

# CBSE

## Solved Paper 2023

### Computer Applications

#### Class-10<sup>th</sup>

(Delhi & Outside Delhi Set)

Time : 2 Hours

Max. Marks : 50

#### General Instructions :

Please read the instructions carefully.

- This question paper has 5 sections A-E.
- All questions are compulsory, However the internal choice of approximately 30% is provided.
- Section A has 12 questions carrying 1 mark each.
- Section B has 7 Very Short Questions (VSA) type questions carrying 2 marks each.
- Section C has 4 short answer (SA) type questions carrying 3 marks each.
- Section D has 1 long answer (LA) type question carrying 4 marks.
- Section E has 2 source based / case based / passage based questions carrying 4 marks each.

#### SECTION - A

1. Suhani asks her colleague for her project work and then copies the entire work and submits it to her team leader claiming it to be own work. The act performed by Suhani is known as \_\_\_\_\_.  
(a) Phishing (b) Plagiarism  
(c) Spamming (d) Virus
2. Which of the following is the correct expansion of SMS?  
(a) Small Message Service (b) Small Multimedia Service  
(c) Short Multimedia Service (d) Short Message Service
3. Which of the following is an e-Shopping portal?  
(a) Diksha (b) Swayam  
(c) Flipkart (d) NPTEL
4. Which of the following is not an e-Governance portal?  
(a) e-Aadhaar (b) DigiLocker  
(c) Sarathi (d) Zomato
5. The protocol that is used to send e-mails is \_\_\_\_\_.  
(a) HTTP (b) POP  
(c) SMTP (d) FTP
6. SFTP is used for:  
(a) Sending Files over the Internet in a secure manner  
(b) Sending Mail over the Internet in a secure manner  
(c) Video Conferencing  
(d) Secure Chat Services
7. Which of the following is not an attribute of <img> tag in HTML?  
(a) source (b) width  
(c) alt (d) color
8. HTML provides us with \_\_\_\_\_ levels of headings that can be inserted in a web page.  
(a) 5 (b) 6  
(c) 7 (d) 8

9. Which of the following options is an INVALID attribute of <font> tag in HTML?
- (a) face (b) width  
(c) size (d) color
10. The default starting value for an ordered list in HTML is \_\_\_\_\_.
- (a) i (b) 1  
(c) a (d) .
- Questions No. 11 and 12 are Assertion and Reason types. Each question consists of two statements, namely, Assertion (A) and Reason (R). Select the most suitable option considering the Assertion and Reason.
11. **Assertion (A)** : MOOC helps geographically dispersed students to pursue any online course.  
**Reason** : MOOC is a free web-based distance learning program.
- (a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).  
(b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A).  
(c) Assertion (A) is true, but Reason (R) is false.  
(d) Assertion (A) is false, but Reason (R) is true.
12. **Assertion (A)** : <br> is a container tag.  
**Reason** : HTML elements that have both opening and closing tags are considered container tags.
- (a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).  
(b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A).  
(c) Assertion (A) is true, but Reason (R) is false.  
(d) Assertion (A) is false, but Reason (R) is true.

## SECTION - B

13. Write one difference between Chat and e-Mail service.
14. (a) What is e-Governance? Write the names of any two services that can be provided using e-Governance.
- OR**
- (b) What is Internet? How can we retrieve information from the Internet?
15. How can we embed audio in an HTML document? Given an example to support your answer.
16. (a) Define Licensed Software. Write names of any two licensed software.
- OR**
- (b) How can we reduce digital divide? Give any two points.
17. How is CSS beneficial for web page development? Give any two points.
18. (a) Illustrate the use of the radio button input type on an HTML form with an appropriate code and the corresponding output.
- OR**
- (b) Write the difference between <ol> and <ul> tags in HTML. Also write suitable examples of each to illustrate the difference.
19. What is the difference between <br> tag and <p> tag in context of HTML? Illustrate using suitable examples.

