COMPUTER

STD 12

PERSONALIZE NOTES

+

USEFUL STUDY MATERIAL

SCIENCE AND COMMON STREAM

ACCORDING TO THE LATEST
PAPER PATTERN OF BOARD

NUZHAT MEMON

INDEX

Compiled by Nuzhat Memon

PAPER PATTERN

STD 12
SCIENCE AND COMMON STREAM (ENGLISH MEDIUM)

GSHEB SYLLABUS FOR THE ACADEMIC YEAR 2025-26

FORMAT OF THE QUESTION PAPER

Theory Question Paper	100 marks	2 hours
Practical Question Paper	50 marks	2 hours

PURPOSE BASED WEIGHTAGE

Purpose	Knowledge	Understanding	Activity	Skill	Total Marks
Weight in Marks	30	30	30	10	100
Weight in Percentage	30%	30%	30%	10%	100%

WEIGHTAGE OF MARKS ACCORDING TO THE DIFFICULTY LEVEL

Difficult level	Easy	Medium	Hard	**Total**
Difficult level (Percentage)	50%	35%	15%	**100%**

WEIGHTAGE OF MARKS OF THE SYLLABUS

Chapter No	Chapter Name	Weightage Theory	Weightage Practical
1	Creating HTML forms using KompoZer	10	07
2	Cascading Style Sheet and JavaScript	12	08
3	Designing simple website using KompoZer	10	10
4	Introduction to E-Commerce	10	-
5	Introduction to M-Commerce	12	-
6	Object Oriented Concepts	10	-
7	Java Basics	10	10
8	Classes and Objects in Java	10	15
9	Working with Array and String	10	
13	Other useful free tools and services	06	-
	Total	**100**	**50**
	Timing	**2 hrs**	**2 hrs**

CREATING HTML FORM USING KOMPOZER

Introduction to Form

- With the increase in the use of **Internet** many activities have become online.
- **Web page** is used to **fill information** about **ourselves or a product**.
- **HTML forms** are used to help the visitors of the website to **input data**.
- It (Form) allows for more **interactivity and control** in **data entry**.
- Example: when a user wants to open a mail account or register on a website, user needs to enter their personal details in a form.
  - In order to obtain such information on Internet, HTML forms are used.
  - This data is further **stored** by the application and also used to **retrieve** the details about the users registered on the website.
- A form in HTML is a **container** used to collect different kinds of inputs from the user.
- HTML forms contains the **form elements** like **label, checkbox, text input field, radio button, submit button, reset button** and many more.
- **Form elements** are used to **enter the data** as well as **validate the data** within the forms.
- Form used to enter the data can be created using **HTML tags**.

Four elements are used in a HTML form:

1) Form
2) Input
3) Textarea
4) Select and Option

Form Elements

- **The form element** is used to create a **HTML form.**
- **Form element** acts as a **container** for all the **elements** used in the **form**.
- The tag **<form>....</form>** is used to implement the **form element**.
  SYNTAX: <form **action**="file1.html" **method**="post">

  ......
  input elements
  ......
  </form>
- The form element uses **two attributes** namely **action** and **method**

Action Attribute

- **The action attribute** is used to specify **where to send the form data** when the form is submitted.
- The action attribute takes a **filename** as value.
- This file given as action attribute (file1.html) is opened when the user clicks on the submit button after filling the data in the form.

Method Attribute

- The **method attribute** specifies the **HTTP method** to be used when sending the data.

- The **method attribute** can take **two values**: **GET** and **POST**
- The **default value** for method attribute is **GET.**

GET Method	POST Method
The GET method retrieves the data from the form and sends it to the server **by attaching it at the end of the URL.**	In the **POST method**, the data is **sent as a block** through the HTTP transaction. POST method attribute **send the data in the body of the request.**
The **GET method** allows only a limited amount of information to be sent at a time.	**POST method** does not have any restriction on data length.

