

Chapter-1 Networking Concepts Assessment Zone

A. Choose the correct answer.

- 1 What is the importance of a computer network?
- It allows sharing of resources.
 - It is an effective communication medium.
 - It lets users share files.
 - All of the above.

Ans. d. All of the above.

- 2 A network that spans countries and continents is known as_____.
- LAN
 - MAN
 - WAN
 - PAN

Ans. (C) WAN

3. A device used to connect computers in a network is referred to as
- a firewall
 - CPU
 - HTTP
 - a switch

Ans. d) a switch

4. A topology in which every computer is connected to every other computer is called
- Ring
 - Mesh
 - Star
 - Bus

Ans. b.) Mesh topology

5. It transmits data in the form of light rather than electronic signals.
- Coaxial cable
 - Bluetooth
 - Optical fibre cable
 - Twisted pair cable

Ans. c) Optical fibre cable

6. A computer network organised around a person for communication between devices such as phones and personal digital assistants is called
- PAN
 - LAN
 - MAN
 - WAN

Ans. a) PAN

7. A device used to connect two or more networks.
- NIC
 - MODEM
 - Router
 - None of these

Ans. c.) Router

B. Fill in the blanks using the words given in the box.

- 1 **Topology** refers to the layout pattern in which the computers are connected to each other in a network.
2. A **MAN** is formed when the computers are connected in a neighbourhood area.

3. A **Firewall** is used to prevent unauthorised access to a network.
4. Modem stands for **modulator-demodulator**.
5. **Protocol** is a set of rules used by computers on the network to communicate with each other.
6. **Wi-Fi** and **Bluetooth** technologies make use of radio waves.
7. **Infrared** waves are used for communication between a TV set and its remote control.
8. **TCP/IP** protocol is used to send data in the form of packets on the internet.
9. In **Ring** topology, each computer is connected to two other computers so as to form a closed network.
10. A **CAN** is a computer network that connects two or more LANs but is not as large as a MAN or WAN.

C. Answer the following questions.

1. Define the term ‘computer network’. What are its advantages?

Ans. A computer network consists of two or more computers that are linked in order to share resources such as printers, exchanges files and allow communication.

Some of the advantages of computer networks are:

1. Resource Sharing.
2. File Sharing and Remote Database Access.
3. Ease of Communication.

2. State the types of computer networks based on the geographical area covered by them.

Ans. The following are the types of network based on geographical area covered or scale of the network:

1. PAN (Personal Area Network)
2. LAN (Local Area Network)
3. CAN (Campus Area Network)
4. MAN (Metropolitan Area Network)
5. WAN (Wide Area Network)

3. Write a note on twisted pair and coaxial cables.

Ans. **Twisted Pair Cable:**

1. It consists of a pair of insulated wires twisted together.
2. It comes in two varieties: Shielded Twisted Pair (STP) and unshielded Twisted Pair Cable (UTP)

Coaxial Cable:

1. Coaxial cable is an electronic cable with a conductor at its centre.
2. The inner conductor is surrounded by a tabular insulating layer.
3. The insulating layer is surrounded by a conductive layer called the shield, which is finally covered with a thin insulating layer on the outside.

4. Give the advantages of optical fibre cables.

Ans.

1. It transmits data in the form of light rather than electronic signals.
2. It has the capability to carry data at a very high speed.
3. It can transmit the signals over much longer distances.

5. What is a bus topology?

Ans.

1. In bus topology, all the computers are connected to a single cable called the bus.
2. The transmission of data from any computer travels through the length of the bus in both the directions.
3. The advantage of the bus topology is that it is quite easy to set up.

6. How is hub different from a switch?

Ans.

1. In a hub, when once computer sends data on the network, the hub simply forwards

the packets to all the other computers connected to it.

2. Unlike a hub, the switch sends the incoming data to the desired destination only.

7. Discuss some common threats to network security.

Ans. Some of the common threats are: Virus, Worm, Trojan Horse, Data Theft.

8. What is a firewall?

Ans. A firewall is used to prevent unauthorised access to a computer network.

A firewall examines each message and blocks those that do not meet the specified security criteria.

