

Unit - 1 (COMMUNICATION SKILLS)

Chapter – 1: COMMUNICATION CYCLE

A. Fill in the blanks:

1. Feedback
2. Environmental
3. Communication channel
4. Receiver
5. Listening

B. Answer the following Questions:

1. Communication is the process of transferring or sharing of information between two or more people. It is a two-way process of reaching mutual understanding.
2. Effective communication has the following features:
 - 1) Mutually accepted code, i.e., a common language.
 - 2) A message should be clear
 - 3) Listening to others
 - 4) response from the receiver
3. The barriers to effective communication are- Environmental Barriers, Situational Barriers, and Individual Barriers.

Situational Barriers are the factors like Distance, Noise, and Distractions cause unnecessary disruption in the communication process. For example, loud music and noise from generators or other machinery.

Individual Barriers include Attitudinal, Linguistic Ability, Inattention, and Emotional State of the sender as well as receiver.
4. Sidhant Should be aware of the environmental barriers like instruments, lighting, room conditions, etc.; Situational Barriers like distance, noise, and distractions like distance, noise, and distractions; and Individual Barriers like attitudes, linguistic abilities, etc.

To avoid these barriers, Sidhant should ensure instruments, surroundings, seating arrangement are proper.

Also, while writing the speech, he should consider the aptitude and language proficiency of the audience. He must keep the length of the speech so it covers the important points but short enough to hold the audience's attention. He should address issues that connect with the audience's daily lives and their emotions.

Chapter – 2: Various Methods of Communication

A. Fill in the blanks:

1. Facial Expressions

2. Feedback
3. Visual aids
4. Written
5. Non-verbal

B. Answer the Following Questions:

1. Following are the advantages of oral communication-

- It is interpersonal and helps in building relationships.
- It encourages involvement in team work and decision making process.
- Oral message provides prompt feedback.
- It is cost efficient.
- It is a preferred mode of communication for private or confidential matters.

Limitations of oral communication are listed below-

- In this form of communication, emotions are visible and hence can lead to miscommunication.
- It has no legal validity.
- It does not provide a permanent record and the message can easily be forgotten.
- It may be difficult for certain people to understand speech due to various accents and pace used in oral communication.
- This form of communication is not suitable for lengthy messages.

2. Body language may support or contradict a message. For example, when you congratulate someone on their success with a smile, it shows you are genuinely happy for the other person. Whereas, the absence of a smile does not express your emotions.

3. Visual communication involves usage of Visual aids like graphs, diagrams, models, etc., which make oral communication more meaningful. The use of visual aids grab the attention of the students and keep them engaged. They also make complex data easy to comprehend and retain information longer.

4. Prateek should use e-mail as a channel to share the marking criteria for the final project with his team mates. E-mail facilitates written communication which is the most suitable mode of communication for formal and lengthy messages. It keeps the record of the communication and the receivers can also use it for reference.

5. Following are the disadvantages of Non-verbal communication:

- It is difficult to analyse a non-verbal message, thus leaving a greater possibility of distortion of information.
- In non-verbal communication, long conversation and necessary explanations are not possible.

Chapter – 3: Perspectives in Communication

A. Fill in the blanks:

1. Prejudice
2. Attitude
3. Past Experiences

4. Assertive
5. Categorise

B. Answer the Following Questions:

1. Perspective has influenced my behaviour towards others in the past. For example, a new boy joined our class, and I quickly formed a judgement that he was not very bright or active since he was very quiet. Later, I realised that he was very intelligent and he was only quiet because he was nervous on his first day of school. In another instance, I was feeling scared to talk to a teacher who was popular for being very strict. But, after talking to her I realised she was kind. I had formed an opinion based on other student's past experience.
2. I once attempted to answer a question in the class and my classmates started giggling. The next time the teacher asked a question I hesitated and did not raise my hand. Later I found out that they were laughing at something else and I felt conscious for no reason and missed out on the opportunity to respond to the teacher's question.
3. The environment can influence peoples' mood and motivation to act, and therefore can facilitate or discourage interactions among people. For example, the environments that are familiar provide us with safety and security, but also the right amount of stimulus to act.
4. Visual Perspective

Chapter – 4: Basic Writing Skills

Practice Time (Page No- 25)

Identify the type of phrases given in bold in the following sentences.

- a) Adjective phrase
- b) Verb phrase
- c) Prepositional phrase
- d) Noun phrase
- e) Noun phrase
- f) Adverbial phrase

Practice Time (Page No- 26)

Read the following sentences and state their type.

1. Assertive
2. Imperative sentence
3. Exclamatory sentence
4. Assertive
5. Exclamatory sentence
6. Imperative sentence
7. Interrogative sentence

8. Imperative sentence

Practice Time (Page No- 27)

In each of the following sentences, circle the subject and underline the predicate.

1. An unusual event occurred at our beach last summer.
2. Two girls were jogging along the beach.
3. They heard a strange sound.
4. Thrashing around in the water was a dark object.
5. A helpless dolphin was being tossed around by the waves.
6. The worried joggers called the Centre for Coastal Studies.
7. Two dolphin experts soon arrived at the beach.
8. They moved into the cold surf near the dolphin.
9. The healthy dolphin was released into the ocean several months later.
10. Have you ever been to the ocean?

Practice Time (Page No- 29)

Read this story and identify the parts of speech for the words given in bold.

was .**Verb**

I**Pronoun**...

failed.... **Verb**..

speech**Noun**..

oh**Interjection**.....

Britain**Noun**.....

am**Pronoun**

recognize**Verb**.....

to**Preposition**.....

go**Verb**.....

driver**Noun**.....

sorry**Adjective**.....

far....**Adverb**....

him**Pronoun**.....

for**Preposition**.....

Practice Time (Page No- 32)

A. Fill in the blanks with the appropriate article, a, an, or the. If no article is needed, leave the space blank.

1. An
2. The
3. __Blank__
4. A
5. The
6. An
7. The
8. The
9. Blank
10. An

B. In each of the following sentences, there is an error in the use of articles. Underline the incorrect word and then rewrite the sentences using correct articles.

1. A Chinese have decided to choose an national flower but they are divided on a choice.

Ans. The Chinese have decided to choose a national flower but they are divided on the choice.

2. Some favour a pansy while others prefer an plum blossom.

Ans. Some favour pansy while others prefer a plum blossom.

3. Since both flowers have their admirers, it is going to be an close contest.

Ans. Since both flowers have their admirers, it is going to be a close contest.