Input Elements

- The input elements are used to **insert various fields** in the form.
- **Fields** likes   1) Textbox   2) Password   3) Radio button
                        4) Checkbox   5) Submit button   6) Reset button
- The tag **<input>...</input>** or **<input>** is used to implement input element.
- **The input tag** has **three** different **attributes** like **type, name** and **value**.
  - **The type attribute** of the input element specifies **the field that is to be created** in the form.
  - **The name attribute** specifies the **name to be used for the field** in the form.
  - **The value attribute** specifies the **default value** of the field in the form.

Various Input Elements created using type attribute of <input> tag:

Type	Description	Syntax
Text or Textbox txt	- A user can **enter any text or data** of his choice in the text field. - Textbox is used to enter data like username, emailId, mobileno etc - Textbox is created by giving **text** value to **type attribute** of **input tag**.	<input type="text" name="var" value="txt">
Password *****	- Password field is used to **enter password** - Password field is **similar to text field**. - In password field the **characters are not displayed** to the user. - Instead the character typed is converted into **non readable format.**	<input type="password" name="var">
Radio button ◉	- Any **one radio button can be selected at a time** from a group of radio buttons. - Generally **radio button** used to **select a single item from a given group of items**.	<input type="radio" name="var" value="txt">
Checkbox ☑	- **Multiple check boxes can be selected** at a time. - Generally used to **select a multiple items from a given group of items**	<input type="checkbox" name="var" value="txt">

Submit button	▪ On clicking the **submit button**, the values of data entered in the form is **submitted** to the file specified in **the action attribute** of the form element.	<input type="submit" value="label">
Reset button	▪ On clicking the **reset button**, the values of data entered in the form are **cleared** and **set back to default values**.	<input type="reset" value="label">

Textarea Element

▪ The Textarea element allows **multi-line text input**
▪ The tag **<textarea>....</textarea>** is used to implement **textarea element**.
▪ Textarea allows **entering unlimited number of characters**.
▪ Textarea can be used to **enter comment, report or a long description** of product.

SYNTAX: <textarea name="address" **rows**="5" **cols**="20">
                     some content goes here
              </textarea>

▪ The **size of a textarea element** can be specifies using **rows and cols attributes**.
▪ The **rows attribute** is used to set the **number of rows of text** that will be visible **without scrolling up and down**.
▪ The **cols attribute** is used to set the **number of columns of text** that will be visible **without scrolling right or left**.

Select and option Element (Drop down menu)

▪ The **select element** is used to **create a drop down list or menu** in a form.
▪ The tag **<select>....</select>** is used to **create a drop down menu**.
▪ The **option element** is used to **specify the values to be displayed in the menu.**
▪ The tag **<option>...</option>** is used **to create the elements within the menu**.
▪ **Selected attribute** is optional. Specific option from the dropdown menu can appear as selected by default by using **selected attribute**.

SYNTAX: <select>
                     <option>Bhuj</option>
                     <option selected>Ahmedabad</option>
                     <option>Baroda</option>
              </select>

Practical Exercise

## Use of IDE to create a form

- Creating a **form using HTML tags** is a **tedious process.**
- A **simpler method** to create a form is to use an **IDE**.
- Full form of IDE is **Integrated Development Environment**
- **An IDE** is a **software application** that provides complete facilities to programmer to develop software.
- IDE provides GUI (Graphical User Interface), Text/code Editor, a compiler and/or interpreter and a debugger.
- **Kompozer, Eclipse, JBuilder** and **Netbeans** are all examples of some **open source IDEs.**(Remember, Netchain or Nutscells are not an example of open source IDEs)

Introduction to KompoZer

- KompoZer is a **free open source web development IDE**.
- KompoZer can be downloaded from **http://www.KompoZer.net**.
- It provides a webpage editor which has a simple graphical interface known as **WYSIWYG** ("**What You See is What You Get**")
- KompoZer is a **complete web authoring system** which **integrates webpage development and web file management.**
- The users can also **edit the webpages by using the source code** and making changes.
- **KompoZer** incorporates a **Site Manager** which gives rapid access to the files on both **local machines and remote servers**.
- Web pages and associated files can be **uploaded** to a remote server from within KompoZer.
- It also supports the use of **"Styles"** through **CSS** (**Cascading Style Sheet**)