9. How is microwave transmission different from radio wave transmission?

- | | | |
|-------------|---|--|
| Ans. | <ul style="list-style-type: none">• Microwave communications are unidirectional.• They can be used for terrestrial communication or for satellite communication. | <ul style="list-style-type: none">• Radio wave communications are omnidirectional.• They are widely used for communication both indoors and outdoors. |
|-------------|---|--|

Example: High towers with antennas in the city.

Example: Bluetooth/Wi-Fi technologies

HOTS

A. Explain how a packet of data travels from one computer to other over the internet. (omit)

B. A company has two offices in adjacent buildings. The computers in the two offices need to be connected to one another for a very high speed connectivity.

1. What cable should be used to connect the computers in these two offices?

Ans. Optical Fibre Cable

2. What type of network is formed when the computers in the two offices are connected to form a network?

Ans. CAN

Chapter 4 Images and Lists in HTML

Practice Zone [pg.69]

Find out the errors in the following code segment and write the correct code.

1. `<OL type=a start=c>`
`Carbohydrtes`
` Minerals`
`Protines>`
``

Ans. Correct codes:-

```
<OL type="a" start="3">  
<LI>Carbohydrtes  
<LI> Minerals  
<LI>Protines  
</OL>
```

2. `<UL type=i>`
` Delhi`
` Mumbai`
` Kolkata`
``

Ans. Correct codes:-

```
<UL type="disc">  
<LI> Delhi  
<LI> Mumbai  
<LI> Kolkata  
</UL>
```

3. `<LI type=disc>`
` keyboard`
` Mouse`
``

Ans: Correct codes:-

```
<UL type="disc">  
<LI> keyboard  
<LI> Mouse  
</UL>
```

Assessment Zone [pg.70-71]

A. Choose the correct answer.

1. Find the odd one out.
a. Alt b. Src c. Border d. Size

Ans. **d) Size**

2. Which one of the following values cannot be assigned to the align attribute of the tag?

Ans. a. Top b. Right c. Center d. Bottom

Ans. **c) Center**

3. Which of the following cannot be used as the value for the type attribute of the tag?

Ans. a. `<OL type= " A">` b. `<OL type= "one">`

c. <OL type= "I" >

d. <OL type= "a">

Ans. b) <OL type= "one">

4. Each item in the ordered or unordered list is marked using which of the following tags?

a.

b.

c.

d. None of these

Ans. c)

B. Fill in the blanks using the words given below.

1. You use the **type** attribute of the tag to specify the type of bullets to be used in front of each list item.
2. The **src** attribute of tag lets you specify the name of the image file to be displayed on a webpage.
3. The text to be displayed when an image cannot be shown can be specified using the **alt** attribute of the tag.
4. Using the **align** attribute of the tag, you can specify the placement of an image with respect to inline text.
5. The **start** attribute of tag is used when you want to start the numbering from a different letter or number.

C. Answer the following questions.

1. • **What is the use of the tag? What are its attributes?**

- Ans. • tag is used to insert image in HTML page.
 • It is an empty tag.
 • The attributes of tag are src, height, width, align, alt, border.

2. **What is the purpose of src and alt attributes of the tag?**

- Ans. 1. Src : This attribute is used to specify the URL or the path of the image to be displayed. For eg.
 2. Alt : This attribute is used to specify an alternative text that a browser will display if the image cannot be displayed. For eg.

3. **Differentiate between and tags.**

Ans.	<u>OL tag</u>	<u>UL tag</u>
	<ul style="list-style-type: none"> • Ordered list is also called as numbered list. • Ordered list is used when the list items have a specific numerical order or ranking. • An ordered list is enclosed within the and the tags. • The default numbering style is 1,2,3,..... and so on. 	<ul style="list-style-type: none"> • Unordered list is also known as bulleted list. • In unordered list, the list items do not have a specific order. • An unordered list is enclosed within the and the tags. • The default value of bulleted list is 'disc'.

4. **What is the use of type attribute of the list tags?**

This attribute specifies the type of numbering or bullet to be used for each list item. For example:

For Bullets →<UL type= “disc”/ “circle”/ “square”>

For Numbering →<OL type= “A”/ “a”/ “i”/ “I”/ “1”>

5. How can you create multilevel lists?

Ordered and unordered lists can be nested within each other to form multilevel list.

