Class 8

Answer Key

Trackpad iPRO (Ver. 4.1)

1. Operating System

One Touch Learn

A. 1. b. 2. a. 3. a. 4. a. 5. b. 6. d.

B. 1. CUI 2. Operating System 3. Characters
4. GUI 5. Application Software

C. 1. c. 2. d. 3. e. 4. a. 5. b.

D. 1. T 2. F 3. T 4. T 5. T

Let's Do It

A. 1. An operating system is a system software that works as a mediator between user and computer hardware.
2. Two categories of software are: System software and Application software.
3. Examples of character user interface are: DOS and Windows Command Prompt.
4. Names of two GUI operating system are: Windows and Mac.

B. 1. The differences between CUI and GUI are:

CUI	GUI
It provides lots of commands to perform different types of operations.	It provides icons, buttons, windows and menus to give commands.
A user needs to remember lots of commands.	A user need not to remember commands. He can just click on the icons, menus etc.
It uses keyboard to give commands.	It uses mouse, stylus, fingers to give commands.
Examples are DOS, Windows Command Prompt, etc.	Examples are Windows, Mac, etc.

2. An operating system perform various functions:

Managing Memory: An operating system manages memory space for multiple processes. It keeps track of every memory location, whether allocated to a process or free. It also allocates memory to files and folder deallocates it when files or folders are deleted.

Managing Resources: An operating system monitors the hardware and software requirements of processes. It acts as a manager for these resources, allocating them to different programs as needed.

3. We prefer to use GUI as in this interface, a user need not to remember all the commands. GUI allows us to give commands to the computer simply by clicking with the mouse.
4. (i) **Single-user Operating System:** This type of operating system allows only one user can access the computer system at a time. The most commonly used single-user operating systems are Palm computer and DOS.

   (ii) **Multi-user Operating System:** In this type of operating system, multiple users can use the computer at the same time. Examples of multi-user operating systems are Linux, Windows, etc.

C.
1. Managing Resources
2. Multi-tasking operating system

Higher Order Thinking Skills (HOTS)

1. A Multitasking Operating System allows a user to run multiple tasks at the same time.
2. A Character User Interface (CUI) is being used when commands are typed to open and close folders on a computer.

Crack The Code

W	T	A	U	W	O	F	I	L	R
V	C	E	U	I	E	T	I	A	H
G	U	I	Y	N	K	L	N	M	H
D	I	Z	Q	D	L	I	N	U	X
P	F	D	L	O	G	H	X	N	W
S	E	Y	X	W	N	U	I	I	C
D	S	E	F	S	K	L	O	X	X
I	N	T	E	R	F	A	C	E	Z
M	U	E	T	Y	X	T	Y	R	X
D	E	F	K	R	T	Y	X	C	P

Hands On

Do it yourself.

FUN in LAB

Do it yourself.

2. Spreadsheet—Functions and Charts

One Touch Learn

A. 1. a. 2. a. 3. c. 4. b. 5. b.
6. a. 7. c. 8. c.

B. 1. F 2. T 3. F 4. F 5. F 6. T

C. 1. Functions 2. equal 3. square root
4. column 5. Dollar 6. Custom Sort

D. 1. b. 2. c. 3. d. 4. a.

Let's Do It

A. 1. A cell reference is a cell address that can be used in a formula to denote a specific cell.

2. (i) Data series is related to the set of values. It is represented by the bars or slices that represent the data values.

   (ii) Legend is a key which shows the meanings of symbols and colours used in the chart.

3. Arranging the selected data in ascending or descending order is called sorting.

4. Area Chart are the chart which emphasise the area between the line and the axis with the help of the colours, textures, pictures, etc.

B. 1. LEN function returns the length of the text string. Example:

   Input: =LEN("Touch")

   Output: 5

2. Rules to enter Functions are:

   (i) All Excel functions must begin with = sign.

   (ii) Function name must be a valid Excel name.

   (iii) Function must be followed by opening and closing parenthesis.

   (iv) Most of the functions must contain an argument within it.

3. Column Chart is usually used to display the data in the form of vertical bars. It is used to show the changes in data over a period of time or comparison among the different data items.

   Whereas, Scatter charts show the correlations between the two sets of values. The x and y axis is used to represent the data plots on the chart.

C. 1. The Mathematical Functions will assist in calculating the total amount raised from different activities and expenses.

2. Column Charts or Bar Charts will help you visualise and compare the performance of each team more clearly.

Higher Order Thinking Skills (HOTS)

a. She typed: C2 * D2, this is incorrect in Excel because it lacks the equal sign.