## SECTION - C

20. How do Intellectual Property Rights provide protection to digital work? Write any two ways to avoid plagiarism.
21. Consider the following URLs:
- https://www.practicepayment.com\_\_\_\_\_URL1  
http://www.prcticepayment.com\_\_\_\_\_URL2
- (a) What is the difference between URL1 and URL2?  
(b) Which of the two URLs will you prefer to use and why?  
(c) Expand www.
22. (a) Write the equivalent CSS code to set the following styles for a web page:
- (i) Entire page background color should be yellow.  
(ii) Second level Heading properties should be as follows:
- Text color should be Red
  - Left margin should be 25 px

OR

- (b) (i) Write a CSS code to display the first level heading text as "My School" in Green color and center-aligned.  
(ii) Write the CSS code to display the following paragraph below the above mentioned heading:

This is my School

I study in class 12

The properties of the paragraph content should be as follows:

(I) Text color should be yellow

(II) Font size should be 25 px

(III) Font style should be bold

23. Write the full forms of the following protocols:

- (a) HTTPS  
(b) TCP  
(c) SSH

### SECTION - D

24. (a) Write the HTML code to design the web page as shown below, considering the specifications that follow. You can write the code for any four specifications out of the given six specifications.



We are happy to provide you all help at your residence.  
Special discount offers from (1<sup>st</sup> May, 2022 to 30<sup>th</sup> June, 2022).  
Please contact us for the following services:  
Maid/Servant (Cleaning)  
Maid/Servant (Cooking)  
Driver  
Queries: [help@homeservices.com](mailto:help@homeservices.com)

**Specifications:**

- The background color of the page should be yellow and the text for the page should be in blue color.
- Heading 'Homes Services' should be the first level of heading.
- The image named 'service.png' should be placed on the web page.
- Font size for the paragraph and the list of services should be 4 and Font face should be Verdana. Superscript tags should be used wherever required.
- The services (as shown in the above web page) should be written with the help of the unordered list.
- The bottom-most line of "Queries: [help@homeservices.com](mailto:help@homeservices.com)" should be a link to open the user's default mail client to send queries to the mentioned email id.

OR

(b)

**Events**

The following events are scheduled to be held on 1<sup>st</sup> April, 2023.

The timings are as follows:

1. 9.00 AM – 10.00 AM Flag Hoisting
2. 10.00 AM – 11.00 AM Painting Competition
3. 11.00 AM – 12.30 PM Dance Competition
4. 12.30 PM – 2.00 PM Closing Ceremony

For any queries contact [queries@event.com](mailto:queries@event.com)

Phone : 9999999999

Write the HTML code to design the above shown web page titled 'Events', considering the specifications as given below. You can write the code for any four specifications out of the given six specifications.

**Specifications:**

- The background color of the page should be cyan, the font face for the page should be Arial.
- Heading 'Events' should be the first level of heading.
- Font size for the paragraph and the list of products should be 5.
- The schedule (as shown in the above web page) should be written with the help of the numbered list. Superscript tags should be used wherever required.
- The bottom-most lines of 'For any queries ...' and 'Phone : ...' should be in hold.
- The contact email [queries@event.com](mailto:queries@event.com) should be a link to open the user's default mail client to send queries to the mentioned email id.

**SECTION - E****Case Study**

25. Arif works in a school as a web designer. He has been assigned the task of uploading the calendar of holidays for the month of March. He was supposed to design an HTML table for the same.

Help him to complete the table with the right statements in the blanks.

Observe the table and attempt any four questions (out of five) given after the table.

MARCH 2023							
DAYS	Mon	Tue	Wed	Thu	Fri	Sat	Sun
DATES	6	7	8	9	10	11	12
		14					

```

<html>
<head>
  <title> </title>
</head>
<body>
<table>
  <tr>
    <td colspan = _____ ><!-- STATEMENT-1 > MARCH 2023 </td>
  </tr>
  _____ <!--STATEMENT-2>
    <th>DAYS</th>
    <th>Mon</th>
    <th>Tue</th>
    <th>Wed</th>
    <th>Thu</th>
    <th>Fri</th>
    <th>Sat</th>
    <th>Sun</th>

```

```

_____ <!-STATEMENT - 3>
<tr>
<td _____ = 2> <! - STATEMENT- 4> DATES </td>
  <td>6</td>
  <td>7</td>
  <td>8</td>
  <td>9</td>
  <td>10</td>
  <td>11</td>
  <td>12</td>
</tr>
<tr>
  <td> </td>
  <td> _____ </td> <! - STATEMENT - 5>
</tr>
</table>
</body>
</html>