For Example:

```
<UL type = “square”>  
<LI> Beaches  
<OL type= “a”>  
<LI> Goa  
<LI> Andaman & Nicobar  
</OL>  
<LI> Hills  
<UL type= “circle”>  
<LI> Darjeeling  
<LI>Gangtok  
</UL>  
</UL>
```

D. Write the HTML code for the following.

1. To display square bullets in an unordered list.

```
<UL type = “square”>
```

2. To start an ordered list with the number 3.

```
<OL type = “1” start= “3” >
```

3. To insert an image ‘picture.gif’ on a webpage and centre align it in the browser’s window.

```
<center>  
<img src= “picture.gif”>  
</center>
```

4. To display the text ‘building image’ if the image ‘building.jpg’ cannot be displayed.

```
<img src= “building.jpg” alt= “building image” >
```

HOTS

Suggest a suitable solution for the given problems.

1. You have written the following code to insert an image in the centre of the webpage. However, it is not giving the desired results. Identify the error and write the corrected code.

```
<IMG src = “logo.jpg” align = “center” >
```

Ans The correct code is:

```
<center>  
<IMG src = “logo.jpg”>  
</center>
```

2 You wrote the code to insert an image on the webpage. However, the image is occupying the entire webpage space. How can you make the image appear in a specific size?

Ans. The height & width attribute of tag is used to specify the height and width of the image in pixels.

For example:

```
<IMG height= "200" width= "200" >
```

3 You want to display two images "picture1.jpg" and "picture2.jpg" as a bulleted list. Write the code for the same.

Ans: <UL type = "circle">

```
<LI><IMG src= "picture1.jpg">
```

```
<LI><IMG src= "picture2.jpg">
```

```
</UL>
```

Chapter 5 Tables and Hyperlinks in HTML

Assessment Zone [pg.84 to 86]

A. Choose the correct answer.

1. Which of the following is an attribute of the <TD> tag?
- a. Cellspacing b. Cellpadding c. Border d. Rowspan

Ans. (d) Rowspan

2. Which of the following is the correct code for creating a hyperlink?
- a. Google Home Page
b. Google Home Page
c. Google Home Page
d. <A http://www.google.co.in

**Ans: (c) Google Home Page **

3. Which of the following attribute is used to specify the space between the cell wall and the contents of the cell?
- a. Cellspacing b. Colspan c. Cellpadding d. Rowspan

Ans: (c) Cellpadding

4. Which of the following statements does not hold TRUE with respect to tables in HTML?
- a. The number of pairs <TR> and </TR> determines the number of rows in a table.
b. The cellspacing attribute specifies the spacing between two adjacent cells of a table.
c. You can merge the cells using the rowspan and colspan attributes of the <TD> tag.
d. You can use the bgcolor attribute only with the <TABLE> tag.

Ans: (d) You can use the bgcolor attribute only with the <TABLE> tag.

B. Fill in the blanks.

1. The text enclosed within the **TH** tag is aligned centrally inside the cell and is displayed in a bolder font.
2. The **TR** tag is used to add rows to the table.
3. The tag used for inserting a table heading is **caption**.
4. A **Hyperlink** connects one webpage to another.
5. **Name** and **Href** are the two attributes of the <A> tag.

C. Answer the following questions.

1. Differentiate between the following.
 - a. <TR> and <TD> tags
 - b. Cellspacing and cellpadding attributes of <TABLE> tag
 - c. Rowspan and Colspan attributes of <TD> tag
 - d. Internal linking and external linking

Ans.

a.	<TR>	<TD>
	<ul style="list-style-type: none">• <TR> tag defines a row in the table.• It is the <TR> tag that divides a table into rows.	<ul style="list-style-type: none">• <TD> tag defines a cell in the table.• Subsequent rows after the first row in table can be divided into data cell using the <TD> tag.
b.	Cellspacing	Cellpadding
	<ul style="list-style-type: none">• his attribute specifies the space between two adjacent cells.• For example: <TABLE cellspacing = 3 >	<ul style="list-style-type: none">• This attribute specifies space between the edge of a cell and the content of the cell.• For example: <TABLE cellpadding = 3>