Correct input: =C2*D2

b. Follow these steps to select a range by using the mouse:

Step 1 Click on the first cell where you want to start the range.

Step 2 Press and hold the left mouse button, then drag the mouse diagonally to select the desired range.

Step 3 Release the mouse button on the cell where you want the range to end.

c. Step 1 GClick on cell E2.

Step 2 Move your mouse to the bottom-right corner of E2 until you see a small "+" (fill handle).

Step 3 Click and drag down to E7.

This copies the formula to calculate amount for all rows.

d. She is calculating the total amount spent on all items combined.

e. Use the function: =MAX(E2:E7)

f. Follow the steps to create a Pie Chart showing amount spent per item:

Step 1 Select the range B1:B7 (Item) and E1:E7 (Amount).

Step 2 Go to the Insert tab on the ribbon.

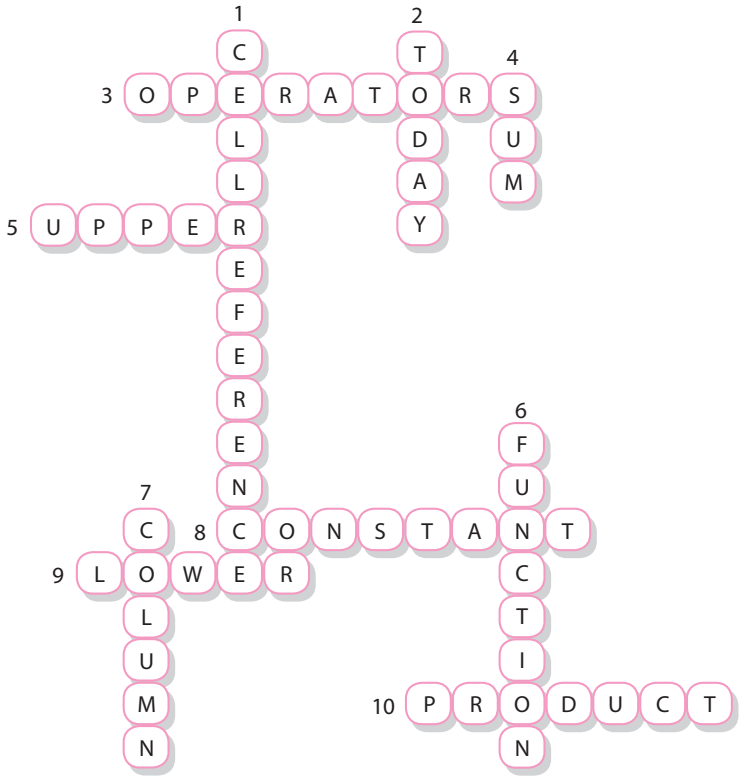
Step 3 Click on Pie Chart in the Charts group.

Step 4 Choose a style (e.g., 2-D Pie).

Crack The Code

A. 1. Pie Chart
2. Cell Referencing

B.



FUN in LAB

Do it yourself.

3. Algorithms and Flowcharts

One Touch Learn

A. 1. b. 2. c. 3. c.

B. 1. F 2. T 3. F

C. 1. Algorithm 2. Flow lines, arrows 3. Standard

Let's Do It

A. 1. Algorithm is a set of steps in a sequential manner to solve a problem or to complete a task.

2. Flowchart is a graphical representation of the sequence of operations in an information system or program.

B. 1. Two characteristic of a good algorithm are:

(i) Precision: Each step is precisely defined.

(ii) Effective: It is measured in terms of time and space.

2. Process symbol shows a process or action step whereas input/output box represents material or information entering or leaving the system.

3. Algorithm to check whether a given number is prime or not:

Step 1 Start

Step 2 Read the number n

Step 3 If n < 2

Print "Not Prime"

Go to Step 7

Step 4 Set a variable i = 2

Step 5 Repeat while i ≤ n/2

If n % i == 0 then

Print "Not Prime"

