



Computer Applications (Code 165)

Sample Question Paper (Theory) Class X (Session 2022-2023)

Maximum Marks: 50

Time Allowed: 02 Hours

General Instructions:

1. This Question Paper has 5 Sections A-E.
2. All Questions are compulsory. However, an internal choice of approximately 30% is provided.
3. Section A has 12 questions carrying 01 mark each.
4. Section B has 7 Very Short Answer (VSA) type questions carrying 02 marks each.
5. Section C has 4 Short Answer (SA) type questions carrying 03 marks each.
6. Section D has 1 Long Answer (LA) type question carrying 04 marks.
7. Section E has 2 Source based /Case-based /Passage based Questions carrying 04 marks each.

Section – A (All questions are compulsory)

1. HTML is a
 - a. Package
 - b. Language
 - c. Software
 - d. None of these
2. Which of the following techniques can be used for the security of data?
 - a. Encryption
 - b. Authorisation
 - c. Authentication
 - d. All of these

Ans. b. Language

Ans. d. All of these

3. is not an example of Intellectual Property rights.
 - a. Password
 - b. Trademark
 - c. Industrial Design
 - d. Patent

Ans. a. Password

4. Which of the following does not come under cybercrime?
 - a. Hacking
 - b. Plagiarism
 - c. Phishing
 - d. Using open-source software

Ans. d. Using open-source software

5. comes with the license to use the software with certain conditions that restrict users to modify or distribute it.
- Proprietary Software
 - Freeware
 - Open-Source Software
 - Free and open source software

Ans. a. Proprietary Software

6. Which of the following involves changing a few words and altering the sentence structure a little so as to escape being caught by a plagiarism checker tool or software?
- Paraphrasing
 - Direct Plagiarism
 - Patchwork Paraphrasing
 - Mosaic Plagiarism

Ans. a. Paraphrasing

7. You can transmit sensitive information, such as your credit card details, by using the SSL protocol over a network. SSL stands for
- Secret Sockets Layer
 - Secure Socket Layer
 - Secret Socket Lane
 - Secure Sockets Layer

Ans. d. Secure Sockets Layer

8. Encryption is a mechanism for converting a message or information into an unreadable form. This unreadable form is also called
- Secrettext
 - Ciphertext
 - Siphertext
 - Hypertext

Ans. b. Ciphertext

9. refers to a declaration that an individual or party to a contract or transaction cannot deny the authenticity of their signatures or disclosed information.
- Fraud
 - Privacy
 - Non-repudiation
 - Encryption

Ans. c. Non-repudiation

10. In this form of plagiarism, a writer takes the content from his/her own earlier work without citing that the work has also been used previously. Identify the form.
- Paraphrasing
 - Direct Plagiarism
 - Self-Plagiarism
 - Mosaic Plagiarism

Ans. c. Self-Plagiarism

Questions No-11 & 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 & Reason.

11. **Assertion(A):** Email is known as electronic mail.

Reason(R): Email represents a mode of communication in which a user can send electronic messages to other users through the Internet.

- a. Both Assertion (A) and Reason (R) are true and Reason (R) is a correct explanation of Assertion (A).
- b. Both Assertion (A) and Reason (R) are true but Reason (R) is not a correct explanation of Assertion (A).
- c. Assertion (A) is true and Reason (R) is false.
- d. Assertion (A) is false and Reason (R) is true.

Ans. a. Both Assertion (A) and Reason (R) are true and Reason (R) is a correct explanation of the Assertion (A).

12. Assertion(A): Using the Internet to chat with people is somewhat similar to using the telephone for the same purpose.

Reason(R): In both cases, the people involved express their views and ideas just as they would if they were to meet face to face.

- a. Both Assertion (A) and Reason (R) are true and Reason (R) is a correct explanation of Assertion (A).
- b. Both Assertion (A) and Reason (R) are true but Reason (R) is not a correct explanation of Assertion (A).
- c. Assertion (A) is true and Reason (R) is false.
- d. Assertion (A) is false and Reason (R) is true.

Ans. a. Both Assertion (A) and Reason (R) are true and Reason (R) is a correct explanation of the Assertion (A).

Section –B(2 Marks each)

13. Define URL and list its components.

Ans. The information resources on the Internet are identified by Uniform Resource Locator (URL), which is a unique address of each Web page. The four components of a URL are protocol, subdomain, domain name, and domain extension.

14. Define video conferencing and e-mailing.

Ans. Video conferencing is the use of audio and video telecommunication technologies to connect two or more users located in different parts of the world, for exchanging information through a virtual meeting over the Internet. E-mailing is a method through which digital messages are exchanged on the Internet or other computer networks.

OR

List two advantages of using a broadband connection.

