Name: ………………………………………………….

(Theory: Marks: 25) + (Practical: 25 Marks) = 50 Marks

**Theory: HTML**

1. **What are tags and attributes in HTML?**

Tags are the primary component of the HTML that defines how the content will be

structured/ formatted, whereas Attributes are used along with the HTML tags to

define the characteristics of the element. For example, <p align=” center”>Interview

questions</p>, in this the ‘align’ is the attribute using which we will align the

paragraph to show in the center of the view.

1. **Define multipart form data?**

Multipart form data is one of the values of the enctype attribute. It is used to send the file data to the server-side for processing. The other valid values of the enctype attribute are text/plain and application/x-www-form-urlencoded.

1. **Write down Inline and block elements in HTML5?**

Inline elements just take up the space that is absolutely necessary for the content and does not start from a new line.

Example:- <span>, <a>, <strong>, <img>,<button>, <em>, <select>,<abbr>, <label>, <sub>,<cite>, <abbr>,<script>,<label>, <i>, <input>,<output>, <q>, etc.

Block elements start on a newline and consume the full width of the page available.

Example:- <div>, <p>, <header>,<footer>, <h1>...<h6>, <form>,<table>, <canvas>, <video>,<blockquote>, <pre>, <ul>, <ol>, <figcaption>, <figure>,<hr>, <article>, <section>, etc.

1. **What is HTML Canvas? Write Examples**

The HTML <canvas> element is used to draw graphics, on the fly, via JavaScript.

Canvas has several methods for drawing paths, boxes, circles, text, and adding images.

Canvas is supported by all major browsers.

Example: <canvas id="myCanvas" width="200" height="100"></canvas>

1. **Write Down Absolute File Paths and Relative File Paths**

Absolute: <img src="https://www.w3schools.com/images/picture.jpg" alt="Mountain">

Relative: <img src="/images/picture.jpg" alt="Mountain">

**CSS**

1. **What is the Box model in CSS? Which CSS properties are a part of it?**

A rectangle box is wrapped around every HTML element. The box model is used to determine the height and width of the rectangular box. The CSS Box consists of Width and height (or in the absence of that, default values and the content inside), padding, borders, margin.

1. **What is the difference between inline, inline-block, and block?**

Block Element: The block elements always start on a new line. They will also take

space for an entire row or width. List of block elements are <div>, <p>.

Inline Elements: Inline elements don't start on a new line, they appear on the same

line as the content and tags beside them. Some examples of inline elements are <a>,

<span> , <strong>, and <img> tags.

Inline Block Elements: Inline-block elements are similar to inline elements, except

they can have padding and margins added on all four sides.

1. **What is a Pseudo element? What is pseudo-class?**

Pseudo-classes select regular elements but under certain conditions like when the

user is hovering over the link.

:link, :visited, :hover, :active,:focus

a:hover {

color: #FFOOFF;

}

A pseudo-element however allows us to create items that do not normally exist in the

document tree, for example ::aer.

::before, ::after, ::first-letter, ::first-line, ::selection

p: :first-line {

color: #ffOOOO;

font-variant: small-caps;

}

1. **Can you name the four types of @media properties?**

The four types of @media properties are:

All → It’s the default property. Used for all media-type devices.

Screen → Used for computer screen, mobile screen.

Print → Used for printers.

Speech → Used for screen readers.

1. **Difference between CSS grid vs flexbox?**

CSS Grid Layout is a two-dimensional system, meaning it can handle both columns

and rows. Grid layout is intended for larger-scale layouts which aren’t linear in design.

Flexbox is largely a one-dimensional system (either in a column or a row). Flexbox

layout is most appropriate to the components of an application.