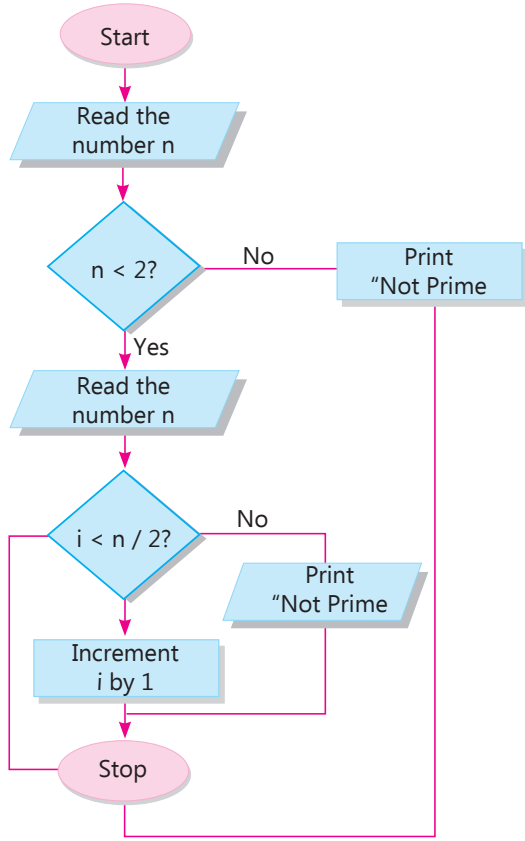
Go to Step 7

Else

Increment i by 1

Step 6 If loop completes, print "Prime"

Step 7 Stop



C. 1. Start/Stop 2. Decision 3. Process 4. Input/Output

D. 1. Algorithm: Making a Smoothie

Step 1 Start

Step 2 Wash your hands and clean the working area.

Step 3 Gather all the ingredients (e.g., banana, strawberries, milk, yoghurt, honey).

Step 4 Wash the fruits thoroughly under clean water.

Step 5 Peel and cut the fruits into small pieces.

Step 6 Add the fruits into the blender.

Step 7 Add milk and yoghurt into the blender.

Step 8 Add 1–2 spoons of honey (optional).

Step 9 Close the blender lid tightly.

Step 10 Blend the ingredients for 1–2 minutes until smooth.

Step 11 Pour the smoothie into a glass.

Step 12 Serve and enjoy!

Step 13 Stop

2. Do it yourself.

Higher Order Thinking Skills (HOTS)

1. Correct Sequence:
   a. Start
   b. Take a pan with water
   c. Turn on the gas burner
   d. Put pan on the burner
   e. Put Maggi and masala in the pan
   f. Give two minutes to boil
   g. Take off the pan and serve Maggi in a bowl
   h. Stop
2. When a flowchart becomes too long to fit on one page, we use connectors to continue the flowchart on the next page

Crack The Code

A. 1. a. Start/Stop
   b. Decision
   c. Process
   d. Input/Output
2. She should make an algorithm.

B.

W	T	A	U	F	O	F	I	L	C	O	F	I
R	V	D	E	L	T	U	S	T	S	C	K	K
B	A	L	G	O	R	I	T	H	M	O	M	N
W	I	N	D	W	A	D	P	E	G	N	L	B
T	N	O	R	C	D	M	R	T	D	N	P	D
E	T	L	C	H	E	P	O	Y	C	E	E	W
X	E	U	I	A	C	J	C	L	M	C	S	E
T	R	M	N	R	I	Z	E	K	E	T	L	Z
Y	F	N	U	T	S	T	S	N	P	O	M	R
E	A	T	K	E	I	P	S	Z	M	R	G	D
A	C	I	F	L	O	W	L	I	N	E	D	M
Y	E	N	F	D	N	E	H	J	K	L	J	R

FUN in LAB

Do it yourself.

4. Program Coding

One Touch Learn

A.	1.	b.	2.	d.	3.	a.	4.	b.	5. c.
B.	1.	T	2.	T	3.	T	4.	F	5. F
C.	1.	c.	2.	a.	3.	d.	4.	b.	
D.	1.	high-level	2.	output	3.	operators	4.	identifier	5. primitive

Let's Do It

A.
1. Java is an object oriented high level programming language.
2. Assignment operator is used to assign values to operands.
3. Arithmetic operators are used to do basic mathematical calculations.

B.
1. Four Features of Java are as follows:
   (i) **Simple:** Java has relatively simple structure and clearly defined syntax.
   (ii) **Case sensitive:** Java is a case sensitive language.
   (iii) **Object-Oriented:** Java supports object-oriented programming concepts of classes and objects.
   (iv) **Platform Independent:** A Java can run on any platform without making changes to it, which means that the same program will run on windows, Linux, Macintosh, etc.
2. Logical operators are used to combine multiple conditions and evaluate them. They return Boolean value 'true' or 'false' as a result.
   &&(AND) and ||(OR) are 2 types of logical operators.
3. Unary operators are special operators which require only one operand or value to perform operations. Java provides only 2 unary operators which are increment (++) or decrement (--).