Ans. The following are some advantages of using a broadband connection:

- It is faster than a dial-up connection.
- It provides a continuous connection to the Internet.

15. What is the functionality of the MAILTO link in HTML?

Ans. The MAILTO link in HTML is used to transmit e-mail messages over the Internet. The MAILTO link refers to an HTML link that is used to activate the mail client installed on the computer system to send e-mails. This link is used with the HREF attribute of the <A> tag. As a value for the link, we need to specify an e-mail address. However, some other parameters including subject, cc, bcc, and body text, can also be added to the e-mail message.

16. Explain the difference between internal linking and external linking in HTML.

Ans. In HTML, external linking refers to the type of link that, on clicking, opens a document or Web page (to which the hyperlink is linked) in a new window. On the other hand, internal linking allows us to link different sections of the same Web page.

OR

Describe any two elements of a search engine.

Ans. Two elements of a search engine are as follows:

- **Spiders or Web crawlers:** It is the software that systematically browses the Internet. They are also known by various other terms, such as ants, bots, automatic indexers, Web spiders, and Web robots.
- **Indexing software:** It is the software that receives the list of Web documents and Web addresses collected by the Web crawler. The indexing software extracts the information from the Web documents and Web addresses and then prepares the index of the available information. Finally, it stores the data in the database.

17. E-learning refers to the electronic mode of delivering learning, training, or educational programs to users.” Write any two advantages of e-learning.

Ans. As compared to traditional classroom learning, e-learning provides the following advantages:

- **Cost effective:** Eliminates the expense and time incurred in travelling by both the instructor and the learner to be at one location.
- **Faster learning:** Provides quicker learning as compared to traditional classroom learning. This is because e-learning adopts the individualized approach, which allows the learners to pace their study according to their comfort and convenience

18. Define cell spacing and cell padding with an example in HTML.

Ans. In HTML, the term cell spacing refers to the amount of space in pixels between the borders of a cell. We can specify cell spacing with the help of the CELSPACING attribute of the <TABLE> tag. On the other hand, cell padding refers to the amount of space in pixels between the edges of a cell and its content. We can specify cell padding by using the CELLPADDING attribute of the <TABLE> tag.

OR

Name the tag used for linking in HTML. What are the main attributes of this tag?

Ans. The <A> tag is used for linking documents in HTML. The main attributes of the <A> tag are HREF, NAME, and TITLE.

19. Write the HTML code to do the following:

- a. To display a horizontal line of green colour.
- b. To create a hyperlink on the word CLICK to an image named testimage.jpeg

Ans. a. The HTML code to display a horizontal line of green colour is as follows:

```
<HR COLOR="green">
```

- b. The HTML code to create a hyperlink on the word CLICK to an image named testimage.jpeg

```
< A HREF="testimage.jpeg"> CLICK </A>
```

Section –C (3 marks each)

20. You can use a CSS style sheet with an HTML document by linking the CSS code with the HTML document. Explain the three different ways of linking the CSS code with the HTML.

Ans. Following are the three ways to apply the CSS style to your HTML document:

- **The internal style sheet:** The internal style sheet is written within the HEAD element of the HTML document. This style is applied only to the documents in which it is defined and not referenced by any other Web document. The syntax of an internal style sheet is written as follows:

```
<STYLE TYPE="TEXT/CSS">  
SELECTOR { PROPERTY: VALUE; }  
</STYLE>
```

- **The external style sheet:** The syntax to create an external style sheet is the same as that of creating an internal style sheet. In the case of an internal style sheet, the CSS file is placed inside the HTML document; whereas, in the case of an external style sheet, the CSS file is written outside the HTML document and the reference of the CSS file is placed in the HTML document.

- **The inline style:** In the inline style, a unique style is applied to a single element. The properties are placed inside the STYLE attribute of the HTML element on which you want to apply the style:

```
<P STYLE="BACKGROUND:#ccc; COLOR:#fff; BORDER: Solid Black 1px;">
```

In the preceding code snippet, we are applying the style to the P element.

21. Write the HTML code to display the text “Welcome on Board” in bold and underline font style.

Ans. The HTML code is as follows:

```
<HTML>  
<HEAD>  
<TITLE>My Page</TITLE>  
</HEAD>  
<BODY>  
<b><u>Welcome on Board</u></b>  
</BODY>  
</HTML>
```

22. What do you understand by the term hyperlinks? What is the need of creating hyperlinks? Discuss the two types of linking.