Interface of KompoZer

- **To Open KompoZer: Applications➔Programming➔KompoZer   OR**
  Double click KompoZer icon on desktop
- To view the different toolbars and status bar, click on **View➔Show/Hide**
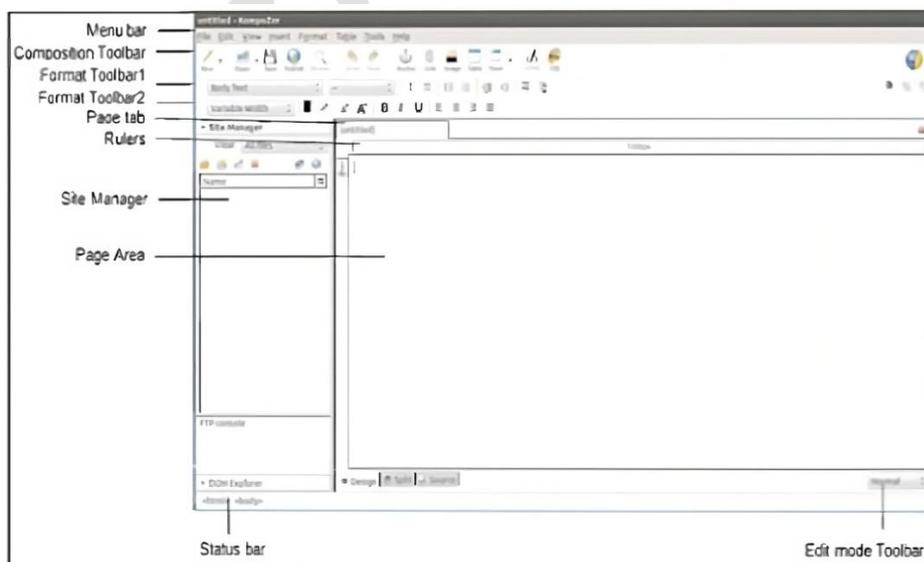
Different options in the **Show/Hide** option of **View** menu:
Composite Toolbar, Format Toolbar1, Format Toolbar2, Edit Mode Toolbar, Status bar, Site Manager and **Rulers.**

KompoZer has eight menus: File, Edit, View, Insert, Format, Table, Tools, Help.

3 Toolbars below Menu bar:

Composite Toolbar, Format Toolbar1 and Format Toolbar2

Composite toolbar	▪ To **create new file, open a file, save a file or publish** a web page.
Format Toolbar1 and Format Toolbar2	▪ To **format the text, add bullets/numbering** and **perform similar formatting operations.** Note: Select **Heading1** from **Format Toolbar1.** Here six types of Headings available from Heading 1 to Heading 6. In **Format Toolbar2**, **Four types of alignments** are available i.e. left, center, right and justified.

2 Panes in the center of the Kompozer Window:

Site Manager and Blank Web Page

| **Site Manager**	▪ In the center of the window at the left side. ▪ **Site Manager** is a powerful **tool used to navigate within the site or between the sites.** ▪ We can **close the site manager** pane by clicking on **close button or press F9.**

Page Pane (Blank webpage)	▪ The page pane shows a **blank untitled webpage.**
	 Edit Mode toolbar
	 The **bottom right side of the window** shows Edit mode toolbar **with**
	 3 viewing modes: **Normal, HTML tags and Preview**
	 All the three viewing modes provide **editing facilities.**
	 ▪ **The Normal View mode:**
	   o Normal view is very **similar to preview mode.**
	   o In normal mode, webpage along with the **table outlines are visible.**
	 ▪ **HTML Tags View:**
	   o The HTML Tags view helps those who are **familiar with HTML.**
	   o **A Yellow marker** is used to indicate the start tag for all elements.
	   o Clicking on a marker selects and highlights whole of the element.
	 ▪ **Preview Mode:**
	   o The Preview mode offers **the page view as seen in a browser.**
	   o In **the Preview mode the script do not run** and therefore their effects will not be seen.
	   o The **links also does not operate** in preview mode
	 The Left side of the page pane shows 3 tabs:
	 Design tab, split tab and source tab
	   o **The Design tab** is used to **design the web page.**
	   o **The Split tab** display the **HTML source of the current element.**
	   o **Source tab** shows **all details of the HTML code** and helps in **editing the source code.**

Status Bar
- Status bar is on the **bottom of the window**.
- When we click on any item in page, its **structure appears** in the status bar.