C.
1. 14.444
2. GST to be paid 0.1
   total invoice value 2.1
3. Value of a is 20
   Value of b is 10
4. Kittu Sharma
5. 20
6. False
   True

7. 12
   14

D. 1.
```
public class program{
public static void main(String[] args){
int a = 10;
int b = 20;
int c = a + b;
System.out.println("The value of c is: "+c);
}
}
```

2.
```
public class assignment{
public static void main(String[] args){
int a =10;
System.out.println(a);
}
}
```

3.
```
public class D3{
public static void main(String[] args){
int a = 5;
String name = "Chirag";
System.out.println(a + name);
}
}
```

4.
```
public class D4 {
    public static void main(String[] args) {
        System.out.println("Welcome");
    }
}
```

E. 1. To build a flexible and user-friendly Java application that handles multiple users and can be easily updated, the Object-Oriented Programming (OOP) features of Java are most helpful. These include:

i. Encapsulation

ii. Inheritance

iii. Polymorphism

iv. Abstraction

2. z = z + 2;

// or simply:

z += 2;

Higher Order Thinking Skills (HOTS)

1.
```
public class fullName {
    public static void main(String[] args) {
```

```
            String firstName = "Sonia";
            String lastName = "Mittal";
            System.out.println(firstName + " " + lastName);
        }
    }
```

2. Valid Variable Names: Computer$, System

Crack The Code

1. Java
2. Equality operator
3. Variable
4. Keyword
5. Integers
6. Comment
7. System.out.println

FUN in LAB

Do it yourself.

Worksheet–1

(Based on chapters 1 to 4)

A.
1. Linux — Windows
2. Max — Min
3. Decision — Start/Stop
4. int — else

B.
1. Character User Interface
2. Graphical User Interface
3. Write Once Run Anywhere
4. Integrated Development Environment

C.
1. An object can be defined as a real-word entity such as telephone, mouse and bag.
2. A class can be defined as a user defined blueprint or prototype that is used to create objects.
3. Java is an object-oriented and high-level programming language.
4. Algorithm is the sequence of steps or computer operations which collectively solve a given problem.
5. A cell reference is a cell address that can be used in a formula to denote a specific cell.
6. A Graphical User Interface is a type of interface that provides icons, buttons, pull down menus and windows to interact with the computer.

D.
1. User Interface
2. Single-user Operating System

3. Cell range
4. SQRT(number)
5. LEFT(text, num_chars)
6. Flowcharts
7. Identifiers
8. Keywords

E. 1. (Start/Stop)
2. Decision
3. Process
4. Input/Output

Test Sheet–1

(Based on chapters 1 to 4)

Section A

A. 1. d. 2. b. 3. c. 4. b.
5. c. 6. c. 7. b.

B. 1. GUI 2. application software 3. square root
4. consistent 5. output

C. 1. F 2. F 3. F 4. T

Section B

A. 1. An operating system is a system software that works as a mediator between user and computer hardware.

2. a. Data series is related to the set of values. It is represented by the bars or slices that represent the data values.

   b. Legend is a key which shows the meanings of symbols and colours used in the chart.

3. A flowchart is a type of graphical diagram that represents an algorithm.
4. Assignment operators are used to assign values to operands.

B. 1. We prefer to use GUI as in this interface, a user need not to remember all the commands. GUI allows us to give commands to the computer simply by clicking with the mouse.

2. LEN function returns the length of the text string. Example:

   Input: =LEN("Touch")

   Output: 5

3. Two characteristic of a good algorithm are:
   (i) Precision: Each step is precisely defined
   (ii) Effective: It is measured in terms of time and space.

4. (i) Start.
   (ii) Read the temperature in Fahrenheit (F).
   (iii) Calculate Celsius using the formula.
   C = (5 × (F - 32)) / 9.
   (iv) Print the value of C.
   (v) Stop
5. Logical operators are used to combine multiple conditions and evaluate them. They return Boolean value 'true' or 'false' as a result.
   &&(AND) and ||(OR) are 2 types of logical operators.
6. public class A{
   public static void main(float P,float r,float t)
   {
   double SI=0;
   SI=(P*r*t)/100;
   System.out.println(SI);
   }
   }
7. 14.44

5. Conditional, Looping and Jumping Statement in Java

One Touch Learn

A. 1. d. 2. a. 3. a. 4. c. 5. b. 6. c.

B. 1. T 2. F 3. T 4. T 5. F

C. 1. do-while 2. while 3. case 4. break 5. conditional

Let's Do It

A. 1. Looping statements are the control flow statements allow us to repeatedly execute a set of statements for a given number of times.
2. The if statement is the most basic conditional statement in Java that allows us to test a condition before executing a block of statements.
3. The default keyword is used to specify some code to be executed if there is no matched case found.
4. The errors that occurred due to violating the rules of Java programming language are called syntax errors.

