JAGAN INSTITUTE OF MANAGEMENT STUDIES
TECHNICAL COMMUNICATION
BCA-109

ASSIGNMENT- I

1. What is technical communication? Discuss its need and importance in IT profession. 10 Marks
2. Write short notes on:
   A. History of Technical Communication
   B. Features of Technical Communication
   C. Difference between Technical Writing and General Writing
3. What elements constitute the structure of a business letter? Explain each element briefly.

ANSWERS

1. **Technical communication** involves the delivery of clear, consistent, and factual information—often stemming from complex concepts—for safe and efficient use and effective comprehension by users. Technical communication is a user-centered approach for providing the right information, in the right way, at the right time so that the user's life is more productive. The value that technical communicators deliver is twofold: They make information more usable and accessible to those who need that information, and they advance the goals of the companies and organizations that employ them.

Technical communication is a broad field and includes any form of communication that exhibits one or more of the following characteristics:

- Communicating *about technical or specialized topics*, such as computer applications, medical procedures, or environmental regulations.
- Communicating *by using technology*, such as web pages, help files, or social media sites.
- Providing *instructions about how to do something*, regardless of how technical the task is or even if technology is used to create or distribute that communication.

The following examples show the value of technical communication with respect to the products and services that technical communicators provide:

- Technical procedures and illustrations that clarify steps and identify parts of a product allow users to focus on getting tasks done efficiently, accurately, and safely.
- Training and instructional materials that teach people new skills make them more employable and productive in their organizations.
- Medical instructions that are informative and comprehensive ensure regulatory compliance and help patients and care providers manage treatment, improve health, and reduce the costs and risks associated with care.
- Well-designed websites that are user-focused make it easier to find information and increase user traffic and satisfaction.

NEED and IMPORTANCE OF TECHNICAL COMMUNICATION

Technical communication facilitates the communication of concepts to workers or customers, but may sometimes help you direct your employees in a particular course of action. You may want to have your workers understand the details of some technological system, or to take a particular action using that system. For example, if the workers in your bank are not properly posting deposits to accounts, you would instruct them on the correct practice by writing all the proper instructions.

2. **a. History of Technical Communication**

While most people think of the field of technical communication as beginning at the onset of the 20th century during World War I, in truth technical communication has been around as long as humans have used technology to expand their abilities. We had to explain to one another "how to" hunt that mastodon without getting killed, create the paints used in cave art, knap an arrowhead, weave a fishing skein, or shape clay into a pot. Those people who could explain the necessary skills were the ancestors of today's technical communicators.

As different forms of writing and tracking evolved, the ancient Aztec, Babylonian, Chinese, and Egyptian civilizations made note of astronomical observations. Aristotle, in 353 BC, wrote a dictionary of philosophy terms. In the 12th century, Muhammad ibn Musa Al'Khowarizmi wrote a detailed exploration on the use of algorithms (which is the technique used in programming languages today). Geoffrey Chaucer, author of The Canterbury Tales, was also a technical writer and created a document in the late 1300s on the theory and use of the astrolabe, a tool that is used to measure the position of a ship at sea. Leonardo da Vinci filled notebooks with sketches and explanations of different technical devices including a prototype of a helicopter. Early scientists from Galileo to Robert Boyle to Isaac Newton

were some of the Europeans who shaped technical communication as they explained how to build and use their devices (e.g. Boyle's air pump) along with their theories of why.

The first and second World Wars pushed technical communication into the forefront as the need for documentation of the development and use of chemical explosives, poisonous gases, radar, and rocketry came into play. In addition, straightforward and user-friendly documentation was needed for manufacturing, medical, electronic, and aerospace industries.

In the 1980s and 1990s, with the advent of home computers, game systems, and the internet, the need for trained and qualified people in the technical communication field grew exponentially. This trend has only continued into the 21st century.

b. Features of Technical Communication

Creation and optimization of templates and designs for customized documentation and information products
Consulting in the implementation and support of global, site-transcending editing processes
System-wide monitoring of legal requirements, general norms and guidelines for technical documentation
Consulting and implementation of consistent modularization and structuring of information units
Media transcending publication
Development of interfaces to upstream and downstream systems

ifference between General Communication and Technical Communication

General Communication	Technical Communication
contains a general message.	It contains a technical message.
...informal in style	Technical communication is mostly formal i

instruments not

Repetitiveness in language: Language suffers from redundancy or repetitio no matter which country it belongs to. In the same sentence, there can be more th one plural word. While in some cases it would seem necessary, in others it ac to wordiness or unnecessary stress on an issue.

