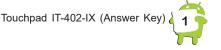# ANSWER KEY

Touchpad Information Technology-402
Class-9

1. Communication Skills-I

EXERCISE

1. (a) the   (b) a   (c) the   (d) an

2. (a) A book would be read by us tonight.

   (b) The instructions for science project would be given to you by the teacher.

   (c) A lot of trees are being cut by people.

   (d) A novel was given to him on his birthday by me.

   (e) Rahul was attacked by a dangerous dog.

3. (a) Ancient Egyptians built the pyramids nearly 5000 years ago.

   (b) The kid was throwing a stone into the river.

   (c) The cat eats the fish.

   (d) Rachna wrote a letter to her brother.

   (e) Shreya's friend is been waited for by her.

4. (a) sending , receiving

   (b) Communication channel

   (c) non-verbal

   (d) non-verbal communication.

   (e) preparation, practice & performance.

5. (a) Communication is the act of transferring information from one place, person or group to another by speaking, writing, or using some other medium. Every communication process involves (at least) a sender, a message, and a recipient.

   (b) Public Speaking is another method of communication in which a speaker delivers idea or content to a group of audience. It is generally one sided communication in which one

speaker says. It helps to overcome fear, nervousness and skepticism.

(c) Visual Communication is a method in which ideas are conveyed in the visual form that can be seen in the form of images or pictures. It involves transmission and interpretation of information by way of visual resources that can be read or viewed. Images, drawings, signs, graphics, typography etc. are some of the forms of visual communication.

6. (a) The major components of a communication cycle are as follows:

- **Sender:** The person who conveys a message with the intention of passing information and ideas to others is known as sender or communicator.
- **Ideas:** This is the subject matter of the communication. This may be an opinion, an attitude, feelings, views, orders, or suggestions.
- **Encoding**: Since the subject matter of communication is theoretical and intangible, its further passing requires use of certain symbols such as words, actions or pictures. Encoding is the process of conversion of subject matter into these symbols.
- **Communication Channel:** The person who is interested in communicating has to choose the channel for sending the required information, ideas, etc. This information is transmitted to the receiver through certain channels which may be either formal or informal.
- **Receiver:** Receiver is the person who receives the message or for whom the mes sage is intended. It is the receiver who tries to understand the message in the best possible manner for achieving the desired objectives.
- **Decoding**: The person who receives the message or symbol from the communicator tries to convert the same in a way that a completely understandable meaning is extracted.
- **Feedback**: Feedback is the process of ensuring that the receiver has received the message and understood it in the same sense as the sender meant it.

(b) It is a method of communication that involves a language in order to interact and interpret ideas, views, and emotions.

Advantages of Verbal Communication:-

- It is a fast method of communication.
- It helps to get a quick response.
- It is real time communication as the speaker gets a response from the listener immediately.

Disadvantages of Verbal Communication:-

- There is no guarantee / evidence of verbal communication.
- Due to lack of time, the message may be misinterpreted.
- It fails to fill the gap of cultural difference between the sender and receiver in case of a language barrier.

(c) Types of non-verbal communication:

TYPE	WHAT IT IMPLIES
Facial Expression	It shows the feeling of a person.
Posture	It shows the attitude and the level of confidence.

Gestures or Body language	The movements of the body, hands, or head can express an idea or convey a meaning.
Touch	It includes shaking hands and patting on the back.
Space	Appropriate personal space should be maintained while talking to a person.
Paralanguage	It is the tone of voice, volume, and speed, which makes a difference in communication.

(d) Visual communication is the most effective way of passing information because the human mind processes things in images.

The majority of people respond quickly to visual images instead of texts. In visual communication images, drawings, signs, graphics, typography, etc. are used

(e) Factors affecting the process of communication are as follows:

- Language: The language used must be familiar to the receiver. Poor choice of words or weak sentence structure also hampers communication. Sentences must be framed correctly.
- Cultural Differences: Sometimes one sign can depict different meanings in different cultures, such as showing a thumb may mean 'good job' done for some people but may be insulting for others.
- Physical factors: Sometimes the hindrances in the environment, such as noise or disturbance, makes communication difficult.

