

## Short Question Answer

Q. Which protocol is used to translate domain name to associated IP address?

IP Protocol.

Q. Amit has a hub in his office to connect all the computers but speed is slow due to collision suggest any other device for this purpose so the speed can be increased?

Router.

Q. Write the name used to refer the difference between the highest and lowest frequencies of a transmission channel?

Bandwidth.

Q. Write the name of computer which takes the services from the other computer?

Workstation / Client Computer.

Q. Why do we use repeater in network?

A repeater is a device that amplifies a signal so that it can be transmitted over a longer distance.

Q. How is coaxial cable different from optical cable?

Coaxial cable comparatively slow, Economic convenient to lay down used in Bus Topology.

Q. Compare freeware and shareware software.

Freeware are software which is free of cost, can be copied and redistributed to others but cannot not be modified by any one as its source code is not available.

Shareware is the type of software which can be downloaded and used by anyone but for a certain period by paying the license fee. It cannot be modified as source code is not available.

Q. Mr. ABhay wants to upload and download from / to a remote internet server, write the name of the relevant communication protocol, which will let him to do the same.

FTP protocol.

Q. Two doctors in the same room have connected their Palm Tops using Bluetooth for working on a group presentation. Out of the following, what kind of network they have formed? LAN, MAN, PAN, WAN

PAN

Q. What is the difference between HUB and a Switch?

Hub is a device which is used to connect computers in a network and send data to all the nodes.

Switch is a device which is used to connect computers in a network and send data intelligently.

Q. Which of the following software are open source? LINUX, MS WINDOWS 7, PHOTOSHOP, MYSQL

LINUX, MYSQL

Q. How many bytes are required to represent the IP Address?

8 bytes.

Q. Define any two threats to network security.

Snooping: It refers to unauthorized access of someone's else data, e-mail, computer activity or data communication.

Eavesdrop: It is act of secretly listening / intercepting someone else's private communication / data / information.

Q. Give two advantages of open standards

No hidden information

Data is accessible to all without any restrictions.

Q Expand the following:- FLOSS and ODF

FLOSS- Free Libre Open Source Software

ODF- Open Document Format

Q Sun Beam Connectivity Association is planning to spread their offices in New Delhi in three location and have named their New Offices as " Front Office", "Back Office", and "Work Office". Which device you will suggest to be produced by the company for connecting all the computers with in each of their offices?

HUB / SWITCH

Q Which of the following is not the transmission medium – Telephone Lines, Coaxial Cable, Modem, Microwave waves

Modem

Q Name any two Indian script included in UNICODE.

Bengali, Devnagri, Tamil, Kannad, Telugu

Q. What is the difference between Switch, Bridge and Router

Switch is a device which is used to connect computers in a network and send data intelligently.

Bridge Connects the similar networks.

Router connects the networks working on different protocols.

Q. Define Snooping and DOS

Snooping: It refers to unauthorized access of someone's else data, e-mail, computer activity or data communication.

DOS Denial of services are the attack that prevents the legitimate users of the system from accessing or using the resources, information or capabilities of the system.

Q Which of the following unit measures the speed with which data can be transmitted from one node to another node of network? Also give the expansion of the suggested unit. Mbps, Kbps, MGps

Mbps – Mega Byte Per Second

Q Define –

(a) IP Address – An internet Protocol is a numerical label assigned to each computer in network to identify each computer uniquely

(b) Gateway – Connect the dissimilar networks.

(c) Firewall – a part of the computer or network that designed to block unauthorized access while permitting authorized communication.

Q Give the full form of

(a) WAP – Wireless Application Protocol

(b) VoIP – Voice over Internet Protocol

Q. Write an advantages and disadvantage of Star Topology.

Advantage – Easy to install

Disadvantage – Central node dependency

Q. Mr Ram is interested in transferring songs from her mobile to Mr Shyam mobile. Suggest the wireless transmission options he may opt for doing the same.

Bluetooth

Q. Define Font. What is difference between True Type and Open Type fonts.

Font – refers to a set displayable text character having specific style and size

TTF – a font that is native operating system font format for windows and macros. And normally 8 bits font

OTF – extension of the TTF and of 16 bits, capable of handling a large glyph sets using Unicode encoding.