Customize any toolbar
- **Right click** on the respective toolbar and click on "**Customize Toolbar"** option.

Creating New File
- Open KompoZer, Click **File→New**
- A dialog box with title "**Create a new document or template"** will be shown.
- Select "**Blank document"** option
- At the bottom of the dialog box, select "**New tab**" option in "**Create in**" dropdown menu. This allows to create the page in a new page.
- Click on the **Create** button
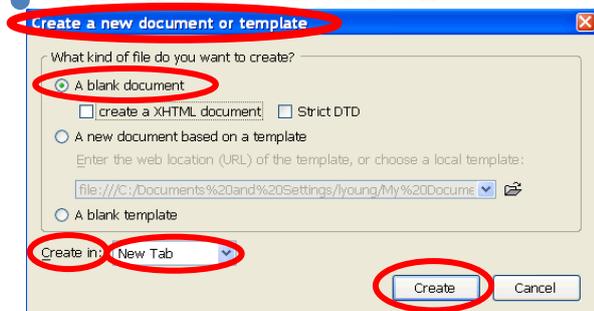
Opening an Existing File

- **File→Open**   **OR**   Click on **Open icon** present on the **Composite Toolbar**.
- If the file has been opened recently, then you can also open the file from **File→Recent pages**.

Creating a form using KompoZer

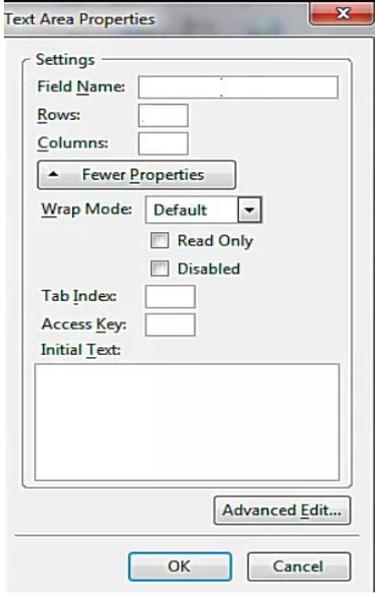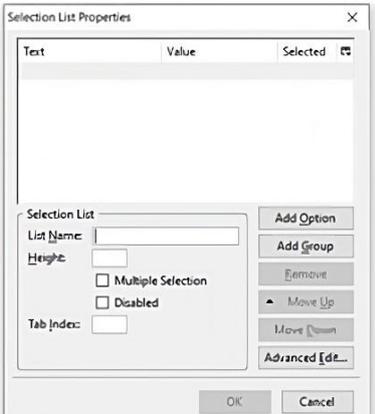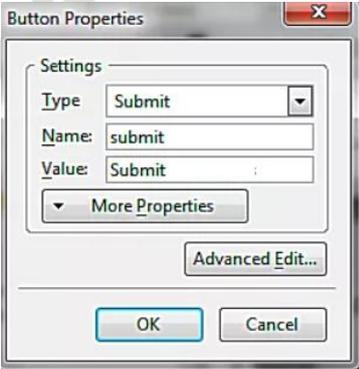|	
Insert→Form→Define Form **OR** Click on **Form icon** from the **Composite Toolbar** **Form Properties** dialog box opens up when we click **Insert→Form→Define Form** 	- **Form name, Action URL** and **method** settings are viewed when user defines form in **Form Properties** dialog box. [Note: Field value option is not in Form Properties dialog box of KompoZer] - **In the action URL,** enter the **filename** where you want the form data to be submitted. - Select the method **POST** from the method drop down menu. - **Untitled** is a default name of the new form created in KompoZer. - In **normal view,** the form is inserted with **light blue color outline in the untitled page.** - In **normal view**, the forms are shown surrounded **by a dotted blue box**.
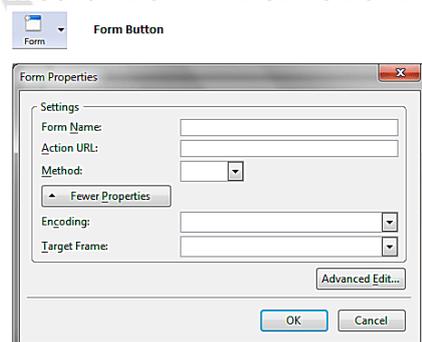
Inserting elements in the form