2. Self Management-I

EXERCISE

1. (a) Self-management
(b) Problem solving
(c) Self-motivation
(d) hygiene, grooming

2. (a) **Self-Awareness-** Self-awareness means having a clear perception of our own personality. It helps us to realize our inner potential, likes, dislikes, strengths and weaknesses and assists in planning accordingly.

(b) **Self-Control-** Self-control refers to the ability to regulate our emotions, thoughts, and behavior in the face of temptations and impulses.

(c) **Self-Confidence**- Self-confidence means having faith in ourselves and self-affirmation of being capable of completing any kind of task. It relates to self-assurance to handle adverse situations with positivity.

(d) **Stress Management-** It is the art of handling pressurized situations by keeping oneself cool and calm. To avoid being stressed we need to be very patient.

3. (a) Self-management includes planning, scheduling, self-development and continuous learning which helps in achieving the desired goals. Making commitments, being punctual with ourselves and properly placing and scheduling things in and around ourselves is good self-management and the key to betterment of life.

(b) Self-management skills help us to manage our thinking process, emotions, and inner resources and enables us to handle situations with positivity and confidence. It is an important element for both personal and professional life as it helps us to be more productive. It inculcates confidence within an individual to face and handle different situations of life. It helps in reducing work pressure and relieves stress related to any particular situational crisis. It makes us energetic and more capable of managing stress and creating a positive aura around ourselves.

(c) Time management is the process of organizing and planning how to divide our time for specific activities. Good time management enables us to work smarter – not harder – so that we get more work done in less time, even when time is tight and pressure is high.

Failing to manage our time well damages our effectiveness and causes stress. It is an art of scheduling our work, being punctual, and adhering to the time-bound commitments. We all know that time is precious and hence, we should manage our time effectively.

(d) Some tips for building self-confidence are:
- Avoid Negative Thoughts
- Think Positive
- Stay Happy
- Stay Clean and Smart
- Talk to Positive People

3. Information & Communication Technology-I

EXERCISE

1. (a) Mark Zuckerberg   (b) Christopher Latham Sholes

(c) nine   (d) pixels

(e) Nibble   (f) Home Page

2. (a) (i)   (b) (iv)   (c) (iv)   (d) (iv)

(e) (iii)   (f) (i)   (g) (iii)   (h) (ii)

3. (a) Smartphone and Tablet

Smartphone	Tablet
• Its screen size is smaller.	• Its screen size is bigger.
• Reading or watching movies becomes difficult on a smartphone.	• Reading or watching movies becomes easier on a tablet.
• Generally has lesser storage capacity than a tablet.	• Generally has higher storage capacity than a smartphone.

(b) RAM and ROM

RAM	ROM
• It stands for Random Access Memory.	• It stands for Read Only Memory.
• RAM holds the data or information temporarily.	• ROM holds the data or information permanently.
• RAM is a "volatile" memory.	• ROM is a "non-volatile" memory.
• When a computer is switched 'OFF' or the power supply is interrupted, all the stored information in RAM disappears or is lost.	• When a computer is switched 'OFF' or the power supply is interrupted, all the information stored in ROM is not lost.
• It allows reading and writing function.	• It only allows reading function.

(c) Printer and Plotter

Printer	Plotter
• Printer is a common output device which is used for the purpose of printing documents.	• Plotter is an output device that helps in printing high quality visuals, charts, graphs, tables, diagrams, etc.
• It is generally used for printing on small-sized (A4/A3) paper sheets.	• It is generally used for printing big-sized charts, graphs, flex, etc.