Q Define Proprietary Software

Proprietary Software – That are owned by by an individual or company. There are almost major restrictions on its use and source are kept secret.

Q. Name the protocol for sending and receiving e-mails.

SMTP

Q. Define the following

(a) Baud – It's the unit to measure the speed of data transfer.

(b) Bps – It's the bytes per second.

Q. Expand terms

(a) FSF – Free Software Foundation

(b) Modem – Modulation Demodulation

Q. Differentiate between MAC address and IP Address

IP Address is a unique number of each computer in TCP/IP network.

MAC Address refers to the physical address assigned by the NIC manufacturer.

Q Which of the following are open source LINUX, MS Windows Vista, Python, PageMaker

LINUX MYSQL Python

Q List down the merits of open standards.

Availability

Maximize end user choice

No Royalty

Q. Shyam has taken a list control on his form to display the list of all items available in his shop. But he wants to allow the user to select multiple items from his list control. Which property of JList should he use to do the same?

Selection Mode Property set to Multiple-Value.

Q. Which method of JFrame is used to closed the frame without closing the application.

close-on-exit

Q. Which HTML tag is used to break the current line in HTML?

<BR> tag

Q. Write any two difference between <HR> tag and <H1> tag.

<HR> tag – It produces a horizontal line at the browser window. It is an empty tag.

<H1> tag – This tag produces the first level of heading with largest size. It is a container tag.

Q. Write the java code that get marks in two subjects from textfields m1TF and m2TF and displays the higher marks in a textfield named highTF.

```
float n1=Float.parseFloat(m1TF.getText());
```

```
float n2=Float.parseFloat(m2TF.getText());
```

```
if (n1>n2)
```

```
    highTF.setText(""+n1);
```

```
else
```

```
    highTF.setText(""+n2);
```

Q. Which control will Ramesh use to input multiple lines.

textArea

Q. What is the purpose of default clause in a switch statement?

When no match is found, the default statement gets executed in switch statement.

Q. Which HTML tag inserts a horizontal straight line on a web page?

<HR> tag

Q. How is <P> tag different from <BR> tag in HTML?

<P> tag – It helps to create a new paragraph. It is a container tag.

<BR> tag – It helps to move to new line. It is empty tag.

Q. Write the commands in java that takes one number as input from textfield and checks whether it is prime or not?

```
int n = Integer.parseInt(jTextField1.getText());
int flag=0;
for (i=2; i<n; i++)
    if (n%i==0)
    {
        flag=1;
        break;
    }
if (flag==0)
    System.out.println("A prime number");
else
    System.out.println("Not a prime number");
```

Q. How are tags used in XML different from tags in HTML? Write two points.

XML – is designed to transport and store the data with focus on what data is.

HTML – is designed to display the data with focus on how data looks.

Q. Ms Seema has developed a java application to get computerization result of the students of her school. She enters the marks in textFields and corresponding percentages is calculated. But she forget to write the command for conversion from string to decimal format. Write the command.

```
float marks = Float.parseFloat(jTextField.getText());
```

Q. What is the main difference between a while ...loop and a do..while loop?

While ...loop – It is an entry controlled loop. Loop will not execute once if condition is false in the starting.

Do..while loop – It is an exit controlled loop. Loop will execute at least once.

Q. Which property of combo box is used to store the selected option from the list?

getSelectedItem() or getSelectedIndex()

Q. What is the function of root element in XML?

The function of root element in XML is to be parent of all the other elements in data instance.

Q. What does the System.exit(0) does when it is attached with a JButton control?

It closes the application and exit from the execution.

Q. Identify error(s) in the following HTML code. Also write the correct code.

```
<OL type = 'a' start = 'd'>
```

```
<OL type = 'a' start = '4'> (correct code)
```

Q. Write the HTML code to set the background color as PURPLE and a text "I am in Class XII" as BLUE.

```
<BODY bgcolor='PURPLE' text='BLUE'>
```

```
I am in Class XII
```

```
</BODY>
```

Q. What will be the output of the following program segment

```
int x=5;
```

```
System.out.println(x++);
```

```
System.out.println(x);
```

ANS:

5

6

Q. Write a command in java that takes a number in Dialog Box and calculate its factorial.

```
int i = JOptionPane.showInputDialog( this, "enter any number" );
```

```
int f = 1;
```

```
while ( i > 0 )
```

```
{
```

```
f = f * i;
```

```
i--;
```

```
}
```

```
JOptionPane.showMessageDialog( this, "The factorial is " + f );
```

Q. How JRadioButtons are managed by Button Group object?

JRadioButton present a set of two or more choices to the user. Selecting one radio button immediately clears all the other buttons in the group but if you simply add them to your application, it won't happen. In order to exhibit this behavior, they must be part of common group i.e. ButtonGroup.

