CLASS – V

COMPUTER

SEM-2

YEAR [2022-23]

ICSE

WOW!
COMPU-BYTES

5 Computer Text Book

Eupheus Learning

CODING APP FOR KIDS

AS PER LATEST ICSE CURRICULUM
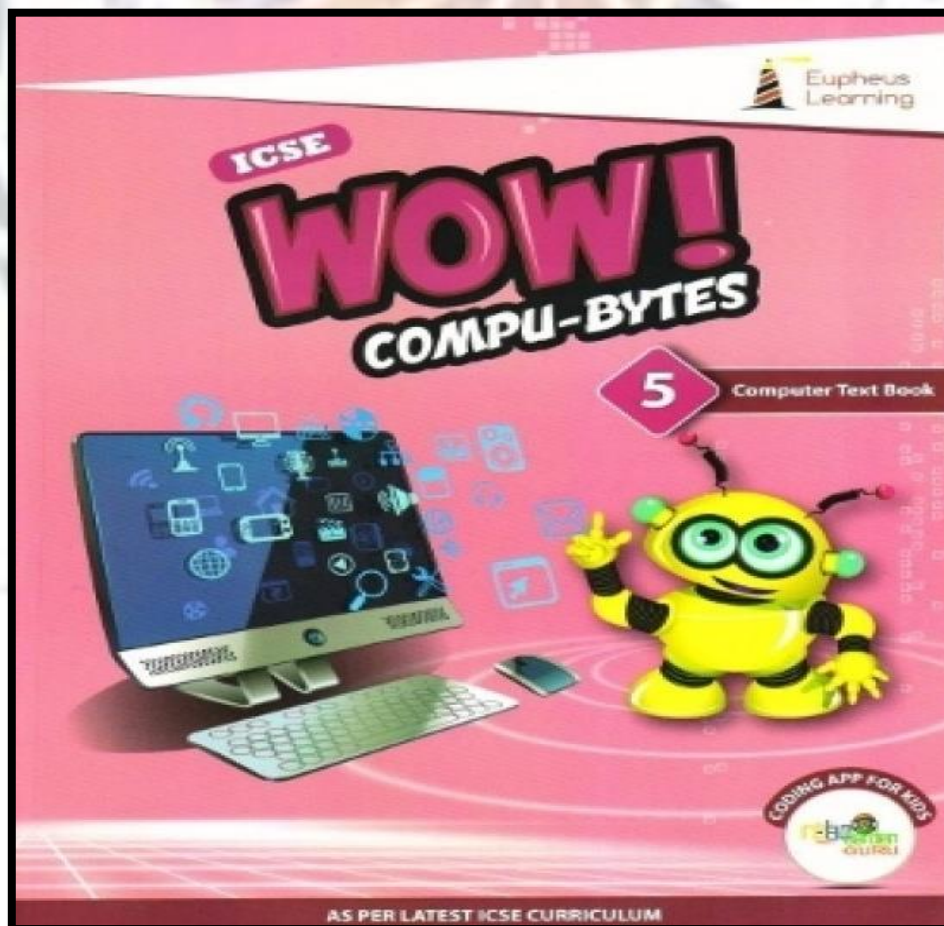
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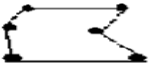
CH-6

Formatting and organizing slides in powerpoint

➤ **Keywords:**

1. **Slide:** An individual page of presentation.

2. **Presentation:** A collection of slides.

3. **Template:** A predefined layout of a presentation.

4. **Formatting:** Any task that is performed to change the appearance of anything.

5. **Theme:** A set of predefined colors, fonts, layout, etc .

6. **Slide Sorter view:** A presentation view that displays all slides together in a miniature form.