```

- (a) Write the attribute value to complete Statement -1 to achieve the output as given in the above table.
- (b) Write the tag to complete Statement -2 to achieve the output as given in the above table.
- (c) Write the attribute value to complete Statement -3 to achieve the output as given in the above table.
- (d) Write the attribute name to complete Statement -4 to achieve the output as given in the above table.
- (e) Write the appropriate answer for the blank given in Statement -5 to achieve the output as given in the above table.
26. Rashmi is a student of ABC School. She has been provided with an email id from the school to use for all academic correspondences. She generally receives all her school's correspondence on the email. One day she was working in the computer lab, and after her work was over, she forget to logout of her email account. When she left the computer lab, her classmate, Prabhnoor sends objectionable emails from the same email id, to her teachers, so as to malign Rashmi.
- Based on the given situation, attempt any four (out of five) fill-ups/questions given below:
- (a) Prabhnoor has invaded \_\_\_\_\_ of Rashmi.
- (b) Rashmi informs her class teacher about the incident. The teacher calls Prabhnoor and makes him aware of \_\_\_\_\_, which is following ethical principles while working online.
- (c) The teacher also advises all students never to shares their \_\_\_\_\_ with anyone.
- (d) Rashmi has learnt that she should always \_\_\_\_\_ of her email account once her work is completed.
- (e) Prabhnoor is now aware of ethical practices to be followed while working over the internet and decides to guide his friends and relatives about the same. Write any two points that Prabhnoor should advise them to do while working online.



# Solutions

## SECTION - A

- Option (b) is correct.**  
*Explanation:* Plagiarism is presenting work or ideas from another source as your own, with or without consent of the original author, by incorporating it into your work without full acknowledgement.
- Option (d) is correct.**  
*Explanation:* SMS or Short Message Service is the standard messaging service used on most mobile phones. It uses standardised communication protocols to send text messages between phones - it's low cost and ideal for businesses to use for sending short messages to clients
- Option (c) is correct.**  
*Explanation:* **Flipkart:** is a e-shopping website in India.
- Option (d) is correct.**  
*Explanation:* Zomato is an online platform that makes it easy to find and order food from restaurants in your area.
- Option (c) is correct.**  
*Explanation:* SMTP(Simple Mail Transfer Protocol) is used to send and receive email. It is sometimes paired with IMAP or POP3 (for example, by a user-level application), which handles the retrieval of messages, while SMTP primarily sends messages to a server for forwarding.
- Option (a) is correct.**  
*Explanation:* SFTP stands for SSH File Transfer Protocol or Secure File Transfer Protocol. It is used to secure file transfers between a remote host server and a client user over a public network like the internet. SFTP ensures that the host and client are validated and authenticated.
- Option (a) is correct.**  
*Explanation:* source is not an attribute of <img> tag in HTML.
- Option (b) is correct.**  
*Explanation:* HTML defines six levels of headings. A heading element implies all the font changes, paragraph breaks before and after, and any white space necessary to render the heading. The heading elements are H1, H2, H3, H4, H5, and H6 with H1 being the highest (or most important) level and H6 is the least.
- Option (b) is correct.**  
*Explanation:* The font tag is having three attributes called size, color, and face to customize your fonts. To change any of the font attributes at any time within your webpage, simply use the <font> tag. The text that follows will remain changed until you close with the </font> tag.
- Option (b) is correct.**  
*Explanation:* An ordered list uses numbers or some sort of notation that indicates a series of items. For example, an ordered list can start with number 1, and continue through 2, 3, 4, and so on.
- Option (a) is correct.**  
*Explanation:* Massive Open Online Courses (MOOCs) are free online courses available for

anyone to enroll. MOOCs provide an affordable and flexible way to learn new skills, advance your career and deliver quality educational experiences at scale.

- Option (d) is correct.**  
*Explanation:* <br>: The Line Break element. The <br> HTML element produces a line break in text (carriage-return). It is useful for writing a poem or an address, where the division of lines is significant.

## SECTION - B

- Difference between Chat and Email service.

1.	The sender and receiver need to be online at the same time.	1.	The receiver may not be online and can open the mailbox later to view mails.
2.	The chat is real-time communication. The chat can be done using various methods like Facebook, Instagram, and WhatsApp. Many other apps also provide the feature of the chat.	2.	Email is the communication that is mostly used in communication at the professional level. The email is introduced by the goggle.