c.	Rowspan	Colspan
	<ul style="list-style-type: none"> • This attribute specifies number of rows a data cell should span. • For example: <TD rowspan = “2”> 	<ul style="list-style-type: none"> • This attribute specifies the number of columns a data cell should span. • For example: <TD colspan = “2”>
d.	Internal linking	External linking
	<ul style="list-style-type: none"> • Internal linking involves linking various sections of the same webpage. • It lets the user view the desired section of a page quickly. • For example: Go to top of the page link in webpage is an example of Internal linking • Eg. Go to top of the page 	<ul style="list-style-type: none"> • The external linking involves connecting two different webpage. • When you click a Hyperlink, a new webpage to which the hyperlink is linked gets displayed in the browser window. • Eg. click to open second file

2. Give the use of Anchor <A> tag.

- Ans:
- Anchor tag is used to create hyperlink in a webpage.
 - Any text or image enclosed within the <A> and tag is displayed as a hyperlink.

3 How is internal linking done on a webpage?

- Ans:
- Internal linking is a two step process:
 - Use the name attribute of the <A> tag to give a name to a section to be linked to:
For eg. you will be linked here
 - Use the href attribute of the <A> tag to refer to the named section preceded by # symbol. For eg. you will be taken to the linked section

4 Explain with the help of an example how to link any text to an email address.

Ans: To link text to an email address, use the ‘mailto’ keyword before the email address in the href attribute of the <A> tag.

For example, To link the text ‘send an Email’ to the email address

maria_joseph@gmail.com, write the following HTML code.

 send an Email

HOTS

Write the HTML commands for the following.

1. To create a table with four pixels thick border of blue colour.

```
<table border= "4" bordercolor = "blue">
```

2. To set the background colour of a row as yellow.

```
<tr bgcolor = "yellow"></tr>
```

3. To centre align the contents of a data cell.

```
<td align = "center"></td>
```

4. To set the image 'flower.jpg' as a hyperlink to the file 'Garden.html'.

```
< a href= "Garden.html"><img src = "flower.jpg"></a>
```

5. To hyperlink the text "solar system" to the image file "solar.jpg"

```
<a href = "solar.jpg" > solar system </a>
```

6. To connect the text "Contact us" to the email address vinodpatil3@gmail.com.

```
<a href= "mailto: vinodpatil3@gmail.com"> Contact us </a>
```


7. To connect the named section "FAQs" to the text 'For information'.

```
<a href = "#FAQs"> For information </a>
```

Chapter-2 Introduction to Microsoft Access 2013

Assessment Zone [pg.39 to 41]

A.	Choose the correct answer.	
1.	Access is an example of	
	a) Word processing software.	b) Spreadsheet software.
	c) RDBMS	d) Animation software.
Ans.	c) RDBMS	
2.	Find the odd one out.	
	a) Date/Time	b) Field Size
	c) Required	d) Allow Zero Length
Ans.	a) Date/Time	
3.	DBMS helps in	
	a) Reducing data redundancy	b) Ensuring data security
	c) Enforcing standards.	d) All of these
Ans.	d) All of these	
4.	A field that has a unique value for every record and cannot be left blank is called the	
	a) Primary key	b) Unique key
	c) Special key	d) None of these
Ans.	a) Primary key	
5.	Which of the following field properties lets you specify conditions on the data that can be entered in a table?	
	a) Field size	b) Format
	c) Validation Rule	d) Required
Ans.	c) Validation Rule	

6.	 Is icon for		
	a) Primary key	b) Sorting	
	c) Design view	d) Datasheet view	
Ans.	c) Design view		
7.	Which of the following objects in Access lets you retrieve data based on a specific criteria?		
	a) tables	b) queries	
	c) forms	d) reports	
Ans.	b) queries		
8.	Which property is used to specify a value that gets displayed automatically whenever a new record is inserted?		
	a) caption	b) format	
	c) validation rule	d) default value	
Ans.	d) default value		
B.	Fill in the blanks using the words given below.		
1.	In a relational database, data is stored in the form of <u>tables</u> .		
2.	The <u>Datasheet</u> view lets you enter data in a table.		
3.	You can set the field data types and their properties in the <u>Design</u> view.		
4.	The <u>Default value</u> property is used to specify a value that is displayed automatically when the records are created.		
5.	The <u>Primary key</u> field cannot contain duplicate values.		
6.	The extension of Access 2013 file is <u>*.accdb</u> .		
7.	The <u>Format</u> property of a field with Date/Time data type determines the manner in which date gets displayed.		
8.	A field with <u>Long Text</u> data type can store more than 255 characters.		