EXERCISE CORNER

A. Tick (✓) the correct option. Cross-check your answers with your classmate.

1. A predefined layout for a presentation is called:

   a. Style   b. **Template**   c. Design

2. Which of the following steps are used to change the layout of a slide?

   a. **Home → Layout**   b. Design → Layout   c. Layout → Slide

3. Which steps do you follow to set text orientation in a placeholder?

   a. **Home → Text Direction**   b. Insert → Text Orientation

   c. Home → Direction

4. A set of predefined colors, fonts, and effects that can be applied to all slides, is   called :

   a. Style   b. Layout   c. **Theme**

5. Which presentation view displays the miniature form of all slides, together?

   a. **Slide Show**   b. Slide Sorter   c. Normal view

B. Fill in the blanks. Compare your answers with your classmates' answers.

Variant	Slide Sorter	Shape Styles	Design	Home

1. The **home** tab contains Font and Paragraph groups.

2. A **variant** contains different color schemes, fonts, effect and background styles for   the selected theme.

3. You select a new style for a placeholder from the **styles** group of the Format tab.

4. The **design** ribbon contains different themes and variants.

5. In **slide sorter** view, you can reorder the slides of your presentation.

C. State 'True' or 'False': -

1. Presentation is a powerful tool to convey information to a large group.   **True**

2. Title slide is the default slide of a blank presentation.   **True**

3. You cannot change the background of a slide.   **False**

4. Themes are applied to all slides.   **True**

5. A variant can be selected to modify a theme.   **True**

D. Match the columns: -

Column A		Column B	
1.	▦	a. Bold	2
2.	**B**	b. Layout	1
3.	⟋⟍	c. New Slide	4
4.	☆	d. Shape Effects	5
5.	▱	e. Edit Shape	3

E. Short answer questions: -

1. **What is PowerPoint?**

Ans:- **The Microsoft PowerPoint is truly the most widespread presentation software which enables us to create our own presentation.**

2. **Write any two uses of a presentation**.

Ans:- **Two uses of a presentation are:**

a. It is used to convey information to large group through presentation aids.

b. It is used in education field for teaching a particular topic to students.

3. **How do you start PowerPoint? Give steps briefly.**

Ans: - **The steps to start the PowerPoint:**

Click the start button → all apps → Microsoft office 2016 → PowerPoint 2016.

4. **How do you set text in the center of a placeholder?**

Ans: - **It is done by clicking to align text in center of a document.**

5. How do you copy a slide?

Ans: - **Steps to copy the slide are:**

Step 1- Select the slide which is to be copied in the slides pane.

Step 2- Right click on the slide and select the duplicate option. A copy of slide appears immediate next to the selected slides. Drag and drop it at the required position in the slides pane.
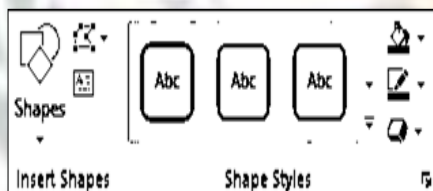
BRAIN TEASER

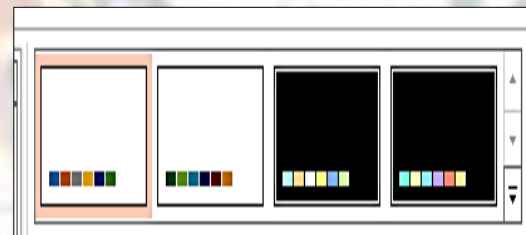**A. Identify the tab and group for each of the following: -**
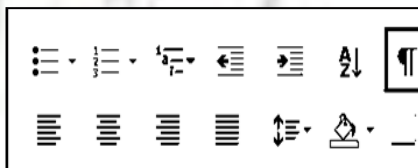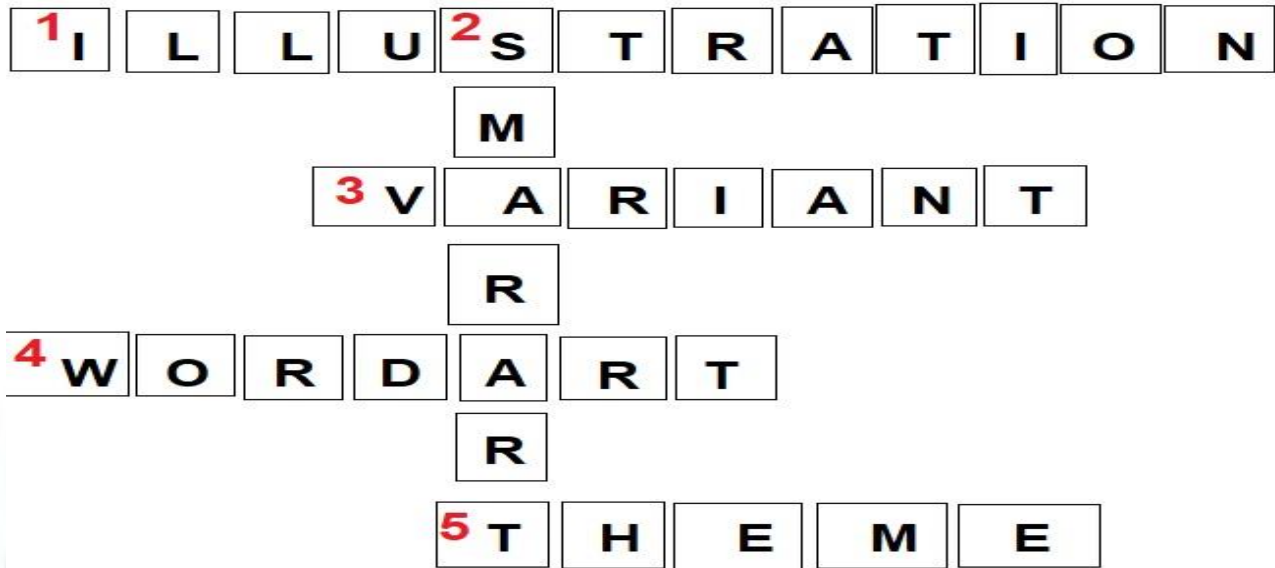