- E-governance is the application of Information and Communication Technologies (ICTs) in government operations to achieve public ends through the introduction of digital means across various stand-alone systems between Government-to-Citizens (G2C), Government-to-Business (G2B), and Government-to-Government (G2G).  
Services provided by e-Governance
  - Applications of e- Governance :
  - Payment of income tax and corporate tax,
  - Registration of new companies
  - Application of personal documents such as passport and driver's license. 5.
  - Employment search services.

OR

The Internet, sometimes called simply "the Net" is a worldwide system of computer networks -- a network of networks in which users at any one computer can, if they have permission, get information from any other computer (and sometimes talk directly to users at other computers). It was conceived by the Advanced Research Projects Agency (ARPA) of the U.S. government in 1969 and was first known as the ARPANET.

The internet comprises of an immense number of servers, each identified by an IP address. These servers store libraries of information of almost all domains.

Most information is found on the Internet by utilizing search engines. A search engine is a web service that uses web robots to query millions

of pages on these servers and creates an index of those web pages. Internet users can then use these services to find information on the Internet.

15. The newly introduced HTML5 `<audio>` element provides a standard way to embed audio in web pages. However, the audio element is relatively new but it works in most of the modern web browsers. The following example simply inserts an audio into the HTML5 document, using the browser default set of controls, with one source defined by the src attribute.

**Example**

```
<audio controls="controls">
<source src="media/birds.mp3" type="audio/
mpeg">
<source src="media/birds.ogg" type="audio/ogg">
Your browser does not support the HTML5 Audio
element.
</audio>
```

16. A software license is a license agreement that gives an individual, company, or , permission to use a software program.

A software license is a document that provides legally binding guidelines for the use and distribution of software. Software licenses typically provide end users with the right to one or more copies of the software without violating copyrights. **Examples of Licensed software :** Microsoft Office , Oracle

**OR**

The digital divide can be closed by implementing digital inclusion policies, programs and tools that incorporate : Affordable, robust broadband internet service. Internet-enabled devices that meet the needs of the user.

**Ways to reduce it also include :**

- Digital literacy programs
- Alliance for affordable internet
- Free Basics

17. CSS is a design language that makes a website look more appealing than just plain or uninspiring pieces of text. Whereas HTML largely determines textual content, CSS determines visual structure, layout, and aesthetics. HTML is a markup language, and CSS is a style sheet language.

- Improves Website Presentation.
- The standout advantage of CSS is the added design flexibility and interactivity it brings to web development.
- Makes Updates Easier and Smoother.

18. The `<input type="radio">` defines a radio button. Radio buttons are normally presented in radio groups (a collection of radio buttons describing a set of related options). Only one radio button in a group can be selected at the same time.

**Note:** The radio group must share the same name (the value of the name attribute) to be treated as a group. Once the radio group is created, selecting any radio button in that group automatically deselects any other selected radio button in the same group. You can have as many radio groups on a page as you want, as long as each group has its own name.

**Example code :**

```
<html>
<head>
<title> Example of Radio Button</title>
</head>
```

```
<body>
<form>
<label>
```

**Gender:**

```
</label> <br>
```

```
<input type="radio" id="gender" name="gender"
value="male"/> Male
```

```
<br>
```

```
<input type="radio" id="gender" name="gender"
value="female"/> Female <br/>
```

```
</form>
```

```
</body>
```

```
</html>
```

**Output :**

Gender :

Male

Female

**OR**

`<UL>` Tag

**Example:**

**Output :**

`<OL>` Tag

An ordered list starts with the `<ol>` tag. Each list item starts with the `<li>` tag.

**The list items will be marked with numbers by default:**

**Example:**

```
<ol>
```

```
<li>Coffee</li>
```

```
<li>Tea</li>
```

```
<li>Milk</li> </ol>
```

**Output :**

1. Coffee

2. Tea

3. Milk

An unordered list starts with the `<ul>` tag. Each list item starts with the `<li>` tag.

**The list items will be marked with bullets (small black circles) by default:**

```
<ul>
```

```
<li>Coffee</li>
```

```
<li>Tea</li>
```

```
<li>Milk</li>
```

```
</ul>
```

- Coffee

- Tea

- Milk

19. `<br>` tag

The `<br>` tag inserts a single line break. The `<br>` tag is useful for writing addresses or poems. The `<br>` tag is an empty tag which means that it has no end tag.

**Example:**

```
<html>
```

```
<head>
```

```
<title>
```

```
Example of BR tag
```

```
</title>
```

```
</head>
```

```
<body>
```

```
<p>If you want to break a line <br> in a
paragraph, <br> use the BR element in <br> your
HTML document. </p>
```

```
</body>
```

```
</html>
```

**Output:**

If you want to break a line in a paragraph, use the br element in Your HTML document.