Q. What is Boolean variable? Give two example.

A Boolean variable can have either of two values i.e. **true or false** formed from ASCII letters

Ex: Boolean Flag = true, Found = false;

Q. Which tag is used to specify (i) Table data (ii) Table row

<TD> and <TR>

Q. Convert the following segment into an equivalent do loop.

```
int x , c ;
for ( x = 10 , c = 20 ; c >= 10 ; c = c - 2)
x = x + c ;
System.out.println(x);
```

```
int x = 10 , c = 20;
do
{
x = x + c;
c = c - 2;
} while( c >= 10) ;
System.out.println(x);
```

Q. What will be the value of Y if the value of X is given 21

(i) Y = ++ X;

(ii) Y = X++;

Ans:

Value of Y is 22

Q Rewrite the following fragment using switch:

```
if (ch == 'A')
    System.out.println("Autum");
if (ch == 'W')
    System.out.println("Winter");
if (ch == 'R')
    System.out.println("Rainy");
if (ch == 'S')
    System.out.println("Summer");
```

```
switch ( ch )
{
case 'A': System.out.println("Autum");
break;
case 'W': System.out.println("Winter");
break;
case 'R': System.out.println("Rainy");
break;
case 'S': System.out.println("Summer");
}
```

Q. How are the following statement identical if we have the statement `int a = 3;`

`jLabel.setText("" + a);` and `jLabel.setText(Integer.toString(a));`

Both are used to display the value of integer variable a after converting into string data type.

Q. ABC public school has developed a java application through which the parents are able to see their deposited fee details for ward. What should school do so that parents / students are able to view the details shown in text field and can't modify them.

Disable the textfield by setting set enabled property to false.

Q. Which function in java gives the text in upper case?

`to_uppercase()`

Q. Is justified alignment to a paragraph will be assigned in HTML. Justify your answer.

No. as only left, right and center are allowed.

Q. Write code in java to find out enter number is palindrome or not.

```
int a, b, rev=0,rem;
b = a = Integer.parseInt ( JOptionPane.showInputDialog( this, "enter the number") );
while ( a > 0 )
{
rem = a % 10;
a = a / 10;
rev = rem + rev * 10;
}
if ( b == rev)
    JOptionPane.showMessageDialog( this, "Palindrome Number");
else
    JOptionPane.showMessageDialog( this, "Not a Palindrome Number");
```

Q. Write a small code for exit control loop.

```
int a, rev=0,rem;
a = Integer.parseInt ( JOptionPane.showInputDialog( this, "enter the number" ) );
do
{
rem = a % 10;
a = a / 10;
rev = rem + rev * 10;
} while ( a > 0 );
JOptionPane.showMessageDialog( this, "Reverse of the Number is " + rev);
```

Q. Write down some features of XML.

XML – is designed to transport and store the data.  
with focus on what data is.  
It is free and extensible.

Q. MYSQL runs on which operating system?

Windows

Q. A table 'emp' has one of its column named salary. Give the command in MySQL to increase the salary of all the employees by 5%.

```
UPDATE EMP SET SALARY = SALARY * 1.05;
```

Q. What are the multiple row functions?

These are the functions, which work on multiple values. Ex. MAX(), SUM(), AVERAGE(), MIN(), COUNT()

Q. What will be the output of following code –

```
SELECT UCASE ("Redundancy");
REDUNDANCY
```

Q. What is SQL? Write down its different categories also?

SQL is a Structured Query Language designed to manipulate and manage the databases. Its different categories are –  
DDL, DML, TCL

Q. A table 'Animal' in a database has 3 columns and 10 rows. What is the degree and cardinality of this table?

Degree = 3 and Cardinality = 10

Q. The pincode column of table 'Post' is given below –

Pincode
110001
120012
300048
280001

- (i) SELECT Pincode from Post where Pincode like "%1";  
(ii) SELECT Pincode from Post where Pincode like "0%";

- (i) 110001  
280001

- (ii) NULL

Q. What do you understand by 'Primary Key' and 'Candidate Key'?

Primary Key – refers to a column (field) in a table that uniquely identifies each row in a table.