Paragraph group of home ribbon

Ribbon

Shape style group of format ribbon

Variant group

WORKSHEET - 3

A. Complete the following crossword: -

```
[1]I  L  L  U  [2]S  T  R  A  T  I  O  N
               M
            [3]V  A  R  I  A  N  T
               R
[4]W  O  R  D  A  R  T
               R
            [5]T  H  E  M  E
```

B. The following are the steps to insert the WordArt in a document. Order them by putting numbers 1 to 5.

5   A placeholder with dummy text appears. Type in your own text and click outside the placeholder.

2   Select the Insert tab.

3   Click the Word Art drop-down arrow in the Text group.

1   Click where you want to insert decorative text in a document.

4   The Word Art gallery appears. Select any WordArt style.

CH-7
Algorithms and flowcharts

➢ **Keywords:**

    1. Algorithm: A sequence of instructions that are used for solving a problem in a systematic way.

    2. Flowchart: A pictorial representation of a problem-solving process in which steps are laid out in logical order**.**

EXERCISE CORNER

A. Tick (✓) the correct option. Cross-check your answers with your classmate.

    1. What would you do first while solving a problem?

      a. **Collect information**   b. Analyze information   c. Set up the goal

    2. Which of the following is a pictorial representation of a problem-solving process?

      a. Algorithm   b. Stepwise solution   c. **Flowchart**

    3. Which of the following state direction and connection between symbols of a   flowchart?

      a. Connectors   b. **Flow lines**   c. Decisions box

    4.Which of the following help to connect different segments of a flowchart?

      a. **Connectors**   b. Counter   c. Start and stop symbols

    5. Which of the following is the process of repeating a section a number of times until the specified condition is met?

      a. Branching condition   b. Counter   c. **Loop**

B. Fill in the blanks: -

One	geometrical	flow	stop	decision	start

    1. In a flowchart, each operation is represented by drawing a specific **geometrical** shape.

    2. The flow lines represent **flow** of execution of instructions.

    3. Every flowchart has a **start** symbol and a **stop** symbol.

    4. Only **one** flow line is used to connect the start and stop symbols.

    5. The **decision** box has only one entry point but two exit points.

C. State 'True' or 'False'.

    1. An algorithm can be written only in low-level language**.**   **False**

    2. Each step of an algorithms must be precisely defined**.**   **True**

    3. A flowchart is an important tool for planning and designing   **True**

a new system.

4. In a loop, a counter is present to count the repetition of statements.   **False**

5. No multiple else statements are allowed with one if.   **True**

D. Short answer questions: -

1.What is an algorithm?

Ans: - It is a sequence of instructions that are used for solving problems in a systematic way.

2. Describe a loop?

Ans: - A loop is used to repeat a section of code, a number of times until the specified condition is met.

3.What is the decision box?

Ans: - A loop is used to repeat a section of code, a number of times until the specified condition is met.

4.Where do you place the start and stop shapes in a flowchart?

Ans: - We place Start shape at the starting and stop shape in the end of the flowchart.

5. What is counter?

Ans: - A counter is present in loop which counts number of times a section has been repeated.

E. Long answer questions: -

1. What are the steps to write an algorithm?

Ans: - The various steps to write an algorithm:

    Step 1: Define the problem clearly.

    Step 2: List the inputs.

    Step 3: Describe the steps needed to complete the task.

    Step4: Choose data set to verify that algorithm works.

2. Give advantages and disadvanges of flowcharts.

Ans: - Advantages of flowchart:

    It is a convenient method to solve problem.

    ii. It is an important tool for designing and planning a new system.

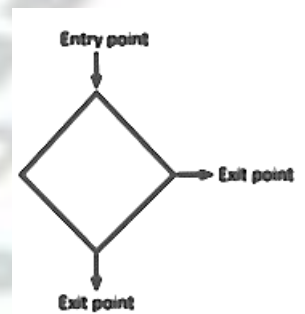   iii. We can analyze the problem effectively using flowchart.

    iv. It acts as a guide or blueprint while programming on computer.

    v. It facilitates troubleshooting.

    vi. It promotes logical accuracy.

Disadvantages of flowchart:

    i. If a program needs alterations, its flowchart may have to be redrawn completely.

ii. It is quite costly to produce and difficult to use and manage.

iii. Sometimes program location becomes cumbersome. In such case flowcharts looks complex and clumsy.