B. 1. The for loop in Java helps to repeat a set of statements a definite number of times.

The syntax of the for loop is:

```
for (initialisation; conditional expression; increment/decrement)
{
[statements]
}
```

2. The break statement forcefully terminates the loop or switch execution within which it lies. It skips rest of the statements next to the break keyword in the loop and jumps over to the statement following the loop.

   Whereas, the continue statement forces the next iteration of the loop to take place and skips the current iteration.

3. Jumping statements are those statement in which the control of the program is transferred out of the loop body, even if all the values of the iterations of the loop have not been completed. The two jumping statements are: Break and Continue

4. The errors that occurred due to violating the rules of Java programming language are called syntax errors. These are the most commonly occurred errors while developing programs in Java. Syntax errors are also known as compile time errors. Programs containing syntax errors does not compile.

   On other hand, a logical error is a type of error due to which a program compiles and executes successfully, but gives the unexpected or incorrect result is called logical error. It is very difficult to find this type of errors in the program. Compiler does not able to find logical errors. We need to read our programs deeply to find logical errors. Logical errors are also called Semantic Errors.

C. 1. Square of 1 is: 1
Square of 2 is: 4
Square of 3 is: 9
Square of 4 is: 16
Square of 5 is: 25
Square of 6 is: 36
Square of 7 is: 49
Square of 8 is: 64
Square of 9 is: 81
Square of 10 is: 100

2. Hello World
Hello World
Hello World
Hello World
Hello World

3. 5
4
3
2

1

4. number is even
5. 4321

D. 1.
```
public static void main(String args[])
{
    System.out.println("Table of 8");
    int a = 8, res;
    int i;
    for (i = 1; i <= 10; i++) {
        res = a * i;
        System.out.println(res);
    }
}
```

2.
```
public static void main(String args[])
{
int i;
for (i = 1; i <= 5; i++) {
System.out.println("The value of i is: " + i);
}
}
```

3.
```
public class modulus {
public static void main(String args[])
{
    int x = 20, y = 45;
    int mod = y % x;
    System.out.println("Modulus is " + mod);
}
}
```

4.
```
public static void main(String args[])
{
    String s = "Touchpad";
    String s1 = "Orange";
    System.out.println(s + s1);
}
```

Crack The Code

A. 1. If statement
2. While loop

B.

C	O	N	T	I	N	U	E	L	L
O	V	D	E	F	A	U	L	T	T
N	H	L	U	I	F	D	R	M	I
D	I	O	E	R	R	O	R	G	T
I	N	O	R	B	R	E	A	K	E
T	T	P	L	E	O	I	H	R	R
I	E	I	I	P	L	H	E	A	A
O	R	N	S	W	I	T	C	H	T
N	F	G	U	N	I	X	G	I	I
A	A	N	X	R	E	S	G	O	O
L	J	U	M	P	I	N	G	N	N

FUN in LAB

Do it yourself.

6. App Development

One Touch Learn

A. 1. a. 2. a. 3. b. 4. a. 5. b. 6. a.

B. 1. F 2. T 3. F 4. T 5. T 6. F

C. 1. hybrid 2. mobile 3. android 4. gaming 5. install

Let's Do It

A.

1. An app is a software program primarily developed for hand-held smart devices such as mobile and tablet.
2. A hybrid app is an app that combines the features of a native app and a web app.
3. Native mobile apps are platform dependent which means that these apps are primarily developed for a specific platform.
4. E-commerce apps is an app to buy or sell products while sitting at home or any other place.
5. Communication apps allow us to communicate with each other by sending and receiving messages, information, and opinion in the form of texts, videos, and audios.
6. Two popular app development tools are Appery, and AppMachine (any two).

B. 1. The types of apps are given the following:

(i) **Entertainment Apps:** Entertainment apps are developed to entertain the people. These apps allow users to watch videos, post photos, search upcoming events, etc.

The most commonly used entertainment apps are Netflix, Talking Tom and YouTube.

(ii) **Utility Apps:** Utility apps allow us to do our daily tasks such as booking a cab, booking a railway ticket, booking an appointment with doctor, sharing files, and performing calculations. These apps make our work easy.

The most commonly used utility apps are SHAREit, Calculator and Flashlight.

(iii) **Educational Apps:** Educational apps provide a platform for children to learn from anywhere and anytime. The most commonly used educational apps are Khan Academy, Vedantu and Grammar EN.