Ans. Links (or hyperlinks) are used to connect one Web page to another. When a user clicks a link, he or she is redirected (sent) to the Web page specified as the destination Web page for the link. In HTML, we can also link different sections of the same or different Web pages. A link is highlighted and underlined to differentiate it from the ordinary text in the Web page. Using HTML, we can do the following two types of linking:

- **External linking:** Refers to the type of linking which, on clicking, opens a document or Web page (to which the hyperlink is linked) in a new window. When we click a hyperlink on a Web page, we are directed to the location specified in the hyperlink, which is a section of the same or a different Web page containing the information we want.
- **Internal linking:** Allows us to link different sections of the same as well as different Web pages. Hyperlinks within the same Web page (internal links) may be created if the Web page contains a large amount of content with many subsections. We can create an internal link by using the anchor (<A>) tag. The <A> tag used to create an internal link is called named anchor.

OR

Briefly explain the following terms:

- a. E-commerce
- b. Online shopping
- c. Social networking

Ans. The preceding terms are explained as follows:

- a. **E-commerce:** Refers to using the electronic mode, such as the Internet, to sell, and buy products or services
- b. **Online shopping:** Refers to the activity of purchasing items from different websites on the Internet
- c. **Social networking:** Refers to a convenient method of getting to know people whose interests, opinions, and likes and dislikes are quite similar to ours and developing friendships with them on the Internet

23. Mr. Sharma is the CEO of ABC Ltd. The company has offices in Delhi, Bengaluru, Chennai, Kolkata, and Hyderabad. To save time while communicating with his clients and business colleagues,

Mr. Sharma has decided to use video conferencing. However, he is worried about the cost this would entail as well as other issues. Should Mr. Sharma use video conferencing? If yes, why? List any three advantages of using video conferencing.

Ans. Video conferencing uses audio and video telecommunication technologies to connect two or more users, located in different parts of the world, for exchanging information through virtual meetings over the Internet. The three advantages of using video conferencing are as follows:

- Provides an efficient medium for communicating over long distances
- Saves time and expenses of travelling
- Allows performing all the activities of a normal meeting

Section –D (4 marks each)

24. Write the HTML code to design the web page as shown below, considering the specifications that follow. You can write the code for any 4 specifications out of the given 5 specifications:

Bengal Tiger

The Bengal tiger (*Panthera tigris tigris*) has the largest population of tigers in Asia, and as of 2011, there were thought to be fewer than 2,500 of them. It has been categorised as Endangered on the IUCN Red List since 2008 and is in danger from habitat loss, poaching, and habitat fragmentation. There are not any Tiger Conservation Landscapes in its range that are deemed big enough to sustain a population of more than 250 adults.

Also, research the following:

- [Russian Tiger](#)
- [Indonesian Tiger](#)
- [Malaysian Tiger](#)



Specification-1: Background colour of the page must be sky blue.

Specification-2: Three links are given on the web page. Their link colour must be black and the visited link colour must be green.

Specification-3: Font style for the page must be Arial.

Specification-4: Heading “Bengal Tiger” on the page must be Red.

Specification-5: PNG Image named “Tiger” must be placed on the right side of the web page.

Ans. The HTML code is as follows:

```
<HTML>
<HEAD>
<TITLE>Tiger</TITLE>
</HEAD>
<BODY BGCOLOR="skyblue" LINK="black" VLINK="green">
<FONT FACE="arial">
<H1 ALIGN="center"><FONT COLOR="Red">Bengal Tiger</FONT></H1>
<IMG SRC="Tiger.png" ALIGN="right" WIDTH="350" HEIGHT="250">
<P ALIGN="left">The Bengal tiger (Panthera tigris tigris) is the most numerous tiger population
in Asia, and was estimated at fewer than 2,500 individuals by 2011. Since 2008, it is listed as
Endangered on the IUCN Red List and is threatened by poaching, loss and fragmentation of habitat.
None of the Tiger Conservation Landscapes within its range is considered large enough to support
an effective population of more than 250 adult individuals. </P><BR>
See Also:<BR>
<UL>
<LI><A HREF="one.html">Russian Tiger</A></LI>
<LI><A HREF="two.html">Indonesian Tiger</A></LI>
<LI><A HREF="three.html">Malaysian Tiger</A></LI>
</UL>
</FONT>
</BODY>
</HTML>
```

OR

Write the HTML code to design the web page as shown below, considering the specifications that follow. You can write the code for any 4 specifications out of the given 5 specifications:

Specification-I: The title of page should be “Pollution and its types” and must be blue in colour.

Specification-II: The hyperlinks used on the web page must be green in colour.

Specification-III: The font style for the page must be Arial.

Specification-IV: Write hyperlink “For more detail” at the centre bottom of the page. It must be used for mailing purpose.

Specification-V: The “Pollution.png” image must be used on the web page to depict pollution.