**Javascript**

1. **What is the output of the following code: document.write(200+”55Tk”);**
2. 20055tk b. 20050 tk c. 50 tk d. NaN
3. **Which of the following statement can be used as an alternative of if-else statement?**
4. for loop b. while loop **c**.switch-case d. all
5. **Switch(n)**

**{ case A: alert(“1”); break;**

**case B: alert(“2”); break;**

**default: alert(“3”);**

**}**

If n=b then what will be the output?

a. 1 b. 2 c. 3 d. none

1. **Any object property is called–**

a. function b. method c. attribute d. none

1. **var xyz =5;**

document.write(xyz++);

document.write(++xyz);

document.write(xyz++);

What is the output?

a. 567 b.566 c.577 d. None

**PHP**

1. **Differentiate between GET and POST**

GET: Used to retrieve data, such as searching, filtering, or paging. GET requests retrieve data from a server and do not modify the server's state. GET is limited to a maximum number of characters and supports only string data types.

POST: Used for submitting forms, modifying data, or creating new resources. POST requests send data to the server for processing and may modify the server's state. POST has no such limitation and supports different data types such as string, numeric, binary, and so on

1. **What's function will start or resume a session for every PHP \_enable page?**

session\_start();

1. **What will be the output?**

<?PHP

$i=0;

While($i<=10) {

If ($i<=5) {

Continue;

}

Print $i;

$i=$i+1;

}

?>

1. 1 (b) Infinitive (c) 5 (d) 10
2. **What are the main features of OOPs?**

Inheritance, Encapsulation, Polymorphism, Data Abstraction

1. **Define a superclass?**

Superclass is also a part of Inheritance. The superclass is an entity, which allows subclasses or child classes to inherit from itself.

**Laravel**

1. **What are the default route files in Laravel?**

web.php - For registering web routes.

api.php - For registering API routes.

console.php - For registering closure-based console commands.

channel.php - For registering all your event broadcasting channels that your application supports

1. **What are Relationships in Laravel?**

One to One, one to Many, many to Many, Has One Through, Has Many Through, One to One (Polymorphic), One to Many (Polymorphic), Many to Many (Polymorphic)

1. **What is Eloquent in Laravel?**

Eloquent is the ORM used to interact with the database using Model classes. It gives handy methods on class objects to make a query on the database.

Some examples of using the Eloquent are below:

`DB::table(‘users’)->get()`

`User::all()`

`User::where(‘name’, ‘=’, ‘Eloquent’)->get()`

1. **What are accessors and mutators?**

Accessors are a way to retrieve data from eloquent after doing some operation on the retrieved fields from the database.

public function getFullNameAttribute() { return $this->first\_name . " " . $this->last\_name; }

Mutators are a way to do some operations on a particular field before saving it to the database.

public function setFirstNameAttribute($value) { $this->attributes[‘first\_name’] = strtoupper($value); }

So, whenever we are setting this field to be anything: $user->first\_name = Input::get('first\_name'); $user->save();

Accessors allow you to change the data after acquiring it from the database. And mutators enable you to modify data before saving it to a database.

1. **What is an abstract class?**

An abstract class is a special class containing abstract methods. The significance of abstract class is that the abstract methods inside it are not implemented and only declared. So as a result, when a subclass inherits the abstract class and needs to use its abstract methods, they need to define and implement them.

**Practical:**

1. **Create Laravel Product CRUD (Name, Description, Price) fields will be there.**

A. Validate - Product name will be unique (name will not be updated during update), 12 characters

B. Description- Validate will be 300 digits

C. Price - Number and character 5 will be there **(15 marks)**

**02. PHP OOP (10 marks)**

class student

{

   public static $my\_name = 'Joe';

   public static function getName()

   {

      return "The name of the student is : " . self::$my\_name;

   }

   public static function getAge()

   {

      // ???????

   }

}

class Professor extends student

{

   public static function getName()

   {

    // ????????

   }

}

student::getAge();

echo "\n";

Professor::getAge();

**Output:**

The name of the student is : Joe

The name of the student is : Joe and age is 24.

**'What to write in the question mark (??)'. Will the output come?**

**Answer**: echo static::getName();

return "The name of the student is : " . self::$my\_name ."and age is 24.";