2. Two categories of mobile apps are:

(i) **Native Apps:** Native apps are platform dependent which means that these apps are primarily developed for a specific platform. For example, any app which is developed for iOS will not run on any other platform such as Android, Windows, and BlackBerry.

(ii) **Web Apps:** Web apps are actually web applications which give a user with experience similar to native apps. These apps are not deployed on the app store. Hence, you need an extra app called browser to access these apps on your mobile device.

3. Android is an operating system for mobile devices developed by Google. It is the most commonly used operating system on mobile devices. Google and some other mobile manufacturing companies use Android as an operating system for their devices. Whereas, iOS (formerly iPhone OS) is also a popular operating system developed by Apple Inc. for its hand-held devices such as iPhone and iPad.

Some of the examples of the Web apps are OLX, Flipkart, and Pinterest.

4. Educational apps provide a platform for children to learn from anywhere and anytime.

The most commonly used educational apps are Khan Academy, Vedantu and Grammar EN.

5. App Inventor allows us to test our app it is being created. So, to test your app, connect your Android device and download MI A12 companion. Now, follow the given steps:

1. Click on the **Connect** menu.
2. Select **AI Companion** from the drop-down list.
3. Open **MIT A12 Companion** on your device and connect by scanning the QR code or typing the code displayed on your screen.

Higher Order Thinking Skills (HOTS)

1. Features for Sharing Photos Securely:

- ✶ Privacy settings: Control who sees your photos.
- ✶ End-to-end encryption: Keeps your photos private.
- ✶ Two-factor authentication: Adds extra security to your account.
- ✶ Trusted reputation: Choose apps with good user reviews and security history.

2. Things to Consider for Booking Movie Tickets:

- ✶ User-friendly interface: Easy to search and book.

- ✶ Secure payment options: Protects your card details.
- ✶ Real-time seat availability: Helps pick seats instantly.
- ✶ Reliable customer support: For cancellations or issues.

Crack The Code

A. 1. Gaming App 2. Utility App

B. 1. Mobile Apps 2. Google Play Store 3. iOS
4. Web Apps 5. Apple's App store 6. Hybrid Apps
7. Gaming Apps 8. Educational Apps 9. Communication Apps
10. Web Apps

FUN in LAB

Do it yourself.

7. Computer Networking

One Touch Learn

A. 1. a. 2. c. 3. b. 4. b. 5. a. 6. a.
7. d. 8. d.

B. 1. Protocol 2. SMTP 3. Router 4. Mesh 5. NIC

C. 1. F 2. T 3. T 4. T 5. T

D. 1. Ring Topology 2. Tree Topology
3. Bus Topology 4. Star Topology

Let's Do It

A. 1. Protocol is a set of rules that governs the communication between the computers on a network.
2. The components needed for a network are Network Interface Card, networking cable, hub or a switch and router.
3. A client server is also called host computer. It controls the access to the hardware and software on the network.
It is a computer which depends on the server for all the resources.

4. Topology refers to the geometric arrangement of computers or nodes in a network.
5. A gateway is a network device that allows to data to flow between two different networks which may use different protocols.

B. 1. A computer network is a group of interconnected computer systems and other computing devices.

The advantages of computer network are:

(i) The information can be easily shared by people.

(ii) It reduces the cost of hardware.

(iii) Store information in one centralised location.

(iv) Reduction in installation cost.

(v) User authentication process to secure the data.

2. LAN is a digital communication system that interconnects a larger number of computers and other peripheral devices within a radius of less than 1 km. This type of network is usually preferred for a smaller area such as a residence, school, laboratory, university campus or office building.

MAN (Metropolitan Area Network) network consists of two or more local area networks or campus area networks together that usually spans several buildings in the same city or town.

3. A single digital page on the World Wide Web (WWW) that contains information and links of another pages is called a web page. Web pages are created by using the Hyper Text Markup Language (HTML). A website is a collection of web pages which are interlinked to each other. A website may contains thousands of web pages.

4. A sender is a computer that wants to send information to other computer connected to the network. Whereas, a receiver is a computer which is expecting the data from other computer on the network.

5. An Internet Protocol (IP) address is an unique identification number assigned to a computer connected to a network. It has two main functions: host or network interface identification and location addressing. IP addresses are written and displayed in human-readable notations, such as 172.16.254.1.