3. What are the rules to draw a flow-chart?

Ans: - Rules to create a flowchart:

    i. Every flowchart has a START symbol and a STOP symbol.

    ii. Only one flow line that comes out from a process symbol.

    iii. The general direction of flow in any flow chart is from top to bottom or left to right.

    iv. Only one flow line is used to connect the START and STOP symbol.

    v. The DECISION box has only one entry print but two exit points. One exit point shows the TRUE condition and the other exit point shows the FALSE condition.
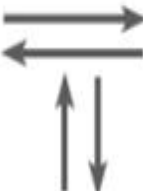
4. Distinguish between loop and branching statements.

Ans:

Loop Statements	Branching Statements
a. It is used to repeat a section of code a number of times until the specified condition is met.	a. It may be required to change the normal sequence of execution in a program depending on the requirements of a problem.
b. Statement written inside loop is executed repeatedly as long as condition is true.	b. They allow you to define a specific condition according to which you get the output. Example- **if-else** statement
c. When the condition becomes false, flow of control comes out of the loop and goes to the statement next to the loop.	c. When the expression is true statements in **if block** gets executed otherwise statements in **else block** gets executed.

Brain Treaser

➢ **The following are names of different symbols of a flowchart. Draw the symbols and write their use to complete the table: -**

Name	Symbol	Use of symbol
start /stop	(ellipse)	It shows the starting and ending of a flowchart.
Input or output box	(parallelogram)	It indicates input or output of data.
Process box	(rectangle)	It is used to show processing instructions, such as calculations, movements, etc.
Decision box	(diamond)	It shows evaluation of a condition or statement and follows exactly one of the two flow lines.
Flow lines	(arrows)	These state direction and connection between symbols of a flowchart.
Connector	(circle)	It connects various sections of a flowchart.

CH-8
PROGRMMING WITH SCRATCH

➢ **Keywords:**

   1. Scratch: A programming language used to create games, animation, interactive stories etc..

   2. Sprite: Each object in Scratch is called a sprite**.** Default sprite is a cat.

   3. Block Palette: An area of the graphical user interface where all the blocks are available that required for programming.

EXERCISE CORNER

A. Tick (✓)the correct option. Cross-check your answers with your classmate.

   1. Which of the following button will you click to get pre-made sprite o the stage?

    a. [✓]   b. [ ]   c. [ ]

   2. To change the background of the stage, you click _____?

    a. [ ]   b. [✓]   c. [ ]

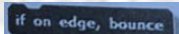   **3. What appears in the center of the stage, you click _____ .**

    a. Cat sprite [✓]   **b. Dog sprite** [ ]   **c. Fish sprite** [ ]

   4. What does the following block do? `when ⚑ clicked`

    a. Stop script's execution [ ]   **b. Start script's execution** [✓]

    c. Pause script's execution [ ]

   5. What does the following block do? `if on edge, bounce`

    a. Bounces a sprite when it reaches the edge [✓]

    b. Turns a sprite towards right [ ]

    c. None of these [ ]

B. Fill in the blanks. Compare your answers with your classmate's answers.

Stage	Sprite	Sprites list	Shrink	Duplicate

   1. The **stage** is 480 units wide and 360 units tall.

   2. You can view thumbnail of stage and sprites in **sprites list** area.

   3. The **shrink** button allows to decrease the size of the sprite.

   4. The **duplicate** tool is used to create a copy of an object.

   5. A **sprite** is an objects or character which you see on the stage.

C. State 'True' or 'False'.

1. You can change the background of the stage.   **TRUE**

2. The duplicate button allows you to move an object.   **FALSE**

3. you cannot insert more than two sprites on the stage. **FALSE**

4. Scratch allows you to add sound in your project.   **TRUE**

5. The center of the stage is at x-y coordinate (0,0).   **TRUE**

D. Match the columns.

1.		a. Green flag to run the project	**3**
2.		b. Shrink	**4**
3	.	c. Grow	**5**
4.	.	d. Duplicate	**1**
5.		e. Default sprite	**2**

E. Short answers questions: -

1. What is Scratch?

Ans:- **Scratch is a programming language. In Scratch, you can easily create, animations, games, interactive stories, etc.**

2. What is Blocks?
Ans**: -Blocks are puzzle-piece shapes that are used to create code in Scratch.**

3. On which tab do you click to write a script?
Ans**:- Scripts**

4. What is the use of the following blocks?

a. move 10 steps   b. if on edge, bounce

Ans: - **a. This block moves a sprite 10 steps forward. You can change the number of steps by entering new numeric value in text field.**

b. This block bounces a sprite when it reaches on edge of stage.