LABEL	**Insert → Form→Define label** First Name	▪ Place the cursor in the form and type text in the label. ▪ To come out of the label field, click anywhere outside the field.
TEXT FIELD	**Insert→Form→ Form Field** *Form Field Properties dialog box*	▪ **Text Field** used for First Name, Middle Name, Last Name, Email and Mobile. ▪ **Form Field Properties** dialog box with **Field Type, Field Name** and **Initial Value** ▪ **Field Name:** to give a Field Name ▪ **Field Type:** Select **Text** from Field Type dropdown menu. ▪ **Initial Value:** To show some text before the user actually enters data. ▪ Click on **More Properties**, it shows **advanced properties** related to the field like field size, maximum length. ▪ **Required Field Size** & **Maximum Length** can be given in **Fewer Properties** section
RADIO BUTTON	**Insert→Form→Form Field** *Form Field Properties dialog box*	▪ Radio button is used to select **single item** from group of items ▪ Radio button is used for **gender** field. ▪ **Field Type: Radio Button** ▪ **Group Name** must be the same for all possible answers in **radio button**. ▪ **Field Value:** To give value to the radio button example: Female ▪ To keep the option of the radio button selected, when the form is loaded then check the box "**Initially selected**"
CHECKBOX	**Insert→Form→Form Field** *Form Field Properties dialog box*	▪ Checkbox is used to select **multiple items** from group of items. ▪ Checkbox is used for **hobby** field**.** ▪ **Field Type: Check Box** ▪ Keep the **Field Name** **same** for all the options of checkbox. ▪ **Field Value:** To make checkbox of type Hobby. Example: Singing ▪ To keep the option checked when the form loads select "**Initially Checked**" **or** "**Initially Selected**"
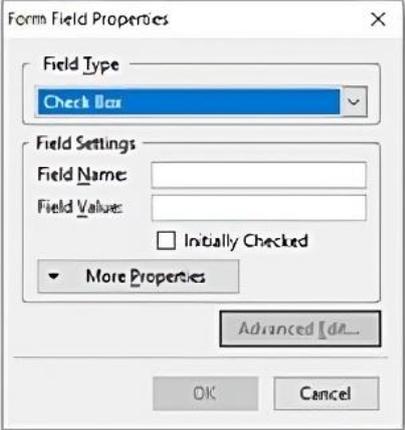
|		
TEXT AREA	**Insert→Form→Text area** Text Area Properties *Settings* Field Name: Rows: Columns: ▲ Fewer Properties Wrap Mode: Default ☐ Read Only ☐ Disabled Tab Index: Access Key: Initial Text: Advanced Edit... OK Cancel	▪ To insert **address** or **comment** or **long description** ▪ **Multi line textarea** and **allow unlimited text** ▪ **Textarea Properties** dialog box opens when click on Insert→Form→Textarea with Field: **Field Name, Rows, Columns and Initial Text** ▪ **Two main attributes: rows and cols** ▪ In Text Area Properties dialog box, the **Initial Text** Field is used to enter a suitable text which will be displayed when the form loads.
SELECTION LIST	**Insert→Form→Selection List** Selection List Properties Text Value Selected *Selection List* List Name: Height: ☐ Multiple Selection ☐ Disabled Tab Index: Add Option Add Group Remove ▲ Move Up Move Down Advanced Edit... OK Cancel	▪ Selection List is to be selected for city field. ▪ **Selection List Properties** dialog box is appears when Insert→Form→ Selection List is selected ▪ **Add option** button is clicked in Selection List Properties dialog box to enter values one after another. ▪ Select the option "**Initially Selected**" when adding option as default one. This checkbox gives an initial value.
SUBMIT BUTTON	**Insert→Form→Form Field** Button Properties *Settings* Type: Submit Name: submit Value: Submit ▼ More Properties Advanced Edit... OK Cancel	▪ Select **Submit Button** from **Field Type** dropdown menu ▪ Type Submit in both the **Field Name** and **Field Value** text boxes.
RESET BUTTON	**Insert→Form→Form Field**	▪ **Field Type:** Reset Button ▪ Enter text in **Field Name** and **Field Value**

- The form at present is in the **normal view.**
- To have a preview of the form, click on **Edit mode toolbar** and select **Preview**.
- You can also **see the source code of the form** by clicking on the **Source** tab.