Ans. The HTML code is as follows:

```
<HTML>
<HEAD>
<TITLE>Pollution</TITLE>
</HEAD>
<BODY LINK="green" BGCOLOR="pink">
<FONT FACE="arial">
<H1 ALIGN="center"><FONT COLOR="blue">Pollution and its types</FONT></H1>
<P>Pollution is the introduction of contaminants into the natural environment that cause adverse
change. Pollution can take the form of chemical substances or energy, such as noise, heat or light.
Pollutants, the components of pollution, can be either foreign substances/energies or naturally
occurring contaminants. </P>
<IMG SRC="pollution.png" ALIGN="right" HEIGHT="300" WIDTH="300"></IMG>
```

```

<P>The different types of pollution are:</P><BR>
<UL>
<LI><A HREF="one.html">Air Pollution</A></LI>
<LI><A HREF="two. html">Soil Pollution</A></ LI>
<LI><A HREF="three.html">Water pollution</A></LI>
<LI><A HREF="three.html">Sound pollution</A></LI>
</UL>
<BR><BR><BR><BR><BR><BR><BR><BR>
<CENTER><A HREF="MAILTO:abc@xyz.com">For more Details</A></CENTER></FONT>
</BODY>
</HTML>

```

Section-E

Case Study 1

25. Medhansh went to an interview for the post of a web developer. In the technical test, he was supposed to design an HTML table as given below. Help him to complete the table with the right statements in the blanks. Observe the table and attempt any four questions (out of 5) given after the table.

WINTER SALE		
S.No.	Garments	Discount%
1	Shirt Full Sleeves	5
2	Jeans	10
3	Blazers	20
4	Trousers	30

```

<HTML>
<HEAD>
<TITLE>SALE</TITLE>
</HEAD>
<BODY>
<TABLE BGCOLOR=_____ BORDER="2" CELLSPACING="10" CELLPADDING="10" BORDERCOLOR="yellow">
.....<!--STATEMENT-1>
<TR><TD COLSPAN="4" align="CENTER">_____ </TD></TR> .....<!--STATEMENT-2>
<TR><TH>S.No.</TH><TH>Garments</TH><TH>Discount%</TH> </TR>
<TR><TD>1</TD><TD>Shirt Full Sleeves</TD><TD>5</TD> </TR>
<TR><TD>2</TD><TD>Jeans</TD><TD>10</TD></TR>
<TR><TD>3</TD><TD>Blazers</TD><TD>20</TD></_____> .....<!--STATEMENT-3>
<TR><TD>4</TD><TD>Trousers</TD><TD>30</TD></TR>
</_____> .....<!--STATEMENT-4>
<A HREF="next.html">Next page>></_____> .....<!--STATEMENT-5>
</BODY>
</HTML>

```

- Write the attribute value to complete Statement-1 to achieve the output given in the above table.
- Write a suitable option for the blanks given in Statement-2.
- Write the appropriate answer for the blank given in Statement-3

- d. Write the appropriate answer for the blank given in Statement-4
- e. What will be the complete sequence of closing the above html document in statement 5?

Ans.

- a. `<TABLE BGCOLOR="ORANGE" BORDER="2" CELSPACING="10" CELLPADDING="10" BORDERCOLOR="yellow">`
- b. `<TR><TD COLSPAN="4" align="CENTER">WINTER SALE</TD></TR>`
- c. `<TR><TD>3</TD><TD>Blazers</TD><TD>20</TD></TR>`
- d. `</TABLE>`
- e. `Next page>>`

Case Study 2

26. Zoya studies in a college and used to chat in a particular chat room on daily basis in his free time. A person started sending messages to Zoya. Initially, Zoya found the person nice as he used to send funny jokes to her. Zoya used to chat with that person everyday. She also shared her daily routine with him.

After a few weeks, the person started to send weird messages to Zoya using the personal information that she shared with him during chatting. She stopped the conversation with that person and also blocked him. But, Zoya started receiving harassment and threatening messages in her email. She also received obscene photos and videos on her mobile which she also used for chatting.

Based on the given information, answer the questions given below. Attempt any four questions:

1. Identify the type of cybercrime Zoya is a victim of.
Ans. d. Cyberstalking
2. What action she should take?
Ans. d. She must share this harassment with her parents and file a complaint at the nearest police station.
3. Zoya is advised by police personnel to store his personal information from his mobile to some other external storage device. This process is known as?
Ans. a. Data backup
4. Sending obscene photos or videos to some person is known as?
Ans. a. Pornography
5. How can Zoya maintain privacy on the Internet?
Ans. Zoya can maintain privacy on the Internet in the following ways:
 - a. By not disclosing her password to other users
 - b. By not accessing Web pages or other resources on the Internet that she is not authorized to access.
 - c. By not sharing her details and information while interacting with other users on the Internet.