C.		A table has to be created in Access to store details of students. The following table shows a sample of the data that needs to be stored in the table.
	1.	Suggest the data types that should be used for each of the fields in the above table (Field: profile is used to store the profile of the student)
	Ans.	Sno -Short text Sname -Short text Saddress -short text Sdob - Date/Time Sprofile - Long Text
	2.	Suggest a field from the above table, which can be set as the primary key.
	Ans.	Sno
D.		Answer the following questions.
	1.	Define the following: 1) Table 2) Database 3) DBMS
	Ans.	1) Table : <ul style="list-style-type: none"> • They are used to store data in the form of rows (Records) and columns (fields). • A Table is also referred as “relation”.
		2) Database: A database is an organised collection of related data so that it can be easily accessed, managed and updated.
		3) DBMS: A database management system is a software program that enables us to create, modify and extract data from database.
	2.	What are the advantages of using a DBMS?
	Ans:	Advantages of using DBMS are as follows: <ul style="list-style-type: none"> • Reduce data redundancy. • Reduce update on errors and increase consistency. • Improve data access to users. • Improve data security. • Maintain standards.

	3.	Distinguish between the following: a) Record and Fields. b) Number and AutoNumber data type. c) Short Text and Long Text. d) Validation rule and Validation text.	
	Ans.		
	a)	Record	Field
		<ul style="list-style-type: none"> • The rows in a table are known as record. • A record stores complete information about an object or an item. 	<ul style="list-style-type: none"> • The columns in a table are known as field. • A field stores one type of information about all the object or items.
	b)	Number	Auto number
		<ul style="list-style-type: none"> • The fields with this data type can store numbers. 	<ul style="list-style-type: none"> • The field with this data type store integers that are incremented automatically when a new row or record is added to a table.
	c)	Short Text	Long Text
		<ul style="list-style-type: none"> • The field with short text data type can store text or a combination of text and numbers. • The fields with this data type can have a maximum of 255 characters. 	<ul style="list-style-type: none"> • The field with this data type can store lengthy texts and numbers. • The field with this data type can have a maximum of 65,536 characters.
	d)	Validation rule	Validation text
		<p>This property is used to put conditions on the data that can be entered in a field. You cannot enter a value if it is not according to the validation rule.</p>	<p>This property is used to display an error when the validation rule gets violated.</p>

	4.	What is a primary key? How do we set primary key in MS Access?
		<ul style="list-style-type: none"> • A Primary key is a field or combination of fields that uniquely identifies the records in a table. • A primary key field cannot have repetitive values and cannot be left blank. <p>To set the primary key in Ms Access,</p> <ul style="list-style-type: none"> • Place the cursor on the field to be set as the primary key and click on the primary key option in the Tools group on the Design tab. • A key symbol appears next to the field.
	5.	What are the two areas of the Design view of a table?
	Ans	<p>The two areas of the Design view are:</p> <ol style="list-style-type: none"> 1. Field Grid Pane: It is used to enter field names and their data types. 2. Field Properties Pane: It is used to set properties for the fields in the table.
		HOTS
	A.	For a field with short text as its data type the following field properties have been set. Answer the following questions.
	1.	What is the effect of setting the Field Size property as 20? What is the default value for this table?
	Ans.	<p>It will not allow the user to enter more than 20 characters.</p> <p>Default value for this data type is 255 characters.</p>
	2.	What value will appear on its own under this field whenever a new row of data is inserted in the table? Is the user allowed to change this value?
	Ans.	<p>“English” will appear every time.</p> <p>Yes, user can change this value.</p>
	3.	What will happen when the user enters the value “Science” in this field at the time of data entry?
	Ans.	It will prompt a message “invalid subject name”.