5. In which category is the block [touching Cat ?] present?

Ans: - **This block return true if sprite is touching specified sprite, edge, or mouse pointer.**

E. Long answers questions: -

1. Describe sprites. How do you add a new sprite? Give Steps.

Ans: - **1**. Sprites are the objects or characters shown on the screen. They perform all sorts of actions like moving, changing colours and spinning around. Scratch comes with a large number of selection of sprites such as cat, elephant, bananas, balloons, etc., and you can draw your own sprites in Scratch.

Steps To add new Sprite:

i. Select thumbnail of Cat sprite. Right-click on it and select delete to remove sprite.

ii. After removing the default sprite, click the Choose new sprite from file button to insert a new sprite.

iii. The New Sprite dialog box appears. Select Animals category → Fish 1 sprite and click OK. In the same manner, insert some more sprites like Fish 2, Fish 3, Frog, Shark, Starfish and Octopus.

2.Wha is backdrop? Write the steps to add a new backdrop?

Ans: - The Background area of the stage is called Backdrop.

Steps to add new Backdrop:

i. Select thumbnail of Stage 1 backdrop in Sprite List area.

ii. Click the Choose a backdrop from library button present at bottom left corner of the screen.

iii. The Backdrop Library appears.
Select Nature category → underwater 3 and click OK.
Selected backdrop appears on the stage

3.Write the steps to add sound in your scripts?

Ans: - **Steps to add the sound:**

i. Select the Sounds tab and click the Choose sound from library button.

ii. The Sound Library appears. Select Bubbles sound and click OK.

iii.Bubbles sound appears in Sounds Area.

iv. Select thumbnail of Stage 2 backdrops and click the Scripts tab.
Here, writes the following script to play sound.

4.**What is a variable? How do you create it? Give steps.**

Ans. A variable is like a labelled box in which you can store data such as numbers of words.
The data stored in a variable is called its value.
For example, Score is a name of variable and **5** is its value.
To make a variable, click Data tab → Make a Variable. Enter name for variable Name and click **OK**

Brain Teaser

➢ **Match the following with their category.**
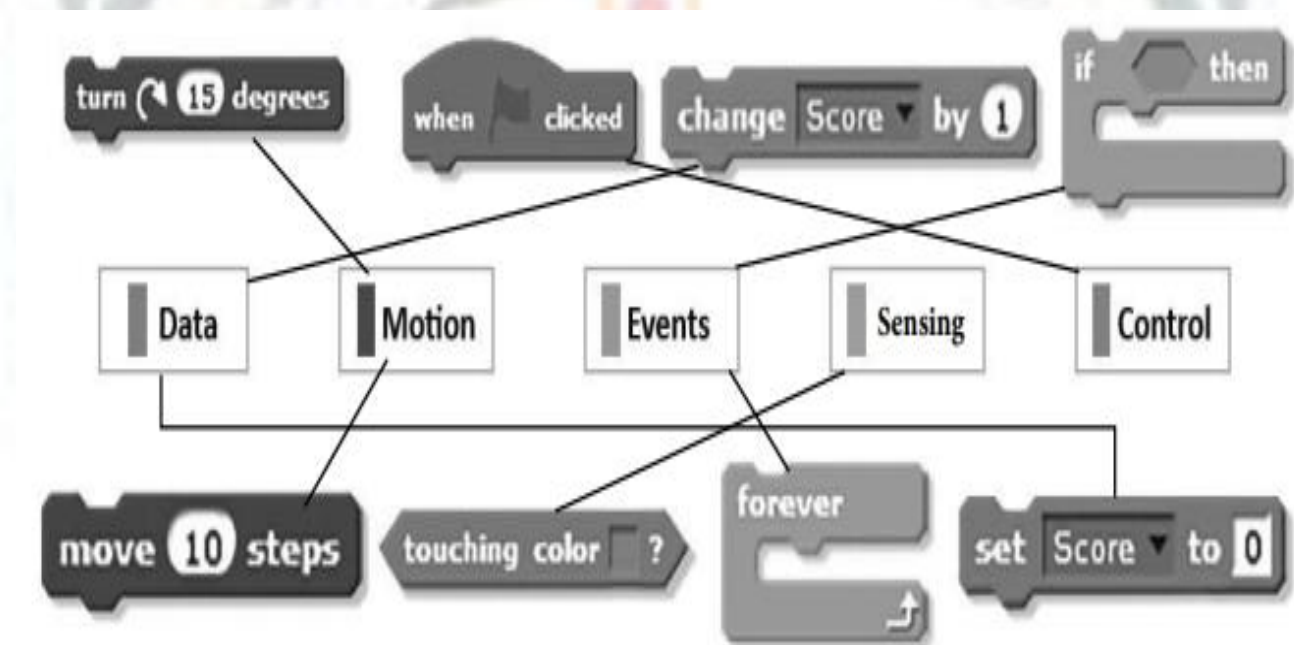
CH-9
COMMUNICATION SERVICES OF THE INTERNET