C. 1. Sumit should choose Ring Topology to do so.

2. Deepak wants to setup Network Server.

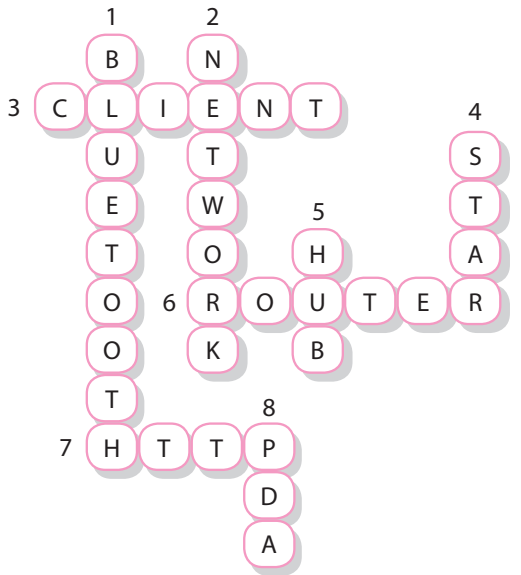
Higher Order Thinking Skills (HOTS)

1.

Acronym	**Full Form**
Wi-Fi	Wireless Fidelity
PAN	Personal Area Network
CAN	Campus Area Network
TCP/IP	Transmission Control Protocol / Internet Protocol
SMTP	Simple Mail Transfer Protocol
IMAP	Internet Message Access Protocol
POP3	Post Office Protocol version 3

2. Personal Area Network (PAN)

Crack The Code



FUN in LAB

Do it yourself.

8. Cloud Computing

One Touch Learn

A. 1. a. 2. c. 3. d. 4. a. 5. a. 6. a.

B. 1. Cloud computing 2. OneDrive 3. Cloud
4. Shared 5. Two

C. 1. c. 2. e. 3. d. 4. b. 5. a.

Let's Do It

A.

1. Cloud computing is an Internet-based service that helps users to get shared resources, software, and information over a network on demand.
2. Any two characteristics of cloud computing are:
   - ✶ No dependence on location and devices
   - ✶ Easy to Maintain
3. The name of cloud storage service that is provided by Apple is iCloud.
4. (i) **Speed:** The cloud computing provides data services on demand and the resources can be accessed within few seconds through internet.

   (ii) **Cost:** The cloud computing is cost effective as the user is not required to spend money on buying hardware, software and resources.

B.

1. Advantages of Cloud Computing are:

   (i) **Sharing of information globally:** The cloud computing enables users to access information from anywhere at anytime whenever they need it.

   (ii) **Productivity:** The cloud computing helps to increase the productivity as there is no need to set up any hardware, software in this. So, the work is reduced and productivity is increased.

   Disadvantages of Cloud Computing are:

   (i) Cloud computing needs a Internet connection always. Without Internet connection or network failure we cannot reap the benefits of cloud computing.

   (ii) We cannot solve technical faults at our end as we have to depend upon the third party for technical solutions.
2. Some of the drawbacks of cloud computing are:
   - ✶ When we use cloud computing for storage and backup, we need a service provider who offers the value of unlimited storage and speed. You may also experience limited storage space or accessibility.
   - ✶ You cannot solve technical faults at your end as you have to depend upon third party for technical solutions.
   - ✶ You have to share information with third party and trust them to not share sensitive information of your organisation. So, at times, the data gets leaked. .
3. Cloud Storage is the online storage space where users can save their documents, can access it through multiple devices.

   Two service provider of cloud storage are DropBox and ZipCloud.

   (i) **DropBox:** The basic users of Dropbox are given 2 gigabytes of storage space. Whereas, if somebody has premium subscription then they are given 1 TB of storage space.

   (ii) **ZipCloud:** It is a cloud storage for documents, music, photos and videos. It offers 1 GB of free storage to users. But users can take 75GB, 250 GB, 1TB storage through paid plans.

C. 1. Sangeeta can use cloud storage services like OneDrive, Google Drive, or Dropbox to store her presentation.
2. Sumit is trying to access OneDrive, which is a service provided by Microsoft. Since he is using a Yahoo account, he won't see the OneDrive option.

Higher Order Thinking Skills (HOTS)

1. Cloud computing can be easily accessed and used from a desktop computer as well. System Requirements:
   i. A working Internet connection
   ii. A modern web browser (like Google Chrome or Microsoft Edge)
   iii. A Microsoft account (for OneDrive) or a Google account (for Google Drive)
   iv. Basic hardware like keyboard, mouse, and monitor

   So, Mohit can explore cloud computing using his existing desktop setup without needing a phone.