(d) RJ11 and RJ 45

RJ11	RJ45
• RJ11 is a port which provides an interface for telephone, modem or ADSL connections.	• RJ45 is a port which is used to connect computers to the Internet or networking devices.
• RJ11 is a smaller port than RJ45.	• RJ45 is a bigger port than RJ11.
• It has a 6-pin connector.	• It has an 8-pin connector.

5. (a) **Internet-** The Internet is a vast network that connects computers all over the world. The internet has millions of smaller domestic, academic, business, and government networks, which together carry many different kinds of information. The short form of internet is the 'net'. It is used by billions of people all over the world.

(b) Windows OS- Windows OS is a graphical user interface computer operating system developed by Microsoft to run personal computers. It is very easy to operate a computer with Windows OS. It enables to run various applications simultaneously, and such property is known as **"Multitasking".**

(c) WhatsApp- WhatsApp is freeware and cross-platform centralized messenger app for smart phones owned by Facebook Inc. It allows users to send and receive messages, images, audio, or video. The service is very similar to text messaging services. However, because WhatsApp uses the internet to transfer messages, the cost of using WhatsApp is significantly less than texting.

(d) Joystick- A joystick is an input device that can be used for controlling the movement of the cursor or a pointer in a computer device. The pointer/cursor movement is controlled by maneuvering a lever on the joystick. This input device is mostly used for gaming applications and sometimes in graphics applications. It is also known as control column.

(e) Blu-ray Disc- Blu-ray disc is an optical disc storage format . It was developed for recording and playing back high-definition (HD) videos and for storing large amounts of data. **Blu-ray** disc can hold up to 25 GB of data.

(f) Device driver- A device driver is a form of software which installs the particular hardware device in a computer and enables that hardware device to be compatible with the computer. It is operating system specific and hardware dependent computer program, which is automatically activated whenever that hardware device is attached to the computer.

(g) FireWire- FireWire was developed by Apple Inc. and is a port looks similar to a USB port that facilitates a high-speed connection between a computer and peripheral devices. It is a port that is used with digital audio/video camcorders, personal computers (PC) and offers sustained data transfer rates of over 3200 Mbits/s.

6. (a) Three mobile operating systems are:

i. Android

ii. Symbian

iii. Apple iOS

(b) A Tweet refers to the short message which are posted on the social media platform Twitter by its user. It may contain photos, GIFs, videos, links, and text. Tweets were originally restricted to 140 characters, but later, this limit was doubled to 280 except in a few languages.

(c) A data bus refers to a computer subsystem that allows the transfer of data from one component to another on a motherboard or system board, or between two computers. This can include transferring data to and from the memory, or from the central processing unit (CPU) to other components. Each one is designed to handle certain bits of data at a time.

(d) The "Fetch-Decode-Execute-Store" cycle fetches the instructions and data from the memory unit, decodes them, and passes them to the ALU (Arithmetic Logic Unit) for further processing. It also directs the ALU to execute the instructions and perform the required operation on the data.

(e) BIOS (Basic Input/output System) is the program a that helps to start the operating system

and supports the transfer of data among the hardware devices. It contains a set of essential software that test the setup of hardware devices during startup. It is stored in ROM and it operates when the computer is switched on.

(f) The full form of SMPS is **Switched Mode Power Supply**. SMPS is an electronic power supply system that makes use of a switching regulator to transfer electrical power effectively. It is a PSU (Power Supply Unit) and is usually used in computers to change the voltage to the appropriate range for the computer.

(g) Kernel is the core part of an operating system that does all major activities (such as memory allocation, CPU time, scheduling, etc.) of the operating system. Kernel helps in initialization (booting) functions, like checking memory. It allocates and de-allocates memory space which allows the software to run in a proper manner.

(h) POST stands for Power On Self Test. **POST** is a test that a computer must complete for verifying whether all the hardware parts - RAM (random access memory), hard drive, CD-ROM drive, keyboard, etc. are working properly or not before starting the boot process.