Saving a File

- To save the file,
    - **File→Save**

      OR
    - Click on **Save button** 💾 on the **Composition Toolbar.**
- The **Page Title** dialog box opens while saving a file in KompoZer to give a suitable title to the webpage.
- The **page Title** will be displayed in the browser windows **title bar** when viewed in the browser.
- **Website name** will be assigned as page title when more than one web page is created.
- A new dialog box "**Save Page As**" is opened that prompts the user to enter a filename and specify the location where you want to save the file.
- Save the file with **html or htm** as an extension.
- Note: If you are creating a website and this is the home page that will open when you type the website's URL, then save th page with the name **index.html**.

Changing background color to the form
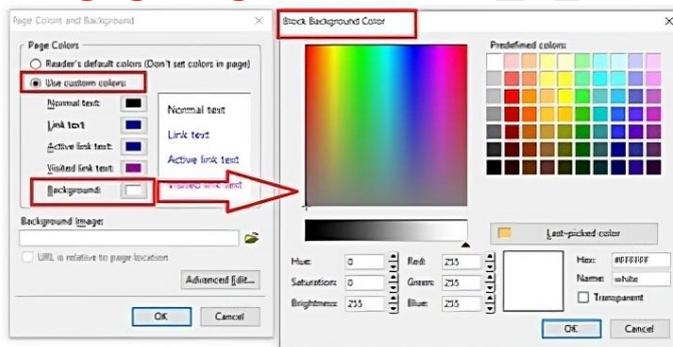
- To give a background color to the form from **white color** to any other color, go to **Format ➔ Page Colors and Background**
- This will open a **Page Colors and Background** dialog box.
- Select "**Use custom colors**" option.
- Click the **background option** and this display "**Block Background Color**" dialog box**.**
- Select the color and click on OK button.

Full form

IDE	Integrated Development Environment
GUI	Graphical User Interface
WYSIWYG	What You See Is What You Get
CSS	Cascading Style Sheet
HTML	Hypertext Markup Language
HTTP	Hypertext Transfer Protocol

CHAPTER 1

Kompozer's Menu-Options

Starting KompoZer Program	Application → Programming→KompoZer
To view different toolbars & status bar	View→Show/Hide
Define a new Form	Insert→Form→Define Form
To insert the label	Insert→Form→Define Label
To insert an input text field	Insert→Form→Form Field→Text
To create a password field	Insert→Form→Form Field→Password
To create a radio button	Insert→Form→Form Field→Radio button
To create a checkbox	Insert→Form→Form Field→Check Box
To create a textarea	Insert→Form→Textarea
To create a pull down menu	Insert→Form→Selection List
Inserting Submit button	Insert→Form→Form Field→Submit Button
Inserting Reset button	Insert→Form→Form Field→Reset Button
To give a background color	Format→Page Colors and Background
Creating a new file	File → New OR New icon on Composite Toolbar
Open an existing file	File → Open OR Open icon on Composite Toolbar
Saving a File	File → Save OR Save icon on Composite Toolbar
To open a recent used file	File→Recent Pages

Element and its tag

Form element	<form>....</form>
Input element	<input>....</input> OR <input>
Textarea element	<textarea>.....</textarea>
To create a dropdown menu or list	<select>....</select>
To create the elements within the menu	<option>....</option>

