-value pairs from user and store it in an associative array

c. Convert associate array to indexed array. For example if associative array stores array("Peter"=>"35", "Ben"=>"37", "Joe"=>"43") then it's equivalent indexed array stores array("Peter","35", "Ben","37", "Joe","43")

B) Write output of the following HTML code: (3)

```

< html>

< body>

< table border="2">

< caption>Table Caption< /caption>

< tr>

< td rowspan="2">< /td>

< th colspan="2">Header 1 < /th>

< th rowspan="2"> Header 2< /th>

< /tr>

< tr>

< th>Header3< /th>< th>Header4< /th>

< /tr>

< tr>< th>h1< /th>< td>A1< /td>< td>A2< /td>< td>A3< /td>< /tr>

< tr>< th>h2< /th>< td>B1< /td>< td>B2< /td>< td>B3< /td>< /tr>

< tr>< th>h3< /th>< td>C1< /td>< td>C2< /td>< td>C3< /td>< /tr>

< /body>

< /html>

```

- C) Write complete web page code to change heading from "old heading" to "new heading" after user clicks on a button. (2)
- 4) Define and explain DOM. List and explain three different parts of W3C DOM. Also, explain getElementById and innerHTML each with a proper example. (5)
- A)
- B) Explain three types of HTML lists with an example for each. (3)
- C) Write output of the following error-free JavaScript code: (2)
- ```
<!DOCTYPE html>

<html>

<body>

<h2>JavaScript Loops</h2>

<p>A loop with a continue statement.</p>

<script>

for (i = 0; i < 10; i++) {

if (i%2==1) { continue; }

document.write("The number is " + i + "
");

}

</script>

</body>

</html>
```
- 5) Create a Student Registration HTML Form having fields Name (text), RegNumber (text), Date of Birth (date control), Gender (radio buttons), Address (Multi-line text), Hobbies (Check boxes having options Drawing, Singing, Dancing, others), submit and reset buttons. Also, write JavaScript code to ensure Name and RegNumber fields are not empty when form gets submitted. (5)
- A)
- B) Explain any three attributes of HTML img element with an example. (3)
- C) Explain roles of browser and server on web. (2)

-----End-----