ASSESSMENT TIME

A. Multiple Choice Questions:

1. a. More formal and less flexible
2. c. 7C's of Communication
3. b. Sentence
4. c. Empirical
5. a. Predicate

B. Fill in the Blanks:

1. Subject
2. Imperative
3. Predicate
4. Adjective
5. Concluding
6. Interjection

C. Answer the Following Questions: (Solved)

D. Answer the Following Questions:

1. Following are the examples of four kinds of sentences:

- i. **Assertive sentence**- I study in class IX.
- ii. **Imperative sentence**- Have a great day!
- iii. **Exclamatory sentence**- It is such a beautiful painting!

- iv. **Interrogative sentence**- How are you doing?
2. A preposition describes a relationship between other words in a sentence. For example, 'The book is **on** the table'. The word 'on' describes the relationship between the book and the table.
 3. Interjection refers to a word or phrase that expresses a strong emotion. They are usually followed by an exclamation sign '!', for example, Ouch!. In the absence of non-verbal cues in the written form of communication, an interjection helps to show the emotion or feeling of the author.
 4. Indefinite Articles ('A' and 'An') are used before Singular Countable Nouns (SCN) to indicate that the noun they precede does not refer to any particular person or thing. Usually, these articles are used to introduce new concepts. For example, 'a book' refers to any book and not a specific book.
 5. Following are the rules for writing a paragraph:
 - Give the paragraph unity
 - Keep the paragraph short
 - Make use of topic sentences
 - Leave out unnecessary details
 - Give the paragraph movement
 - End the paragraph with a concluding sentence

C. Application Based Question:

1. A paragraph is usually judged on the following criteria:
 - i. Introduction (Including Title)
 - ii. Support/Explanation. This is further divided into-
 - a) Content
 - b) Expression (Fluency, Grammar, and Spelling)
 - c) Sequencing
 - iii. Conclusion
2. The correct sentence is, 'I bought **an** HD television set'. While writing the indefinite articles, the initial sound is important and not the spelling. The word HD begins with a consonant letter but has a vowel sound (ech). Therefore, it should have the article 'an' before it.

BRAIN DEVELOPER

SECTION 1: OBJECTIVE TYPE QUESTIONS-(SOLVED)

SECTION 2: THEORY QUESTIONS-(SOLVED)

SECTION 3: SHORT ANSWER TYPE QUESTIONS:

1. An effective communication is a communication between two or more people where the intended message is successfully delivered, received, and understood.
2. A barrier to effective communication is any factor, individual, situational, or environmental, that prevents the receiver from receiving and understanding the message accurately.

3. Non-verbal Communication means communicating without the use of words, oral or written. The different elements of non-verbal communication include Facial Expression, Gestures, Voice, Body Language, Eye Gaze, Physical Contact, and Dress and Appearance.
4. Verbal Communication involves the use of words in delivering the intended message. The two primary forms of verbal communication are- Oral communication and Written communication.
5. The various factors affecting perspective in communication are – Visual perspective, Past experiences, Attitude, Prejudice, Environment, Feelings, and Beliefs.

SECTION 4: LONG ANSWER TYPE QUESTIONS-(UNSOLVED)

1. Following are the impacts of effective communication on our lives-
 - It encourages active participation in group discussions and cohesive teamwork.
 - It helps in building relationships with others.
 - It enables a leader to cultivate a sense of common goal among the team members and drive them to work in a spirited manner.
 - Ability to communicate effectively builds your confidence and equips you to respond and articulate aptly in any situation.
 - Effective communication helps in handling various conflicts or misunderstanding in an organisation.
 - Effective communication saves time and reduces stress and anxiety levels.
 - It fosters success in professional and personal life.
2. Translation of an idea into a message by the source is called encoding. It is a significant element of the communication cycle as encoding helps in the accurate interpretation of the message, thus ensuring effective communication cycle. Encoding requires that the symbols or signs used must be clear to both the sender and the receiver. While encoding a message, one needs to consider what content to include, how the receiver will interpret it, and how it may affect one's relationship. Thus, encoding is guided by the nature and the purpose of the communication as well as the relationship between the sender and the receiver.
3. Written communication involves sending messages in the form of written words to convey information. Written communication is the most formal form of communication.
4. Non-verbal communication, like gestures, posture, etc., can be effectively used to enhance our verbal communication. Non-verbal signs can convey thoughts and feelings in the absence of verbal communication. Moreover, how we say something, is often more important than what we say as it provides subtle but powerful clues into our true feelings. Unconscious gestures also convey one's state of mind, for example, glancing at the watch is interpreted as a sign of disinterest or a desire to leave the conversation.
5. 'Our beliefs form a vicious cycle' refers to phenomenon that beliefs shape our behaviour and our communication style. Our communication style elicits responses from others and determines the result of an interaction, and the reactions from others further reinforce our beliefs. For example, if we believe that everybody should be treated with respect, then we will be respectful towards others while communicating with them. That will elicit a respectful behaviour from others too. This interaction will reinforce our belief that everyone should be treated with respect.

SECTION 5: APPLICATION BASED QUESTIONS:

1. Aryan should consider the following elements of non-verbal communication while giving his speech:
 - a. Facial Expression
 - b. Gestures
 - c. Voice
 - d. Body Language
 - e. Eye Gaze
 - f. Physical Contact
 - g. Dress and Appearance
2. Past experience.
3. Sushant has two tasks- (i) Sharing ideas (ii) convey working protocol. Sushant should use face-to-face (oral form) meeting for sharing his idea as the oral form of communication
 - Is interpersonal and helps in building relationships.
 - encourages involvement in team work and decision making process.
 - Provides prompt feedback.
 - Is cost efficientHowever, he should use e-mail (written form) to convey working protocol as written communication
 - Allows the sender to thoughtfully draft clear and comprehensive message.
 - Provides a permanent record and the message cannot easily be forgotten.
 - Is a suitable mode of communication for lengthy messages.
4. Mr Sharma seems to be operating with 'I'm Ok: You're not OK' life-position.
5. Visual Perspective.

Unit - 2 (SELF MANAGEMENT SKILLS)

Chapter – 5: Importance of Self-Management

A. Multiple Choice Questions:

1. b. Specific
2. b. Time-bound
3. a. Organisation
4. a. Schedule
5. d. Solution-centred

B. Fill in the Blanks:

1. Organisation
2. Responsible

3. Procrastination
4. Solution-centred
6. Initiative

C. Answer the Following Questions: (Solved)

D. Answer the Following Questions:

1. Management is the art of planning, organising, directing, and controlling the resources and tasks, efficiently and effectively, to achieve a goal assigned by someone else. While, Self-management is managing yourself to achieve the pre-determined tasks or goals that you have set for yourself by regulating your actions, organising your time, and being accountable for your decisions.
2. It is important to devise a realistic and time-bound plan. A time-bound target informs you whether you are progressing at the right pace or not, and a realistic plan allows you to succeed in your efforts and saves you from a false sense of failure.
3. A 'measurable' target means defining the target in quantifiable terms so that you can objectively assess the success or failure. For example, rather than saying, 'I will speed up my learning', a more measurable target would be, 'I will solve 20 Math problems in 2 hours'.
4. The practice of self-management benefits you in the following five ways:
 - a. Makes you more organised
 - b. Instils discipline
 - c. Helps in attaining goals
 - d. Enhances self-confidence
 - e. Commands respect from others
5. I plan to apply and benefit from the following three organisational skill strategies in my life-
 - a. Set SMART targets- I will be able to set realistic goals and also assess my progress to ensure success in achieving the set target.
 - b. Prioritise and schedule- By prioritising and scheduling, I will be able to complete the important tasks first.
 - c. Learn to say 'NO'- I will be able to avoid doing insignificant tasks that may hinder my progress, and will be able to focus on my goal.