Keywords

- **Internet:** A global network of interconnected computers.
- **ARPANET:** Advance Research Projects Agency Network
- **NSF:** National Science Foundation
- **Email:** An electronic mail that allows you to send and receive messages over computer networks.
- **Chat room:** An online site in which people can chat online.
- **IM:** Instant Messaging
- **IRC:** Instant Relay Chat
- **FTP:** File Transfer Protocol
- **Uploading:** The process of transferring files from client computer to server computer.
- **Downloading:** The process of transferring file from server computer to client computer.
- **Blog:** An abbreviated word of the term Weblog.
- **Search engine:** A program that is designed to search for information on the Internet.

Exercise Corner

A. Tick (✓) the correct option. Cross-check your answers with your classmate.

1. In which year was ARPANET developed?

   a. 1950 ☐   b. 1951 ☐   **c. 1969** ✓

2. Which of the following site allows to create an email account to send and receive to send and receive emails ?

   a. Gmail ✓   b. Google chrome ☐   c. Internet Explorer ☐

3. Which of the following is not a search engine?

   ☐   ☐   ✓

a. Google   b. Bing   c. Google Chrome

4. The process of exchanging typed messages with other people who are using the Internet at the same time as you are, is called:

a. Video calling [ ]   b. Chatting [✓]   c. Bing [ ]

5. Which of the following is not a social networking website?

a. Facebook [ ]   b. Google Plus [ ]   c. Quick heal [✓]

B. Fill in the blanks. Compare your answers with your classmate's answers.

> Internet   Spam   ARPANET   video calling   electronic mail

1. **ARPANET** was the first computer network.

2. The **internet** is a global network of interconnected computers.

3. Skype is a very popular program for **video calling.**

4. Email stands for **electronic mail.**

5. The **spam** refers to useless and unwanted emails.

C. State 'True' or 'False'.

1. Emails deliver instantly over the network.   **True**

2. IRC is mainly designed for group communication in discussion forums.   **True**

3. Hangouts is an example of an instant messenger.   **True**

4. Social networking sites allow people to build online networks.   **True**

5. FTP stands for File Transfer Protocol.   **True**

D. Match the columns

Column A	Column B
1. Google	a. A social networking site
2. Facebook	b. Instant messaging
3. Yahoo Messenger	c. Weblog site
4. Skype	d. Search engine
5. Blogger	e. Video calling program

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

E. Short answer questions.

1. What is ARPANET?

Ans. ARPANET was the first computer network and a step towards the creation of the network.

2. Define the term Internet.

Ans. Internet is the largest computer network of the world, consists of thousands of connected computers with cables, telephone lines and satellites.

3. Give any two services of the internet.

Ans. The internet carries an extensive range of services such as E-mail, chatting, FTP, blog etc.

4. Expand FTP.

Ans. . FTP stands for File Transfer Protocol.

5. What is Skype?

Ans :- Skype is very popular program for video calling over the internet.

E. Long answer questions.

1. Write any four advantages and limitations of emails?

Ans:-1. **Advantages of E-mail:**

   a. E-mail is a fast communication method to deliver messages.

   b. There is no need of pen and paper to compose and send email.

   c. It gives an immediate feed back

   d. Most of the services are free of cost with no overhead costs involved as in the case of postal mail where postage fee needs to be paid.

   e. Using an e-mail we can send any kind of file i.e photograph, movie clip, music etc.

Limitations of E-mail.

   a. To use the facility of email – a computer, internet connection and supporting hardware are mandatory.

   b. Sometimes the format of the text messages might get altered by the operating system.

   c. Every time we open our inbox, you see a set of useless and unwanted emails called spam from people whom you do not know at all.

   d. This way of sending messages is rather impersonal without one's own handwriting and signature.

### 2. Describe the video calling service of the Internet . Also define its types.

Ans2:-Video calling is a useful method of conducting live conference between two or more people.

A video call is of two types: -

a. point to point video call: - Two persons talk each other from different locations.

b. multipoint video call: - More than two people talk to each other from different locations.

3.What is FTP? Describe.