(i) Hypertext Transfer Protocol (HTTP) is considered as a stateless protocol because it does not have the previously executed command in its memory.

7. **(a)** The role of ICT in daily life is as follows-:

- It can improve the quality of human life because it can used as a learning and education media.
- It can be used as a learning and educational media tool using virtual classes, video conferencing, and online exams.
- The mass media helps to disseminate information about practical and important issues such as health and social evils.
- It provides wider knowledge and can help in gaining and accessing information.

(b) Five common mobile apps are-:

- Phone- This app is used to make calls and to store contact details.
- Message- This app is used for sending and receiving SMS. It also stores drafts, typed, sent, and received messages.
- E-mail- An email app is used to send and receive email messages by configuring email accounts (Gmail, Outlook, etc.). It works similar to the web-based email accounts.
- Photos- This app helps to view images and videos and is also used to organize photos in albums.
- Music- It is used to play and listen to music and songs.

(c) Some of the applications of Internet are as follows:

1. Communication: Computer users around the world extensively use the email service on the internet to communicate with each other. Pictures, documents and other files are sent as email attachments. Emails can be cc-ed to multiple email addresses.

2. Job search: Nowadays, many people search for their jobs online as it is quicker and there is a larger variety of job vacancies present. Some of the web sites providing this service are naukri.com, monster.com, summerjob.com, etc.

3. Online Shopping: The internet has also facilitated the introduction of a new market concept consisting – that of virtual shops and online shopping.

4. Social networking: Social networking is the use of internet-based social media programs to make connections with friends, family, classmates, customers and clients. Social networking can be done for social purposes, business purposes, or both.

5. Video Conferencing: It enables direct face-to-face communication across networks via web cameras, microphones, and other communication tools. When video Conferencing is used in education, it is easier to have interactive communication between teachers, teacher and classroom, or classroom to classroom with students in different places.

(d) A computer is an electronic device that can perform various operations on the data in accordance with a given set of instructions to produce useful results or information with high speed and accuracy. To function, a computer system requires three main aspects :input, processing, and output.

- Input devices: It is the process of accepting raw data or information from the user.
- Process: It is the process to convert the input into output
- Output: It is the display of results after processing

4. E-Mail

EXERCISE

1. (a) Mails, mailbox   (b) Electronic Mail   (c) Subject

2. (a) (iii)   (b) (ii)   (c) (i)

3. **(a) File Attachment**- File attachment is a file sent with an email message. It may be an image, video, text, document or any other type of file. More than one file can be attached with a single e-Mail message. The size of all the attachments should not be more than 25 MB.

(b) Webmail- It is to a portable email system in which a user can access their emails via any browser on any computer or device that is connected to the internet. Some of the popular webmail sites are Gmail, Yahoo, SquirrelMail, etc.

(c) Starred- Starred is a folder in the email that holds the email messages which are marked as most important. By default, starred messages are labeled with the yellow star.

(d) Schedule Send- Schedule Send enables the user to compose eMail messages whenever they want and can schedule them to send it at a later time.

4. (a) User name and Domain name

User name	Domain name
• A username is a type of credential which helps to access computer, laptop, website, social media and other online services.	• Domain name is the last part of the email address and it shows the name of the host website or the location of the email account on the internet.
• User name is known as login identity.	• Domain name is known as the identity of the server.

(b) Replying and Forwarding

Replying	Forwarding
• Reply is the option which is used to send a reply to an already received email from a person or a group.	• Forward is the option which is used to send the same content to some other person. The content remains the same but the receiver might change.

5. (a) In an e-Mail system there are different folders that help to manage and organize email messages properly. Different folders present in emails are : Inbox, Sent, Drafts, Starred, Junk, Spam, Trash, etc.

(b) Email forwarding generically refers to the operation of re-sending an email message to one or more different email addresses.