E. Application Based Questions:

1. Sumit should learn to manage his time by following the following strategies:
 - a. **Planning:** A good work plan enables you to start being realistic about how much work you can take on, how much time it will take, and what activities will it involve. Then organise your time accordingly.
 - b. **Estimate time required for each task:** Be realistic in estimating the time required to accomplish the tasks as it helps you to plan effectively.
 - c. **Prioritise and Schedule:** Prepare your schedule to accommodate the planned tasks and other activities. Prioritise your tasks based on importance and urgency while preparing your schedule.

- d. **Learn to say 'No':** Always refer to your schedule and to-do lists before committing to new projects.
- e. **Spending the right time on right activity:** Set a time limit to complete the task.
- 2. Aarti should adopt the following strategies to avoid procrastination:
 - a. Acknowledge that she is procrastinating. The mere acknowledgement helps in curbing it.
 - b. Prepare and refer to her to-do list. She should keep your to-do list displayed where she can see it often.
 - c. Refer to your to-do list often and promise to reward herself after completion of the task.
 - d. Make it a habit of scheduling your more laborious tasks before more enjoyable tasks.

Chapter - 6: Building Self-Confidence

A. Multiple Choice Questions:

- 1. c. Overprotective Parenting
- 2. d. Both a and c
- 3. a. Emotional
- 4. d. Positive
- 5. c. Unprepared

B. Fill in the Blanks:

- 1. Self-confidence
- 2. Society
- 3. Overprotective
- 4. Culture
- 5. Threats

C. Answer the Following Questions: (Solved)

D. Answer the Following Questions:

- 1. Experience helps to raise confidence as it builds competence. Each incident of success takes the self-confidence a step further. One also learns to overcome obstacles and handle failures in the process.
- 2. A lack of confidence puts them in a vicious cycle, where the fear and unpreparedness prevent them from succeeding, and the failure further reinforces their sense of inadequacy leading to low self-confidence.
- 3. The attitude of parents toward their child creates the first significant impact on him especially in his initial years of his life. For example, lack of love and attention, harsh physical and mental punishments, and excessive criticism and derogatory remarks on a child's mistakes can break his confidence, instil a fear of failure in him, and make him hesitant to take on challenges. On the other hand, overprotective parenting style also hampers a child's self-confidence. Shielding a child prevents him from facing any pain and struggle. It also prevents him from developing

resilience and coping with stress and failure. Therefore, a balanced approach to parenting is necessary to build a child's confidence.

4. Self-confident people have the following attitudes: They have a positive outlook, are able to recognise their strengths and accept their weaknesses at the same time. They rely on their own ideas and beliefs rather than on others' opinions. Confident people accept their mistakes and learn from it. They choose to focus on the opportunities to grow rather than concentrate on their shortcomings.

On the other hand, people with low confidence are fearful and anxious as they depend on other people's approval and validation to feel good about their ideas. They tend to focus on their shortcomings and do not feel motivated to bring about change or improvisation. They are usually unprepared for their job and reluctant to deal with others.

Unit - 3 (INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS)

Chapter – 7: Introduction to ICT

A. Multiple Choice Questions:

1. (a) Online shopping
2. (d) Book
3. (d) All of these
4. (b) E-books

B. Fill in the Blanks:

1. access
2. traditional
3. Tablets
4. One-to-many

C. Answer the Following

1. a) Television b) Mobile phone c) E-mail
2. ICT is used in the pharmaceutical sector for latest research and manufacturing. It helps in hospital management, administration and it also helps the doctors and nurses to diagnose, treat, and monitor patients. One can search for and learn about various diseases, their symptoms, cures, and precautionary measures on the Internet.
3. ICT is used in various workplaces for
 - a) searching information
 - b) prospecting
 - c) research and development
 - d) designing

- e) engineering and manufacturing
- f) assembling as well as fault diagnosis
- g) safety tests and simulations
- h) power generation and distribution
- i) building and maintaining networks

Chapter – 8: Components of Computer System

A. Multiple Choice Questions:

1. (b) HDD
2. (b) 1024 Giga Byte
3. (a) Register
4. (d) Central nervous system

B. State True or False:

1. True
2. False
3. True
4. True
5. False

C. Answer the Following:

1. Central Processing Unit controls all the internal and external devices of a computer and performs arithmetic and logical operations.
2. There are three main components in a CPU.
 - i. Arithmetic and Logical Unit (ALU): Arithmetic Logic Unit is the component of CPU, which performs the arithmetic and logical operations on the operands.
 - i. Control Unit (CU) : This unit controls the operation of every other component of a computer system. It also controls the transfer of data and instructions among the various units of a computer.
 - ii. Memory Unit (MU): The memory unit is the principal storage of the computer. It stores both data and instructions.
3. A register is a very small data holding place in a computer processor. It holds an instruction, storage address or data. There are various types of registers; each register performs a specific function. Some most commonly used registers are: Accumulator (AC), Data Register (DR), Address Register (AR), Program Control (PC).
- 4.

RAM	ROM
Stands for Random Access Memory.	Stands for Read Only Memory.

It is volatile in nature, i.e., the data gets erased if the power supply is switched off.	It is non-volatile in nature, i.e., the data is not lost even if the power supply is turned off.
It is temporary memory.	It stores data permanently.