**<p> tag**

The HTML <p> element defines a paragraph. A paragraph always starts on a new line, and browsers automatically add some white space (a margin) before and after a paragraph. <p> tag is a container tag.

**Example**

```
<html>
```

```
<head>
```

```
<title>
```

```
Example of BR tag
```

```
</title>
```

```
</head>
```

```
<body>
```

```
<p> This paragraph contains a lot of lines in the source code, but the browser ignores it. </p> <p> This paragraph contains a lot of spaces in the source code, but the browser ignores it. </p>
```

```
</body>
```

```
</html>
```

**SECTION - C**

20. Digital property rights represent subsequent generations of property rights, which puts them on an equivalent playing field as patents, copyrights, and trademark brands. As property, digital information exists inside the web realm. It gives the owner the exclusive right to copy, modify, and distribute or sell those copies or modifications of the property to the public. Software copyright could cover the specific code used in the program or elements in the user interface. Ways to protect intellectual property
- Keep business and trade ideas a secret. Until you adequately secure your IP through a non-disclosure agreement, it is best to avoid discussing it with others.
  - Document your concepts and original content in detail.
  - Apply for a trademark.
  - Ensure strong access credentials.
21. a. URL1 is using the https protocol, whereas URL2 is using the http protocol.
- b. **I will prefer to use URL1 as:** The major difference between HTTP and HTTPS protocol is that HTTP is less secure whereas HTTPS is more secure protocol and it uses TLS/SSL certificate to ensure the authentication. Both, HTTP and HTTPS are used to transfer hypertext documents on the world wide web (www).
- c. **WWW :** World Wide Web
22. a. i) {background-color: yellow;}  
ii) h2 { display: block; font-color: Red ; margin-left: 25px;}  
**OR**  
b. i) h1 { display: block; font-color: green ; text-align: center;}  
ii) p { display: block; font-color: yellow; font-weight: Bold ; font-size: 25px;}  
23. a. **HTTPS :** Hypertext Transfer Protocol Secure  
b. **TCP :** Transmission Control Protocol  
c. **SSH :** Secure Shell

**SECTION - D**

24. <HTML>  
<HEAD>  
</HEAD>  
<BODY BGCOLOR="YELLOW" TEXT="BLUE">  
<H1> HOME SERVICES</H1>  
<IMG SRC="SERVICE.PNG"> <BR>  
<FONT FACE="VERDANA" SIZE=4>  
We Are happy to provide you all help at your residence <BR>  
Special discount offers from (1<sup>st</sup></sup>May,2022 to 30<sup>th</sup></sup>June 2022)<BR>  
Please contact us for the following services<BR>  
<UL>  
<LI>Maid/Servant(Cleaning)  
<LI>Maid/Servant(Cooking)  
<LI> Driver  
</UL>  
**Queries:** <a href="mailto:help@homeservices.com"> help@homeservices.com</a>  
</FONT>  
</BODY>  
</HTML>

**OR**

- ```
<HTML>
<HEAD>
</HEAD>
<BODY BGCOLOR="CYAN" >
<FONT FACE="ARIAL" >
<H1> EVENTS</H1>
<FONT SIZE=5>
The following events are scheduled to be held on
1<sup>st</sup></sup>April,2023 <BR>
The timings are as follows<BR>
<OL>
<LI>9:00AM – 10:00 AM Flag Hosting
<LI>10:00AM-11:00 AM Painting competition
<LI>11:00AM – 12:30 PM Dance competition
<LI>12:30-1:30 PM Song competition
<LI> 1:30-2:00 PM Closing Ceremony
</OL>
<B>For any Queries contact : <a href="mailto:queries@event.com">queries@event.com </a><BR>
PHONE: 9999999999
</B>
</FONT>
</BODY>
</HTML>
```
25. **STATEMENT1:** <TD COLSPAN=8>  
**STATEMENT2:** <TR>  
**STATEMENT3:** </TR>  
**STATEMENT4:** <TD ROWSPAN=2>  
**STATEMENT5:** 14
26. a. Mailbox/EmailID  
b. Cyber Ethics  
c. Credentials  
d. Logout  
e. 1. Be respectful to others.  
2. Don't bully people.