Candidate Key – is a column which can be a primary key.

Q. What is the purpose of "ALTER TABLE" command?

It is the command to make changes in the structure of the table (to add new column, to modify the column, to delete the column)

Q. Explain the equi-join operation.

The join in which two or more tables are joined based on the equality between common columns is called equi-join.

Q. Define – (i) Commit (ii) Rollback

Commit – It saves all changes made by DML statements.

Rollback – It undoes all the changes made by DML statements.

Q. Differentiate between Char and VARCHAR datatypes.

Char is a fixed length string right padded with spaces to the specified length when stored, varchar is a variable length string.

Q. If you have to create a database 'STUDENT', which MySQL command helps you to create it.

```
CREATE DATABASE
```

Q. Arun created a table in MySQL. Later on he found that the data type of a 'Admno' column is entered wrong. Write command to change it to numeric.

```
ALTER TABLE
```

Q. Rama is not able to change a value in a column to null. What did she specify when she created the table?

NOT NULL

Q. Explain the two wildcard character \_ and % used with LIKE clause.

% - It matches any length string.

\_ - It matches any single character.

Q. A numeric data field Price stored a value 30309.98. Write command in SQL to round off amount.

(i) upto 1 decimal place.

(ii) to a whole number

(i) SELECT round(Price,1)

(ii) SELECT abs(Price)

Q. If a database "Employee" exists, which MySQL command helps you to start working in that database?

USE Employee;

Q. Sahil created a table in MySQL. Later on he found that there should have been another column in the table. Which command should he use to add another column to the table?

ALTER TABLE command

Q. Pooja, a student of class XI, created a table "Book". Price is a column of this table. To find the details of books whose price have not been entered she wrote the following query:

```
SELECT * from Book where Price = NULL;
```

Help Pooja to run the query by removing errors from the query.

```
SELECT * from Book where Price is NULL;
```

Q. Which command in MySQL makes the changes in database permanent?

COMMIT

Q. In student table, out of rollno, name, address which column can be set as primary key and why?

rollno as this attribute contains unique value.

Q. Write two DDL and DML commands used in MySQL.

DDL – create, alter, drop, use

DML – select, insert, update, delete

Q. A table "stock" in a database has 5 columns and contains 17 records. What is the degree and cardinality of this table?

Degree 5 and Cardinality 17.

Q. What is constraint? Name any two constraints in MySQL.

Constraint – is the restrictions applicable on the data contained in columns. Primary Key, Not Null, Unique, Check, Foreign Key

Q. Ramesh has created a table SUPPLIER in a database. One of the column in the table is City. Which keyword is used to display unique City name from the table.

Distinct

Q. Sunil decided to delete AGE column from a MySQL Table student after inserting some data into the table. Write the command to delete that particular column in student table.

```
UPDATE Student set Age = NULL;
```

```
ALTER TABLE Student DROP column AGE;
```

Q. Ram is not able to repeat a name in the NAME field of the Student table. What is the constraints he has used to achieve this?

UNIQUE

Q. What is the cardinality and degree in MySQL?

Cardinality – Number of rows or records.

Degree – Number of columns or fields or attribute

Q. How a delete command is different from drop command?

Delete – used to delete record(s) from the table. (DML command)

Drop – used to delete the table from database. (DDL command)

Q. Reshma, a student of class XI, has created a table "PARTICIPANTS (PNO, NAME, CITY, CLASS)". She wants to find out the names of the participants who are not from Mumbai, Delhi and Ahmedabad. She tried the following

```
SELECT NAME FROM PARTICIPANTS WHERE CITY HAS NOT Mumbai, Delhi, Ahmedabad;
```

Find out the errors and rewrite the above query after correction.

```
SELECT NAME FROM PARTICIPANTS WHERE CITY NOT IN('Mumbai', 'Delhi', 'Ahemdabad');
```