5. The smallest unit of memory is Bit (Binary digit) that can hold a single state - either 0 or 1. 1Bit (1b) is the smallest unit of data. Other units are:

- Nibble: Group of 4 bits
- Byte: Group of 8 bits
- Kilo Byte: 1KB = 1024 Bytes
- Mega Byte: 1MB = 1024 KB
- Giga Byte: 1GB = 1024 MB
- Tera Byte: 1TB = 1024 GB
- Peta Byte: 1PB = 1024 TB

Chapter – 9: Peripheral Devices

A. Fill in the Blanks:

1. Sound
2. Powdered
3. Plotter
4. Platters
5. USB

B. State True or False:

1. False
2. True
3. True
4. False
5. True

C. Answer the Following:

1. Peripheral devices are internal and external devices that connect to the computer directly and add functionality to it. They can be easily removed and plugged into a computer system. A few examples of peripheral devices are:
 - Optical disk drive
 - Modem
 - Bluetooth
 - Memory card reader
2. Scanner is an input device that scans text, images, and objects optically. The scanned data is then converted into a digital image and displayed on the computer screen. There are three types of scanner. They are:
 - a) Drum Scanner
 - b) Flatbed Scanner
 - c) Handheld Scanner

3. Monitor is the most common output device. It is also called Visual Display Unit (VDU), an electronic visual display for computers. Just like a television, a monitor also displays the output on the screen. Monitors display pictures by dividing the display screen into thousands (or millions) of minute dots called pixels, arranged in rows and columns. The pixels are so close together that they appear connected.
4. HDD or Hard Disk Drive is the most common storage device for storing a large amount of data. Hard disk is made up of a collection of disks known as platters. Each platter requires two read/write heads one for each side. All the read/write heads are attached to a single access arm so that they do not move independently. Each platter has the same number of tracks to store data.

Chapter – 10: Basic Computer Operations

A. Multiple Choice Questions:

1. (a) Unity
2. (b) POST
3. (d) Distributed
4. (a) Icons
5. (c) Shell and Kernel

B. Fill in the Blanks:

1. Multithreading
2. Trash
3. Commands
4. Directory
5. Linus Torvalds

C. Answer the Following Questions:

1. System software is a collection of one or more programs, that are designed to control and manage the overall operation and performance of a computer system.
2. An operating system which is capable of doing multiple tasks or executing processes while using common processing resources like CPU, is called a Multitasking Operating System.
3. Timothy Paterson wrote the original disk operating system.
4. Multithreading operating systems are the operating systems which allow different parts of an application or program to run simultaneously. The feature of multithreading can delay the execution response of certain processes.
5. A system software can be classified into the following four categories:
 - a) Operating System
 - b) Device Drivers
 - c) Language Processors
 - d) Utility Software

6. Following are the security measures which are used to protect the user's data from threats and intrusion:
 - a) Protection against unauthorised access through login and password.
 - b) Protection against intrusion by keeping the firewall active.
 - c) Displaying messages related to system vulnerabilities.
7. A directory is just like a file folder which contains all the logically related files. DOS files are organised in a hierarchical or an inverted tree-like structure. The files are further divided into directories and sub-directories. The main directory is called Root Directory.

Chapter – 11: Operating System

A. Fill in the Blanks:

1. User-friendly
2. Desktop
3. Notification area
4. Icons
5. Recycle Bin

B. State True or False:

1. False
2. True
3. False
4. True

C. Answer the Following Questions:

1. Linux is the operating system that is available free of cost. It was developed by Linus Torvalds on 5th October 1991. Linux has become most popular because it is freely available, easy to use and operate and also allows users to work on many programs at the same time. Some features of Linux are:
 - Portable
 - Open Source and Free
 - Multi-User and Multiprogramming
 - Hierarchical File System
 - Shell
 - Security
2. A screensaver is a computer application that blanks the screen of the computer when it is inactive or fills it with images or patterns to avoid phosphor burn-in on plasma and CRT monitors.
3. The Recycle Bin is used by Windows computers to store deleted items. It temporarily stores files and folders before they are permanently deleted. To permanently remove all items in the Recycle Bin, select "Empty the Recycle Bin" in the left sidebar of the window.
4. Current system Date and time is displayed on the bottom right corner of your desktop. To change it
 - a) Click on the clock in the icon tray at the bottom right of your computer screen.

- b) This should show the clock, date and calendar. Click on **Change date and time settings...** to get the **Date and Time** menu. (Alternatively, use **Start > Control Panel > Date and Time.**)
 - c) Click on **Change time zone** and select your time zone.
 - d) When you have the correct time zone, check that the time displayed in the **Date & Time** tab is correct. If not, change it and click **Apply**.
 - e) When complete, click on **OK**.
5. Small graphic symbols displayed on the desktop are called **icons**. Some icons present on the Windows 7 desktop are: Files, Programs, Computer, Folders, Network Neighborhood /Network, Shortcuts, and Recycle Bin.

Chapter – 12: Introduction to Internet

A. Multiple Choice Questions:

1. (a) HyperText Transfer Protocol
2. (c) HTML
3. (d) Protocol
4. (a) Domain
5. (c) Web Browsers

B. Fill in the Blanks:

1. Interface
2. HTML
3. URL
4. Static
5. Website, Webpage

C. Answer the Following Questions:

1. Internet is a global system of interconnected computer networks that enables the users to share information and various resources with each other. Some of the common uses of Internet are:
 - Education
 - E-mail
 - Business
 - E-Commerce
 - Media and Entertainment
 - Social Networking
 - Forum
 - Health and Fitness
2. Web browser is a software that is used to view websites. It is an interface between a user and the World Wide Web. A web browser can have a graphical user interface, or can be text-based. Some popular web browsers are:
 - Google Chrome
 - Mozilla Firefox
 - Microsoft Internet Explorer (MSIE)
 - OPERA

- Apple Safari
 - Microsoft Edge
3. Web page is a digital page which may contain text, hyperlink, videos, audios, images, tables, etc. It is commonly written by using HTML (HyperText Markup Language) and is stored on a web server. Whereas, a website is a collection of related web pages containing images, videos, or other digital media set under the same domain name.
 4. The Uniform Resource Locator denotes the global address of the web documents and the web resource. Internet communication is the main reason for identifying a resource on the web. The URL has two parts:
 - a. Protocol Identifier: It tells the Internet browser what protocol needs to be followed to access the address.
 - b. Resource Name: It specifies the complete address of the resource on the Internet.Example - <http://www.mygov.in>
Here, [http](http://) is Protocol, and www.mygov.in is Resource name