Ans3:- **FTP** stands for File Transfer Protocol. It allows you to get access to the files stored in the disk of a remote computer, which is connected to the Internet. FTP is commonly used to transfer files such as web pages from their creators to the computer that acts as their server for everyone on the Internet. It is also commonly used to download programs and other files to your computer from other servers. It does not allow any other type of communication between the computers. The transfer of files takes place between an FTP server and FTP client.
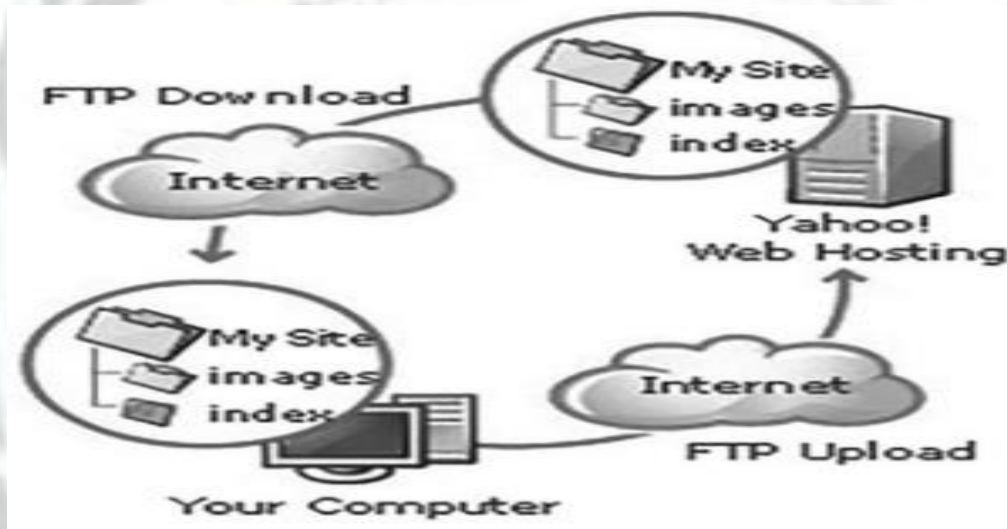
4. Define the following: -

Ans. **a. Social networking**: Social networking is a big buzzword on the Internet. Millions of individuals around the world belong to a social network. Using social networking sites, people build online networks of contacts and interact with these personal or business friends in a secure environment. Some of the most popular social networking sites include Facebook, Google Plus, LinkedIn and Myspace.

b. Chat Room: A chat room is an online site in which people can chat online. It means one can talk by broadcasting messages to others on the same site in real time. Chat rooms allow you to meet different kinds of people who share similar interests, goals, hobbies and desires. Some famous chat room sites are Chat Random, Face Flow, Enter Chat Room .
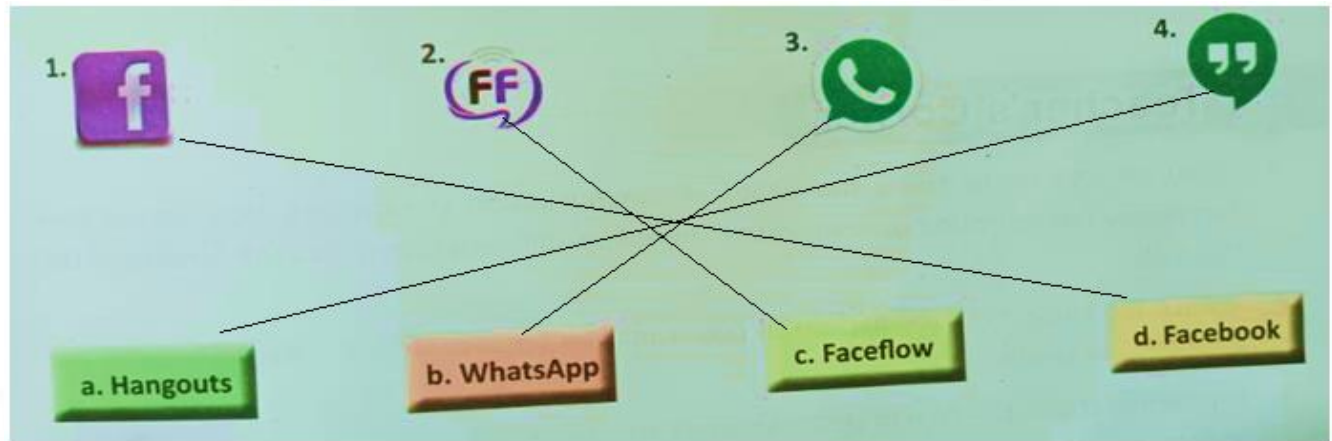
5. Write any two advantage of video calling.

Ans- **Two advantages of Video Calling:**

1) Video calling is a useful method of conducting live conference between two or more people.