2. **Factors to Consider:**

   - Storage space available
   - Cost of subscription
   - Integration with other apps (like MS Office)
   - Data security and privacy
   - Ease of access and syncing across devices
   - Internet dependency

   Advantages of OneDrive:

   - Seamless integration with Microsoft tools
   - Auto-sync across devices
   - Easy sharing and collaboration
   - Cloud backup

   Disadvantages of OneDrive:

   - Limited free storage
   - Requires Internet for access
   - Privacy concerns if not properly secured
   - Slower uploads with poor connectivity

Crack The Code

A.

T	K	O	C	G	P	H	I	S	L	L
O	N	E	D	R	I	V	E	K	T	T
N	H	I	U	I	F	D	R	Y	I	I
D	D	C	U	P	L	O	A	D	T	T
I	R	L	R	B	R	E	A	R	E	E
G	O	O	G	L	E	D	R	I	V	E
I	P	U	I	P	L	H	E	V	A	A
O	B	D	S	W	I	T	C	E	T	T
N	O	G	U	N	I	X	G	I	I	I
A	X	N	X	R	E	S	G	O	O	O
Z	I	P	C	L	O	U	D	N	N	N

B.
1. She can upload her data on OneDrive.
2. Sumit needs a Microsoft Account.

FUN in LAB

Do it yourself.

Worksheet–2

(Based on chapters 5 to 8)

A.
1. The if statement is the most basic conditional statement in Java that allows us to test a condition before executing a block of statements.
2. The for loop in Java helps to repeat a set of statements a definite number of times.
3. The break statement forcefully terminates the loop or switch execution within which it lies.
4. Android is an operating system for mobile devices developed by Google.
5. A computer network is a group of interconnected computer systems and other computing devices.
6. Cloud computing is an Internet-based service that helps users to get shared resources, software, and information over a network on demand.

B.
1. continue Statement
2. error
3. App
4. iOS

5. Bandwidth
6. Website
7. Digitization
8. OneDrive

C.

1. syntax errors — runtime errors
2. Khan Academy — Vedantu
3. LAN — WAN
4. POP3 — HTTP

D.

1. File Transfer Protocol
2. Hyper Text Transfer Protocol
3. Network Interface Card
4. iPhone Operating System

E.

```
public static void main(String args[])
{
int i;
for (i = 1; i <= 5; i++) {
System.out.println("The value of i is: "+i);
}
}
```

Test Sheet–2

(Based on chapters 5 to 8)

Section A

A. 1. c. 2. d. 3. a. 4. a. 5. c. 6. a.

B. 1. do-while 2. Gaming 3. Mesh 4. OneDrive

C. 1. T 2. T 3. T 4. T 5. F

Section B

A.

1. The if statement is the most basic conditional statement in Java that allows us to test a condition before executing a block of statements.
2. Native apps are platform dependent which means that these apps are primarily developed for a specific platform.
3. Protocol is a set of rules that governs the communication between the computers on a network.
4. ISP stands for Internet Service Provider.
5. Cloud computing is an internet-based service that helps users to get shared resources, software, and information over a network on demand.

B.

1. The break statement forcefully terminates the loop or switch execution within which it lies. It skips rest of the statements next to the break keyword in the loop and jumps over to the statement following the loop.

   Whereas, the continue statement forces the next iteration of the loop to take place and skips the current iteration.

2. Web apps are different from websites. The major difference is that a web app can be a small part of a website which provides a particular functionality. On the other hand, a website can contain many web apps.
3. An Internet Protocol (IP) address is an unique identification number assigned to a computer connected to a network. It has two main functions: host or network interface identification and location addressing. IP addresses are written and displayed in human-readable notations, such as 172.16.254.1.
4. Advantages of Cloud Computing are:
   (i) **Speed:** The cloud computing provides data services on demand and the resources can be accessed within few seconds through internet.
   (ii) **Cost:** The cloud computing is cost effective.

   Disadvantages of Cloud Computing are:
   (i) Cloud computing needs a internet connection always. Without internet connection or network failure we cannot reap the benefits of cloud computing.
   (ii) We cannot solve technical faults at our end as we have to depend upon the third party for technical solutions.
5. Square of 1 is: 1
   Square of 2 is: 4
   Square of 3 is: 9
   Square of 4 is: 16
   Square of 5 is: 25
   Square of 6 is: 36
   Square of 7 is: 49
   Square of 8 is: 64
   Square of 9 is: 81
   Square of 10 is: 100
6.
```
public static void main(String []args)
    {
       int reverse=0;
       int num=1234;
       while(num!=0)
       {
           reverse=reverse*10;
           reverse=reverse+num%10;
           num=num/10;
       }
       System.out.println(reverse);
    }
```