Chapter – 13: Introduction to E-mail

A. Multiple Choice Questions:

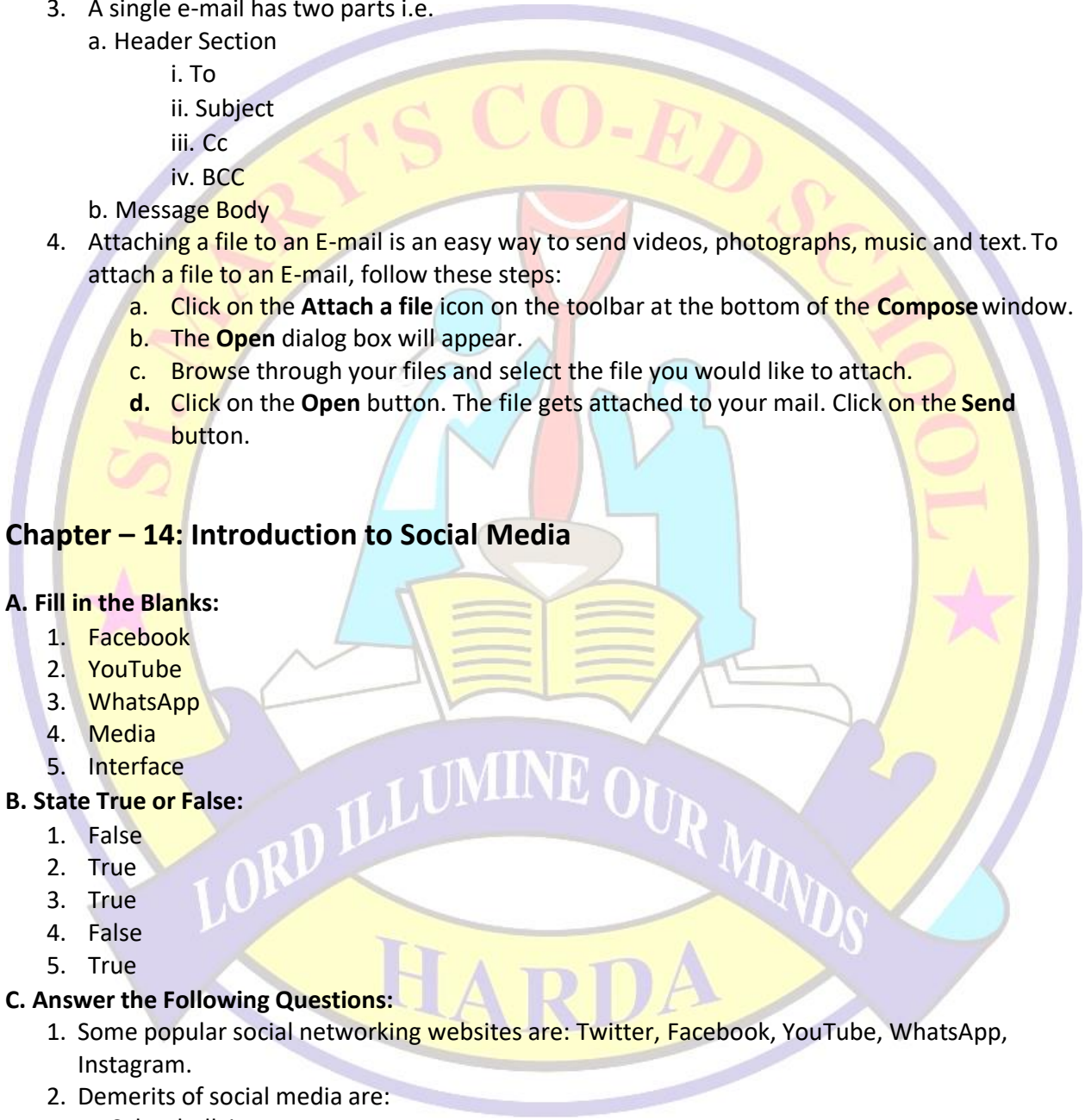
1. (a) Inbox
2. (b) Spam
3. (d) Domain Name
4. (b) Facebook.com
5. (a) Carbon copy

B. State True or False:

1. False
2. True
3. False
4. False
5. False

C. Answer the Following Questions:

1. The two parts of an E-mail address are: username and domain name. E-mail address consists of two parts, separated by @ symbol, i.e., username@domain name.domainextension.
e.g. Kipspublishingworld@gmail.com
User name – Kipspublishingworld
Domain Name- Gmail
Domain extension- .com
User name is the name of a person's account, which can be an actual name or an alphanumeric string.
Domain name is the location of the person's account on the internet separated by a period.
Domain extension indicates the type of organisation and is specified after the domain name.
2. E-mail is more popular over conventional mails because of the following reasons:

- 
- a. Cost effectiveness
 - b. Time saving
 - c. Secured and reliable network
 - d. Accessible anywhere at any time
 - e. Provides flexibility
 - f. Easy to modify
 - g. Privacy
3. A single e-mail has two parts i.e.
- a. Header Section
 - i. To
 - ii. Subject
 - iii. Cc
 - iv. BCC
 - b. Message Body
4. Attaching a file to an E-mail is an easy way to send videos, photographs, music and text. To attach a file to an E-mail, follow these steps:
- a. Click on the **Attach a file** icon on the toolbar at the bottom of the **Compose** window.
 - b. The **Open** dialog box will appear.
 - c. Browse through your files and select the file you would like to attach.
 - d. Click on the **Open** button. The file gets attached to your mail. Click on the **Send** button.

Chapter – 14: Introduction to Social Media

A. Fill in the Blanks:

- 1. Facebook
- 2. YouTube
- 3. WhatsApp
- 4. Media
- 5. Interface

B. State True or False:

- 1. False
- 2. True
- 3. True
- 4. False
- 5. True

C. Answer the Following Questions:

- 1. Some popular social networking websites are: Twitter, Facebook, YouTube, WhatsApp, Instagram.
- 2. Demerits of social media are:
 - a. Cyber bullying
 - b. Less real life interaction

- c. Addiction
 - d. Misleading information
 - e. Misuse of information
 - f. Fake profiles
 - g. Peer pressure
3. A blog is an easy to create website that allows users to share their thoughts with the world. The topic of the blog can be anything from personal to professional.
4. YouTube is a free video sharing website. You can find all kinds of user generated videos on YouTube, such as tutorials, cooking lessons, exercise tips, music, comedy, and a lot more. It allows you to:
- Select videos from a grid of recommended and trending videos You can watch, like, share, and comment on the videos.
 - Manage subscriptions, replay from history, manage playlists, or choose videos from various categories
 - Download and Upload videos from your computer or mobile phones.
 - Choose the privacy settings of your channel.
 - Edit your videos to give them a professional look using various editing tools like Combine and Trim (cut or Snip).
5. Facebook is a popular social networking website which is used to connect with people online. Following are a few of its most popular features:
- Friends List: It allows registered users to create their profiles and create a list of their contacts, called 'Friend' in the Facebook language.
 - Walls: It is essentially a virtual bulletin board where members can post messages, pictures, or videos and share links to their Facebook friends.
 - Virtual Photo Album: This feature allows members to upload an unlimited number of photos. The members, 'friends' may comment and identify or 'tag' people in the photos.
 - Status Update: It is a micro blogging tool that helps the users to broadcast short announcements about themselves.
 - Facebook Pages: This feature was initially Facebook Pages: designed for business use. It allows businesses to publish content on a public page and receive comments.
 - News Feed: This feature constantly updates list of stories in the middle of your home page. News feed includes status updates, photos, videos, links, app activity and likes from people, pages, and groups that you follow on Facebook.
 - Privacy Controls: Facebook provides a customisable set of privacy controls, so users can protect their information from getting exposed to third-party individuals.