Example

Correct: There are *many boys* seated on the *chairs*. (Many, Boys and Cha all indicate the presence of more than one.)

Wordiness: *Together* meet me *all* of you in the camping area on Sunday.

Recursiveness of language: All languages contain some basic templates grammar. These templates can be used for a variety of expressions and sentence Recursiveness implies that there is no limit to the length of a sentence. The sam structure can be repeated to make long sentences.

FEATURES OF TECHNICAL COMMUNICATION

Technical communication is not learnt in a day. Sincere effort and practice goes into learning to write a report or memo. It is important to look into the features that constitute good technical communication.

Audience

The audience is specific in technical communication. The executives who have to attend a meeting with their boss have to have clear information about time, venue and agenda. This is normally done by the use of memo, or agenda or circular. A technical document is created for a specific type of client or group of clients. During creation of message if this is not kept in focus, then a technical writer will not generate documents whose goal would be to address the needs of specific readers. To write a technical document, the writer must analyze the audience and decide the level of knowledge it possesses.

The audience could be the following:

Technical: Those with technical qualification, experience or training. For example, engineers, scientists and doctors.

Semi-technical: Those who have received some kind of technical training or work experience in industry, but not directly in the field such as those with training in related areas. For example, staff (administration, clerical, secretarial).

Non-technical: General public or unknown audience, or any combination of technical, semi- and non-technical readers, including customers, clients and patients.

Objective Language

Technical communication is expressed in a plain, objective language, it uses terminology that the audience understands. Because its purpose is to inform, instruct or persuade a reader about a specific practical matter, technical writing draws the writer's attention towards what is relevant. A good technical document does not prompt emotional, unusual or unreasonable interpretations of the subject.

Format

A technical document has a presentation style that enables readers to assimilate information at a glance. Good writers make the format of the technical document easy to scan.

Technical communication according to requirement can have one of the following formats:

- Reports or documents, e.g. lab report
- Record-keeping forms, e.g. service report
- Instructions, e.g. technical manual
- Correspondence, e.g. letters, memos, emails
- Presentation, e.g. marketing calls, interviews

Style

Writers style (language, organization and layout) the document depending on the audience, purpose and format. A technical document can contain many technical terms which may be jargon for others. In that case, the writer includes definition and explanation for the difficult terms.

The people who read technical documents also prefer that the writer gets straight to the point and uses the words that are functional, exact and clear. They prefer paragraphs that are short, with each paragraph focusing only on one idea. They also prefer clearly demarcated headings and subheadings with numbered graphics, tables and examples that illustrate the details of the subject.

Visual Aids

Essays, novels and poems seldom use visual aids to communicate. Newspapers sometimes use visual aids in their analytical articles. But in technical documents, visual aids are added to explain experiments or projects. Manuals and instructions

also carry detailed illustrations to explain the machinery parts and their working. Feasibility reports include maps of site, and information reports include graphs and tables containing information.

DIFFERENCE BETWEEN TECHNICAL WRITING AND GENERAL WRITING

It is important to differentiate between technical and general writing. A technical writer should know the difference so that good technical documents can be produced. The fundamental differences between them are as follows:

	Technical writing	*General writing*
Document type	All professional, scientific and specialist documents, drafts, reports, letters, papers, theses	Literary (poetry, prose, newspaper, magazine) and other types of writing
Style	Familiar, simple, clear and precise and of everlasting value	Poetic, rhetorical or elegant and carries stamp of individuality
Skills	Acquired through practice	Creative and innovative with an inborn talent
Format	Strict and well defined so that the reader can understand the organization of document	No set pattern and predefined organization
Language	Simple, straightforward, objective, rational and scientific	Elegant or creative. Can be poetic, literary or generic
Words	Technical words and their explanation	Descriptive and literary composition
Content	It is preplanned on the basis of information collected	Spontaneous and written on-the-spur of the moment
Profession	Pertains to profession	Relates to society in general
Function	Instructs, informs and persuades	Amuses, inspires and educates
Diction	It is simple and effective	May use complex and long sentences, but the meaning will be clear

Both types of writings have their merits and demerits and are important in their place for effective communication.

TYPES OF TECHNICAL COMMUNICATION

Technical communication can be clubbed under two distinct categories of communication, viz., **oral** and **written**. However, with the advent of electronic media, electronic communication has also come to play an important role in technical