(c) An e-mail application is a dedicated application software installed on a computer or a mobile device that is used to access services related to e-mail. This application enables the user to store e-mail messages on the storage device of a computer or a mobile phone. Some common e-mail applications are Outlook, Thunderbird, Apple Mail, etc.

6. (a) The similarities between email and postal mails are as follows:-

- Postal letters and email both have specific senders, receivers, and messages.
- There is a channel through which postal messages are transferred from one place to another and then get delivered by a postman. Email messages also reach us through a channel known as the internet.
- Email and postal letters both are sent to a specific address.

(b) The limitations of email are as follows:-

- Although all emails are delivered instantly, the recipient may or may not read their mail at that point of time. This defeats the purpose of quickness of an electronic mailing system.
- Most of the websites display advertisements while using the email server, which are called spam mails. It results in the increased size of mailbox, which consumes extra time of a user who has to navigate through all the mails to search for the required one.
- Since email passes through various networks, sometimes it may be intercepted. A failure or fault in one of the links (of the network) between the sender and receiver can prevent the delivery of the email, though the sender may assume that the email has been delivered.

- A slight error in the address of the recipient may result in the non-delivery of the message or delivery to some other recipient.

(c) Some advantages of email are as follows:-

- **Fast-** e-Mail messages can reach any corner of the world in seconds. Email messages are delivered much faster when compared to any conventional system of sending letters.
- **Cost-** For sending and receiving e-mails, there is no fee. Once connected to the internet, the user doesn't need to pay for sending messages.
- **Convenience-** An email message can be sent at any point of time from anywhere on the earth. Email messages do not require the person receiving the message to be present at their computer at that moment, unlike telephone calls. The received messages are stored in the inbox of the account holder. One can receive and read the messages as per convenience.
- **Resource saving**- An email does not require paper, envelope or stamp. It is digital in nature so the wastage of natural resources is minimum.
- **Maintenance of Record-** The sender or the receiver can always keep the records of the messages in the "Sent mail" section of the mailbox or in a computer as soft copy.
- **Reusable**- The email messages can be reused or forwarded to other recipients as and when required.

5. Enterpreneurship-I

EXERCISE

1. (a) Self-employment   (b) enterprise

     (c) Hybird business   (d) Limited, Liability, Partnership

2. (a) **Entrepreneur-** Entrepreneurs are individuals who are determined to be self-employed and who starts their own venture with a sense of ownership is called an 'entrepreneur'. The aim of an entrepreneur is to create an 'enterprise'. The process of transforming a small business into a large business enterprise, by planning and management skills, is said to denote 'entrepreneurship'.

    (b) **Manufacturing Business-** A Manufacturing Business acquires raw material with the intention of using them as ingredients in the making of a new product and it combines the resources, labor, and factory overhead in the production of goods. The manufactured goods are then sold to customers. Hardware making is one example of a manufacturing business.

    (c) **Hybrid Business-** A Hybrid Business is a mix of two or more types of businesses.The entrepreneurs provide services along with the products in a hybrid business. Such businesses are involved in both services and manufacturing. They offer intangible and tangible commodities.

3. **(a)** Self-employed people are those who establish their own unit or firm to earn money by implementing their own innovative ideas, applying their creativity and management skills, and by generating their own resources.

(b) Entrepreneurship is the ability and readiness to develop, organize, and run a business enterprise, along with any of its uncertainties in order to make a profit. The process of transforming a small business into a bigger enterprise with constant growth and proper management style is said to be 'Entrepreneurship'.

(c) The types of businesses found in our community are as follows:-

  i. Sole Proprietorship- Sole proprietorship is a type of enterprise that is owned, managed, and controlled by a single individual whom we call a proprietor.

  ii. Partnership- A partnership firm is formed by two or more people. The owners of the enterprise are called partners.

  iii. Limited Liability Partnership (LLP)- In a Limited Liability Partnership or LLP, the partners of the firm enjoy its perpetual existence as well as the advantage of limited liability. Each partner's liability is limited to their agreed contribution to the LLP.