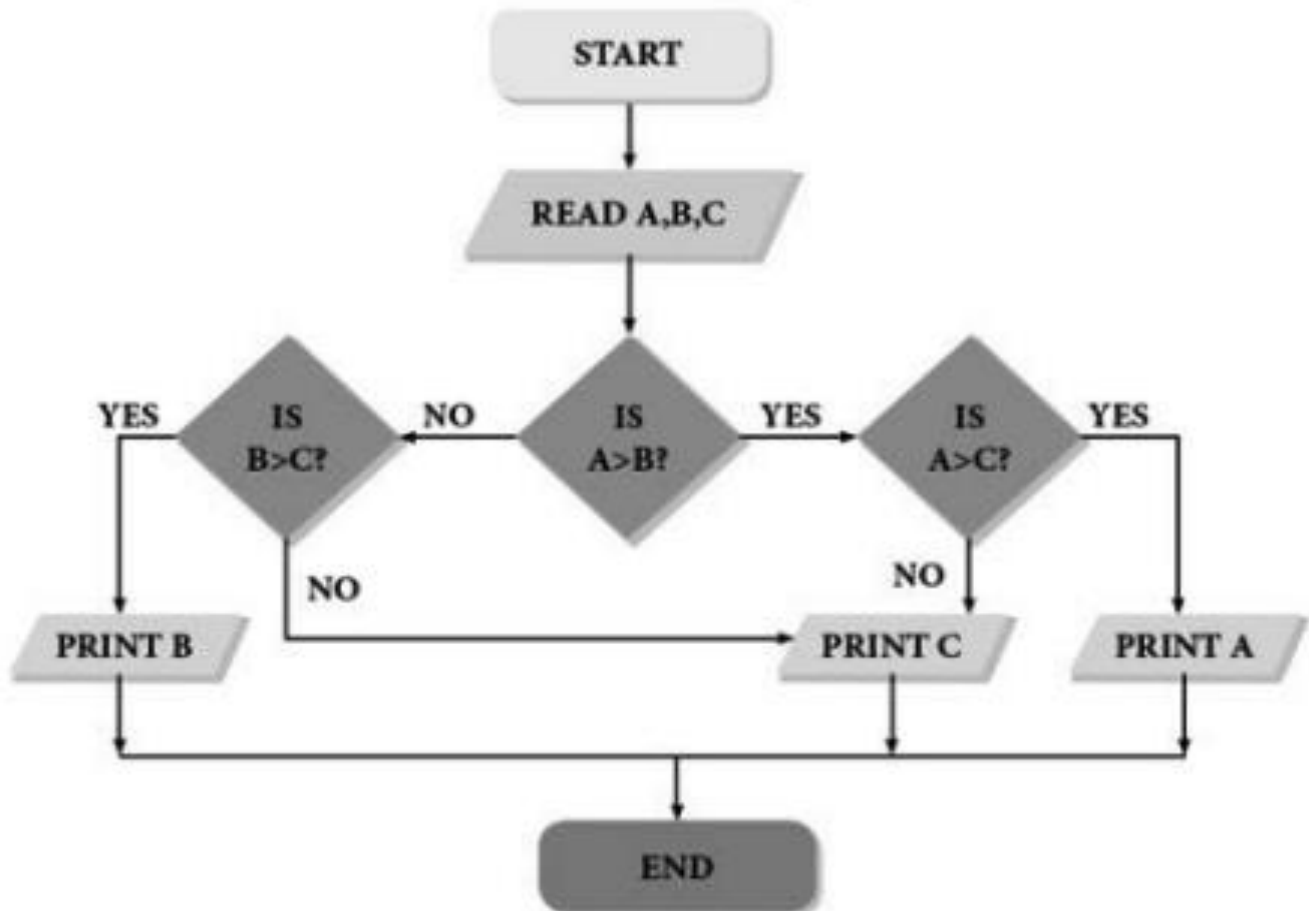2) It saves people time and expense and can often accomplish many of the things a physical meeting can.

➢ **Make the following with their names: -**

1. f
2. (FF)
3.
4.

a. Hangouts
b. WhatsApp
c. Faceflow
d. Facebook

WORKSHEET -4
(Based on chapters 7 to 9)
A. Complete the following flowchart to find the greatest number among three numbers.

START

READ A,B,C

YES — IS B>C? — NO — IS A>B? — YES — IS A>C? — YES

NO (from B>C?)

NO (from A>C?)

PRINT B

PRINT C

PRINT A

END

B. Observe the shape of blocks and name them. Also, write uses of each block.

1.		**Hat blocks** are the blocks that start every script.
2.		**Stack blocks** are the blocks that perform the main commands.
3.		**Boolean blocks** are used to set conditions. They are they are either true or false.
4.		**Reporter blocks** are the values. Reporter blocks can hold numbers and strings.
5.		**C blocks** are also called "Wrap blocks", these blocks loop the blocks within it or check if a condition is true.
6.		**Cap blocks** are the blocks that end scripts.

C. Write names of any two Internet Services.

1. E- mail   2. FTP