BRAIN DEVELOPER

SECTION 1: OBJECTIVE TYPE QUESTIONS-(SOLVED)

SECTION 2: THEORY QUESTIONS-(SOLVED)

SECTION 3: APPLICATION BASED QUESTIONS-(SOLVED)

SECTION 4: APPLICATION BASED QUESTIONS-(UNSOLVED)

1. ALU
2. Laser Printer
3. WhatsApp
4. YouTube
5. Add a Bcc to the mail for his colleague's e-mail address.

SECTION 5: SHORT ANSWER TYPE QUESTIONS-(UNSOLVED)

1. The three main components of a CPU are:
 - a. Arithmetic and Logical Unit (ALU)
 - b. Control Unit (CU)
 - c. Memory Unit (MU)
2. A register is a very small data holding place in a computer processor. It holds an instruction, storage address or data.
3. Two types of primary memory are: RAM (Random Access Memory) and ROM (Read Only Memory).
4. CPU speed is measured in Megahertz (MHZ).
5. Disk Operating System (DOS) is a type of system software that runs on a hard disk drive. It is a command line operating system.
6. The desktop is the primary user interface of a computer. It includes the desktop background (or wallpaper) and icons of files and folders you may have saved to the desktop.
7. Social media is an online platform that facilitates the building of social networks or social relation among people who, share similar interests, activities, backgrounds, or real-life connection.
8. System software is a type of computer program that is designed to run a computer's hardware and application programs.
9. Daisy Wheel Printers, Dot-Matrix Printers.
10. Recycle Bin is used by Windows computers to store deleted items. It temporarily stores files and folders before they are permanently deleted.

SECTION 6: LONG ANSWER TYPE QUESTIONS-(UNSOLVED)

1. Some ICT tools being used in the field of education are: Desktop and laptops, Projector, Digital cameras, Printer, Photocopier, Tablets, Popplet, Pen Drive, Webboards, Scanners, Microphones, interactive white board, DVDs.
2. ICT provides a platform for interaction between the government and people through government websites and apps. Services, such as tax payment, ordering LPG cylinders, enrolling for the electoral process, paying for water and land bills, and finding information about different government schemes has been made possible because of ICT.
3. Primary memory is a place where data and programs are stored temporarily as long as they are being executed. It is very fast and expensive but has limited storage capacity. Internal memory is of two types: 1. RAM 2. ROM
 - a) RAM - RAM (Random Access Memory) is a type of computer internal memory that can be accessed randomly. Whatever information we enter into the computer goes into RAM and remains there as long as we are working on an application. It is a

volatile memory as data and instructions are stored temporarily during its processing only and lost forever when the computer is switched off.

Types of RAM:

- DRAM (Dynamic Random Access Memory)
- SRAM (Static Random Access Memory)
- SDRAM (Synchronous Dynamic Random Access Memory)
- DDR (Double Data Rate Memory)

b) ROM - ROM stands for Read Only Memory. It is a type of memory from which information can only be read. It is a non-volatile memory as it stores information permanently. Data stored in ROM can neither be modified nor removed.

Types of ROM:

- PROM (Programmable Read Only Memory)
- EPROM (Erasable Programmable Read Only Memory)
- EEPROM (Electrically Erasable Programmable Read Only Memory)
- Flash Memory

4.

CRT	LCD	LED
CRT stands for Cathode Ray Tube	LCD stands for Liquid Crystal Display	LED stands for Light Emitting Diode
It is a tube coated with phosphorous in inner surface. When electrons produced by e-gun come in contact with phosphorous wall, light is produced by virtue of which we can see.	It is a thin, flat display screen made up of any number of color or monochrome pixels arrayed in front of a light source or reflector.	It is a semiconductor diode that emits incoherent narrow-spectrum light when electrically biased in the forward direction of the p-n junction. This effect is a form of electroluminescence.
It is generally used in TV screens, monitors, etc.	It is often used in electronic devices because it uses very small amounts of electric power.	It can be used as a regular household light source.

5. Cache memory is a special high speed memory which can either be inserted on a motherboard or made a part of the CPU. The CPU uses cache memory to store instructions that are repeatedly required to run programs, thus improving the overall system speed. Cache memory maximises the system performance.

6. Differences between Primary and Secondary memory.

Primary memory	Secondary memory
The primary memory is categorized as volatile & non-volatile memories.	The secondary memory is always a non-volatile memory.
These memories are also called internal memory.	It is known as a Backup memory or Additional memory or Auxiliary memory.

Data is directly accessed by the processing unit.	Data cannot be accessed directly by the processor. It is first copied from secondary memory to primary memory. Only then CPU can access it.
It's a volatile memory meaning data cannot be retained in case of power failure.	It's a non-volatile memory so that that data can be retained even after power failure.
It holds data or information that is currently being used by the processing unit. Capacity is usually in 16 to 32 GB	It stores a substantial amount of data and information. Capacity is generally from 200GB to terabytes.
Primary memory is costlier than secondary memory.	Secondary memory is cheaper than primary memory.

7. Internet is a boon to the world. Almost every aspect of our life is touched by the Internet. Interestingly, Internet provides 24x7 services.

Some of the good effects of Internet are: Education, E-mail, Business, E-Commerce, Media and Entertainment, Social Networking, Forum, and Health and Fitness.

Some bad effects of Internet are: Virus Threat, Spamming, Cyber Crime, Pornography, Cyber Terrorism, and Time Wastage.

8. E-mail or Electronic mail helps in sending and receiving messages from one computer to another. It allows us to communicate quickly with people around the world at any time. E-mail is an economical mode of communication. It facilitates you to send the same message to more than 100 people at the cost of a local phone call. It also helps in reducing the wastage of paper.

9. To create an e-mail account and get our e-mail address:

- Connect to the Internet. Open the website www.gmail.com.
- Click on the **Create account** link and proceed to the next page.
- A registration form will appear. Fill the registration form, choose a username and password.
- Accept the agreement. An e-mail account gets created if all the entries have been filled properly.

After creating an e-mail account, it can be used to send and receive e-mails. To use the e-mail account, one must login with the username and the password.