(d) Businesses like restaurants, hardware/software repairing services, banking, salon, and interior designing services are some of the examples of service-sector businesses.

(e) The characteristics of entrepreneurs are as follows:-

- Self-Starter Clarity
- Courageous
- Creative
- Networking Skills
- Updated
- Adaptable
- Hard Working
- Foresight
- Innovative
- Communication Skills
- Disciplined & Committed

(f)

Private Limited Company	Public Limited Company
• A private limited company is neither listed on the stock exchange nor are they traded.	• A public limited company is a company listed on a recognized stock exchange and the stocks are traded publicly.
• It is a smaller firm or business whose capital is limited by share that are generally owned by limited group of family members, friends, etc.	• It is a bigger firm whose capital is limited by share that are generally owned by a larger group of people in and across the country.
• It has lesser number of shareholders.	• It has more number of shareholders as compared to the private limited company.

(g) The rewards of entrepreneurship are as follows:

- Independence- Entrepreneurs are independent to take decisions for their business without being answerable to anyone.

- Flexibility-Working hours and holidays are up to their own discretion since they own the company. This contributes to a satisfying work-life balance and a better quality of life.
- Profit: All the profit generated in the firm solely belongs to the entrepreneur.

6. Green Skills-I

E X E R C I S E

1. (a) Environmental
    (b) United Nations Environment Program
    (c) Hybird business
    (d) Limited, Liability, Partnership

2. **(a) Ecosystem-** A component of the environment, where all kinds of living beings (plants, animals, microbes) live together and complete their requirements by their own demand-supply chain mechanism, is collectively known as an ecosystem.

    (b) Natural Resources- Natural resources are the useful raw materials which are found in nature. They occur naturally, which means that humans cannot make or create natural resources, although they can be modified in the way that suits their requirement.

    There are two types of natural resources:- (i) Renewable Resources and (ii) Non-Renewable Resources.

    (c) Hazardous Effects of Use of Plastic- The burning of plastic waste materials gives out extremely harmful gases which can cause many health problems. The gases given out during the burning of plastics can cause asthma and also leads to cancer.

    (d) Green Consumer- A person who avoids environmental degradation or destruction and chooses to purchase only environment friendly products is known as a Green Consumer.

3. (a)

Biodegradable	Non-Biodegradable
• Substances that degrade or break down by natural process and get mixed in the soil are known as biodegradable substances.	• Substances that do not degrade easily or break down by natural process are known as non-biodegradable substances.
Eg- Wood	Eg- Plastic

    (b) The factors causing imbalance in environment are as follows:-

      i. Deforestation- The cutting down of trees and shrinking of forests is called deforestation. Deforestation increases air pollution, and leads to scanty rainfall.

      ii. Population- The increasing population has resulted in the increase in needs and demands. It is affecting our ecosystem, as our mother nature has got a limited capacity to fulfill

every living being's requirement.

iii. Mining- The process of digging the earth for extraction of ores results in erosion, formation of sinkholes, and contamination of soils that causes severe damage to the environment. It disturbs the natural living and breeding place of various living organisms and people residing in nearby areas. It leads to soil erosion, landslides, noise pollution, etc.

iv. Industrialization- By setting up industries and manufacturing various products, we are destroying the natural components of our environment. The industrial wastes, garbage, etc. are dumped into soil or water which makes the soil useless.

v. Pollution- It is the contamination of the environment (land, air, and water) due to the presence of some unnatural elements. The pollutants can be solid, liquid, or gas. It is caused due to poisonous gases emitted from industries, vehicles, chemicals, garbage dumped in water, excessive noise, etc.

(c) Green Economy can be defined as an economy with a vision of growth and development for mankind while reducing environmental risks or ecological imbalance.

The importance of Green Economy is as follows:-

- It encourages overall development of humans in compliance with laws of nature.
- It helps in economic growth while maintaining a balance in the environment.