	4.	What happens when the Required property is set to “yes” and Allow Zero length property is set to “no” for this field?	
	Ans.	If the required property is set to “yes” and the Zero length property is set to “no” then a value must be entered in the field.	
	B.	Mr. Gupta is a manager of a Stay Fit Gymnasium. The gymnasium offers three categories of membership (A1, A2, and A3). Mr. Gupta has been asked to set up a table to keep track of the personal details of members such as name, age and so on. The table should also store the member ship category, date of registration, date of expiry of membership.	
	1.	Discuss the field names that should be there in the table.	
	2.	Suggest their Data types.	
	3.	Which field in the above table should be the primary key of the table?	
		Ans 1. Field names	Ans 2. Data types
		1. Membership_no 2. Member_name 3. Member_Age 4. Membership_category 5. Member_dor 6. Member_doe	Short Text/AutoNumber/ Number Short Text Number Lookup Wizard Date/Time Date/Time
		Ans.3 Membership_no field in the above table should be the primary key.	

Chapter: 3 Advanced Features of MS ACCESS 2013

Assessment Zone [pg.56,57]

A. Choose the correct answer.

1. The object to be used to pull out data from one or more tables based on conditions is
- a. Query b. Form c. Report d. Table

Ans. a. Query

2. Which of the following is not a view for working with a Form object?
- a. Form view b. Datasheet view c. Design view d. Layout view

Ans. b. Datasheet View

3. The basic elements of a form or report are called
- a. Controls b. Objects c. Windows d. Reports

Ans. a. Controls


4. In a Query Design Grid, which of the following options is not present?
- a. Criteria b. Sort c. Show d. Filter

Ans. d. Filter

5. A query can be worked on in _____ views, while a report has _____ views.
- a. Two, four b. Three, four c. Three, three d. Four, four

Ans. a. Two, four

B. Fill in the blanks using the words given in the box.

1. When you click on the  option on the Design tab, the results of the Query appear in Datasheet View.
2. Queries, forms and reports are Objects of Access.
3. Form provides a convenient user interface to view, modify and enter data in a database table.
4. Data is not displayed in the Design view of a report or a form.

C. Answer the following questions.

1. Define the following.

- a) Query b) Form c) Report

- Ans: a) **Query:** - A query is used to retrieve selective data based on specific criteria from one or more tables.
- b) **Form:**-A form provides an interface that allows user to enter, change and view the data in database tables.
- c) **Report:** - Reports are used to present data from tables or queries in a format that can be printed.

2. Explain the purpose of the following rows in the Query Design Grid?

- a) Sort b) Show c) Criteria

- Ans: a) **Sort:** - If you want the query results to be sorted, then select Ascending or Descending order from the sort box under that field.
- b) **Show:** - In the Query Design Grid if we clear the Show Check box for any field, that field will not appear in Query result.
- c) **Criteria:** - If we want to choose or filter the records we can type the search conditions in the criteria row of the field.

3. How can you specify multiple conditions while designing a query?

Ans: It can be done in two ways :

- (i) Specifying the condition in **Criteria** row for more than one field will result in a query that will select only those records that meet all the conditions.
- (ii) Specify the 1st condition in the **Criteria** row and other conditions in the **Or** row, and the rows beneath it results in a query that meets one or more of the specified conditions.

4. What is the use of the Print Preview and the Design View of a report?

- Ans: **Print Preview:** - This view displays the report as it will appear after printing.
- Design View:** - Design View displays only the structure of your report.

5. Differentiate between a form and a report.

Ans:

Form

- A form provides an interface that allows users to enter data in a database tables.
- You can work on a form in three view.
 1. Form view
 2. Layout view
 3. Design view

Report

- Reports are used to present data from tables or queries in a format that can be printed.
- You can work on a report in four views.
 1. Report view
 2. Print view
 3. Design view
 4. Layout view

HOTS

Consider the following screen shot and answer the questions that follow.

Field:	CoachID	CoachName	CoachGame	CoachFee
Table:	Coach	Coach	Coach	Coach
Sort:				Descending
Show:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Criteria:			= "Cricket"	> "500"
or:				

1. What is the area shown in the screen shot known as?

A Query Design View.

2. On which table is the query based?

A Coach table.

3. What is the condition for selecting the records?

A The CoachGame will be "Cricket" and CoachFee should be greater than 500

4. Which fields would be visible in the query result?

A CoachName and CoachGame

5. In which order would the result be displayed when the query is executed?

A It will display the result in descending order of coach fees.