10. A Social Networking is an online platform that facilitates the building of social networks or social relation among people who, share similar interests, activities, backgrounds, or real-life connection. Social networking can be done for social purposes, business purposes, or both. In a social networking website, users create profiles, which contain information about them, create a list of users with whom to share connections, and organise their social networks. Advantages of Social Networking:

- Easier To Connect
- Create New Connections
- Free Business Promotions
- Aids In Criminal Cases
- Spreads Information Incredibly Fast

Disadvantages of Social Networking:

- a. Cyber Bullying
- b. Less Real Life Interaction
- c. Addiction
- d. Misleading Information
- e. Misuse of Information
- f. Fake Profiles
- g. Peer Pressure

Unit - 4 (ENTREPRENEURIAL SKILLS)

Chapter – 15: Types of Business Activities

A. Multiple Choice Questions:

- 1. a. Entrepreneur
- 2. a. Sole Proprietorship
- 3. b. takes risk to earn profits
- 4. b. Merchandising
- 5. a. Income tax exemption

B. Fill in the Blanks:

- 1. Cooperative
- 2. Hybrid
- 3. Service
- 4. Retail
- 5. Trading, Buy and Sell

C. Answer the Following Questions (Solved):

D. Answer in One or Two Sentences:

- 1. Corporation
- 2. Partnership

E. Answer the Following Questions:

1. The benefits of studying entrepreneurship are:

- It helps to think about new business ideas.
- It helps to cultivate skills and knowledge for starting an enterprise.
- It develops business skills in areas such as finance, sales, marketing, management, and accounting.
- It helps in the development of other skills such as adaptability, effective communication, business discipline, and confidence.

2. Being legally responsible for a business is termed as 'liability'. All forms of business ownership have liabilities. Liability is an important factor because it defines the level of risk and profitability of the business.

3. A sole proprietorship is a business is-

- owned by a single person who keeps all the profits and is solely liable for all the debts
- easy to set up and is the least costly among all forms of ownership
- usually adopted for small independent businesses
- simple to Start and close and requires minimum costs

A sole proprietor has a limited capacity to raise capital. Thus, sole proprietorship is often considered as the most appropriate form during the early stages of a business.

A partnership is a business-

- Owned by two or more persons who jointly invest money in the business.
- Expected to yield higher growth rates than a sole proprietorship
- Offers the opportunity for income splitting and tax saving
- Easy to change the legal status of the business if needed.
- Divides the profits and losses of the business among the partners.

Both partners are legally responsible for the business and they take joint decisions. However, the liability of the partners for the debts of the business is unlimited, i.e., each partner is liable for the partnership's debts and the consequences of each other's actions. Also, there is always a risk of disagreements and friction among partners.

4. Corporations have many advantages including,

- They attract investors because shareholders of a corporation have limited liability, i.e., creditors can only claim the assets of the corporation and not the personal assets of the stockholders for the settlement of the corporation's debts or liabilities.
- Shares of the ownership are transferable, so the corporation continues to exist even if the management changes.

F. Application Based Questions:

1. Cooperative

2. Surabhi should opt for Sole Proprietorship because it involves minimum start-up cost and least government regulation.

Chapter – 16: Characteristics of Entrepreneurship

A. Multiple Choice Questions:

1. b. A process
2. c. Identification and evaluation of the opportunity
3. b. Initiative
4. d. Natural talents or inclinations
5. d. All of these

B. Fill in the Blanks:

1. Perseverance
2. Confidence
3. Capital
4. Creativity
5. Action

C. Answer the Following Questions (Solved):

D. Answer in One or Two Sentences:

1. Integrity is the personal commitment to keep your promises, to do what you say you are going to do.
2. Some aptitudes that could be useful in an entrepreneurial venture are- Artistic, Perceptive, Logical, Perceptive, Logical, Mechanical, Spatial, Intellectual.
3. Some of the social benefits of entrepreneurship are-
 - It helps reduce unemployment.
 - It improves socio-economic status.
 - It satisfies consumers' needs
4. Optimism means to have a positive outlook and not to give up in difficult situations. It is an excellent personal quality for an entrepreneur as it helps in bouncing back after a failure.
5. Background of a family business also influences entrepreneurship. Youngsters who belong to business families often join their family business. They learn business skills from their elders. They often evolve their business according to the changing culture and take it to greater heights. The Ambani brothers (Mukesh and Anil Ambani) are good examples of this phenomenon.

E. Answer the Following Questions:

1. I possess the following characteristics that can help me become a successful entrepreneur:
 - Identify business opportunities
 - Foresee risks
 - Hard work
 - Perseverance
 - Problem-solvers
2. I plan to start a Tiffin service for office going professionals. The four initial stages of the entrepreneurship development process will be:
 - **Identification and evaluation of the opportunity**- An increasing number of professionals living away from families and decreasing trend of cooking at homes is raising demand for tiffin services.
 - **Development of the business plan**- Researching for number of potential customers, pricing, dishes in demand, different delivery timings, packaging material and costs, and delivery method.
 - **Determination of the required resources**- Raw material supplier, packaging material, cooking space, utensils, gas connection, delivery personnel.
 - **Management of the resulting enterprise**- Quality maintenance, accounts, taxation, advertisement, etc.

3. It is not essential to start with big place or capital investment. Most of the successful entrepreneurs started their ventures at home, with minimal investment. For example, Software giant Microsoft was started in Bill Gates' garage.
4. 'Entrepreneurs are a national treasure. They create wealth, jobs, opportunities, and prosperity in the country'- the statement is absolutely true. By identifying opportunities, entrepreneurs fill the existing gaps between societies' needs and products offered. In doing so, they employ people, instigate competition, and raise living standards of the society.

F. Application Based Questions:

1. Some of the career options that Amit may pursue are:
 - Arts Administrator
 - Art Restoration Specialist
 - Visiting Artist
 - Commercial Artist
 - Muralist
 - Painter
 - Interior Designer
 - Decorator-Wall Papering
2. Sunaina seems to be motivated by the spirit of service to society.

Unit - 5 (GREEN SKILLS)

Chapter – 17: Environment Protection and Conservation

A. Multiple Choice Questions:

1. b. Living things
2. c. Water, soil, air, light
3. d. Both b and c
4. b. Interact with each other
5. b. They will soon get exhausted

B. Fill in the Blanks:

1. Ecosystem
2. Biotic
3. Abiotic
4. Heterotrophs
5. Oxygen, Carbon dioxide

C. Answer the Following Questions (Solved):

D. Answer in One or Two Sentences:

1. Overexploitation refers to the overuse of natural resources to such an extent that it almost reaches a stage of exhaustion.
2. Earth Day is celebrated worldwide every year on April 22 to support environmental protection.
3. Gases that trap the heat in the atmosphere are called greenhouse gases. The primary greenhouse gases that humans emit directly in significant quantities in the earth's atmosphere are carbon dioxide, methane, nitrogen, nitrous oxide, and CFCs.
4. The three Rs are- Reduce, Recycle, Reuse.
5. Conservation of environment means the proper use and management of natural resources.