Tag and its attributes

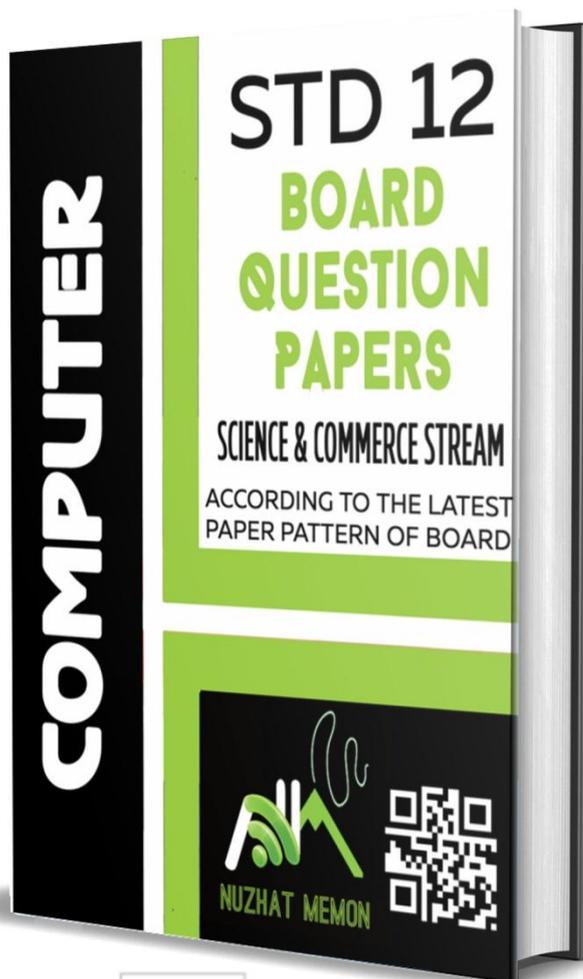|	
Form tag	2 attributes: **Method and Action** Note: 2 Values of Method attribute: Get and Post
Input tag	3 attributes: **type, name and value**
Textarea Tag	2 attributes: **rows, cols**

TEXTUAL EXERCISE

1. Which of the following is a container used to collect different kinds of inputs from the user?
   (A) Form   (B) Webpage   (C) Text   (D) Input

2. Which of the following element is used to create an HTML form?
   (A) Textarea   (B) Form
   (C) Select and option   (D) Input

3. Which of the following is the tag used to implement form element?
   (A) <form>.....</form>   (B) <form>....<form>
   (C) </form>....</form>   (D) <frm>....</frm>

4. Which of the following attribute of form is used to specify where to send the form data when the form is submitted?
   (A) method   (B) action   (C) submit   (D) input

5. Which of the following attribute of form specifies the HTTP method to be used when sending the data?
   (A) submit   (B) action   (C) method   (D) input

6. Which of the following values are used by method attribute?
   (A) GET and POST   (B) GET and SET
   (C) GET and PUT   (D) SET and POST

7. Which of the following method allows only a limited amount of information to be sent at a time?
   (A) GET   (B) POST   (C) SET   (D) PUT

8. Which of the following method sends the data as a block through the HTTP transaction?
   (A) GET   (B) SET   (C) PUT   (D) POST

9. Which of the following attribute of the input element specifies the field that is to be created in the form?
   (A) Input   (B) Type   (C) Name   (D) Value

10. Which of the following element allows multi-line text input?
    (A) Textarea   (B) Input
    (C) Select and option   (D) Form

11. Which of the following element is used to create a drop down list or menu in a form?
    (A) Input   (B) Textarea   (C) Select   (D) Form

12. Which of the following is a free open source web development IDE ?
    (A) HTML   (B) Kompozer   (C) Scite   (D) Base

13. Which of the following stands for "WYSIWYG" ?
    (A) When You See Is When You Get   (B) What You See Is When You Get
    (C) What You See Is What You Get   (D) When You See Is What You Get

ANSWER KEY

1. A   2. B   3. A   4. B   5. C   6. A   7. A   8. D   9. B   10. A
11. C   12. B   13. C

FOR STD 12
BOARD QUESTION PAPERS

STD 12
BOARD QUESTION PAPERS

SCIENCE & COMMERCE STREAM

ACCORDING TO THE LATEST PAPER PATTERN OF BOARD

COMPUTER

NUZHAT MEMON

NUZHAT MEMON