E. Answer the Following Questions:

1. Biotic Components consist of all the living organisms within an ecosystem, for example, plants, animals, birds, insects, fungi, and other living organisms.

Abiotic Components comprise all the non-living things in an ecosystem, for example, water, air, soil, sunlight, and minerals.

2. Each ecosystem is unique, but all ecosystems consist of three primary components:

- * **Autotrophs:** They are the producers of energy. Plants make up the majority of the autotrophs in an ecosystem as they convert energy from the Sun or other sources into food.

- * **Heterotrophs:** They are the consumers of energy. These are organisms which depend directly or indirectly upon the autotrophs for their food. They are also known as consumers. Most of the heterotrophs are animals.

- * **Non-living matter:** It is soil, sediments, leaf litter, and other organic matter found on the ground or at the bottom of an aquatic system.

3. Development and conservation of environment can absolutely go hand-in-hand. Conservation of environment requires judicious and balanced use of natural resources. We can protect environment without hampering growth by adopting a few strategies like:

- * The three Rs- Reduce, Recycle, Reuse
- * Developing eco-friendly habits like- such as proper handling of wastes and refraining from using polythene bags' keeping rivers and oceans clean, etc.
- * Saving electricity by making sure that lights and appliances are turned off when not in use
- * Refer to the energy star ratings while buying electrical appliances
- * Reducing car emission
- * Rainwater harvesting and judicious use of water

4. Some of the important factors that cause ecological imbalance are:

- * Overexploitation of natural resources
- * Habitat destruction
- * Environmental Pollution
- * Greenhouse gas emission
- * Nuclear weapons
- * Radioactive wastes
- * Biotechnological misuse

5. As an entrepreneur I will take the following steps to contribute towards protecting the environment:

- * Use recyclable, biodegradable raw material
- * Recycle and reuse material
- * Reduce chemical emission
- * Use LED and CFL bulbs instead of incandescent bulbs.
- * Utilise renewable energy sources
- * Buy electrical appliances with higher energy star ratings

F. Application Based Questions:

1. The residents can take some small but important steps to conserve water. For example,

- * Use water judiciously for daily chores like bathing, drinking, washing, cooking, etc.
- * Practise rainwater harvesting at home.
- * Always turn taps off tightly so they do not drip and promptly repair any leaks.
- * Never run water continuously while washing dishes or brushing your teeth.

2. Natural gas and LPG

Chapter – 18: Importance of Green Economy

A. Multiple Choice Questions:

1. d. Conserve the environment
2. a. Green job
3. d. All of these
4. d. New employment opportunities
5. c. False

B. Fill in the Blanks:

1. Resource
2. Green
3. Bamboo
4. Environmental
5. Green economy

C. Answer the Following Questions (Solved):

D. Answer in One or Two Sentences:

1. The three human activities that cause damage to the environment are-

- * Greenhouse gas emission
- * Deforestation
- * Radioactive wastes

2. The two job opportunities in the green sector are-

- * Waste management
- * Construction related areas

3. Greenhouse gasses affect our environment in the following ways-

- * The greenhouse effect has warmed up oceans and caused melting of glaciers, rising sea levels, flooding of coastal areas, and deterred shipping industry.
- * Carbon dioxide also contributes to air pollution creating acid rains. Acid rains damage trees and other plant life and further pollute water and soil.
- * Carbon dioxide emissions displace oxygen in the atmosphere, thus impacting human health.

4. Green Job contribute towards preserving or restoring the quality of the environment. Green jobs involve greater efficiency in the use of energy, water, and material. These jobs help to protect ecosystems and biodiversity, de-carbonise the economy, and minimise all forms of waste and pollution.

5. India aims to address the following three issues through green economy initiatives:

- * Issues of energy scarcity
- * Issues of environmental pollution
- * Issues of unemployment or underemployment

E. Answer the Following Questions:

1. Green skills refer to the knowledge, abilities, values, and attitudes needed to live in, develop, and support a society which reduces the negative impact of human activity on the environment. Green skills help in protecting the environment for the future, creating jobs that protect the environment, reducing energy consumption, and minimising waste and pollution.

2. In the relationship between the man and the environment, the environment influences the life of human beings depend on their natural environment for survival. But with the advancement in technology and increasing population, human beings have undertaken certain activities like rapid industrialisation, unplanned urbanisation, deforestation, and overexploitation of natural resources. Human have also caused great environmental harm by Burning fossil fuels, Flushing waste into rivers, and emitting greenhouse gases and nuclear and radioactive waste.

3. Social inclusion means sharing the responsibility as well as the benefits of economic growth across all sections of society.

4. The youth of India can greatly benefit from Green Skills Development Programme (GSDP) as it aims to

- * Train green skilled workers
- * Generate new jobs for green skilled workers
- * Preserve or restore environmental quality so that it lasts for future generations

5. Green economy will help in

- * Preventing
 - melting of glaciers and resulting rise of sea level
 - variations in rainfall
 - climate disasters like droughts and floods
 - desertification (fertile land becoming infertile)
 - loss of biodiversity
- * Improving
 - Air, water, and soil quality

- New areas of manufacturing such as biofuels and renewable energy source
- Industrial and agricultural production
- New areas of employment

6. Low carbon growth the chief aim of green economy because it is essential for environmental sustainability and future prosperity. An increased carbon emission prevents Earth from cooling at night, thus causing global warming and climate change. Consequences of global warming and climate change include:

- Melting of glaciers changes, resulting in rising sea levels and floods in coastal areas
- Influence on shipping industry
- Changes in the amount and pattern of precipitation
- Global warming is causing more wildfires, droughts, and tropical storms, resulting loss of property and human life, chronic waterborne diseases, and lasting psychological traumas
- Air pollution creating acid rains. Acid rains damage trees and other plant life and further pollute water and soil
- Contaminating vegetation that we eventually consume
- Carbon dioxide displacing oxygen in the atmosphere, thus impacting human health

F. Application Based Questions:

1. Some job opportunities involving green skills are:

- Wildlife (zoos, wildlife sanctuaries, national parks, biosphere reserves, botanical gardens, nurseries, wetland sites, State Biodiversity Boards, Biodiversity Management Committees, and Wildlife Crime Control Bureau)
- Industries (involved in production or manufacturing of green products)
- Tourism (as eco-tourist guides)
- Agriculture (as organic farmers or green practitioners)
- Education and research sectors
- Waste management (in Municipal Corporations, Councils, urban local bodies)
- Water management
- Construction related areas

2. Bahadur Lal is contributing in halting environmental damage as National Parks protect the ecological integrity of ecosystems for present and future generations by prohibiting exploitation of natural land and wild life.