(d)

Renewable natural resources	Non-Renewable natural resources
• It includes the sources of energy which can be reused or regenerated.	• It includes the resources which are limited and cannot be recycled.
Eg- Water, Sun, Wind, etc.	Eg- Coal, Oil, Natural gas, Fossil fuels, etc.

(e) The steps to conserve natural resources are as follows:-

- Use alternative sources of energy.
- Wise use of water. Use water wisely.
- Recycle & Reuse elements & products.
- Limit the use of natural resources and products.

7. Introduction to IT & ITES

EXERCISE

1. (a) Online chatting   (b) Telnet   (c) Courseware   (d) Telemedicine

2. (a) **ISPIRT** - Indian Software Products Industry Round Table

   (b) **ITES** - Information Technology Enabled Services

(c) **BPO** - Business Process Outsourcing

(d) **CAM** - Computer Aided Manufacturing

(e) **GPS** – Global Positioning System

(f) **CAL** - Computer Aided Learning

3. (a) **BPO** - BPO stands for Business Process Outsourcing. It is the business strategy where one company hires another company to perform a certain task for them. It also means outsourcing of business processes or functions to a third party to get time-bound results at a lesser cost with professional service from experts in the field.

(b) **MNC-** MNC stands for Multi-National Company. These are the companies that are registered and have facilities, assets, and operations in more than one country at a time. Generally, the company has its head-quarters in one country and operates in many countries.

(c) **FTP** - FTP stands for File Transfer Protocol. It is a standard protocol which is used to transfer files between computers which are connected in a network.

(d) **Online Newspaper** - Online newspaper refers to the digital form of the printed newspaper. It can be read by the users from anywhere and anytime.

(e) **Webinar-based Digital Learning** -It is a mode of providing professional or career-oriented training in which contents are delivered to a seminar of audience located at different places by a trainer from a remote location on the web. These presentations and lectures are broadcast over the internet and can be accessed by registered users through dedicated video conferencing software.

(f) **Virtual Classroom** - A virtual classroom is a digital learning environment that allows teachers and students to connect online in real time and to communicate and collaborate. It can be conveniently accessed any time and from any place by the students pursuing the academic course.

4. (a) The opportunities in I.T. industries can be classified into:
- Software development
- IT Applications
- IT Enabled Services (ITES)

(b) Outsourcing is usually defined as the process of an organization entering into a contract with another organization to operate and manage one or more of the operations or functions of the parent company.

(c) Business Process Management (BPM) is a process in operation management in which we study, identify, change, and monitor business processes of an organization to ensure that they run smoothly and can improve their performance in the course of time.

(d) Video conferencing is a facility that enables users at different locations to hold face-to-face meetings with the help of computers and the Internet without moving to a common location.

(e) Social media is a computer-based technology that facilitates the sharing of ideas, thoughts, and information through the building of virtual networks and communities. Users engage with social media via computers, tablets, or smart phones.

(f) A digital classroom is the process of applying multimedia tools in classroom teaching that includes the display of animated content on an interactive white board. It refers to a classroom that is fully immersed in technology. These classrooms rely on educational apps and websites to enhance student learning.

(g) Robotics is the intersection of science, engineering, and technology that produces machines called robots that substitute humans and replicate human actions.

(h) It is a computer based examination (paperless examination) system that is a great way of conducting tests and other important exams with the help of Internet. An online exam needs a device capable of accessing the internet such as a computer or a smartphone. The exam as well as the evaluation process requires very less time. Moreover, the examinee is able to appear for the exam from anywhere.

5. (a) Types of BPO Services are-

- **Customer Support Services:** Such services are related to giving information to clients by responding through Chatbot, Voice, e-Mail, chats, etc.
- **Technical Support Services**: Such types of BPO services provide technical knowledge at the outsourced Centre to resolve customer queries pertaining to computer hardware, software, peripherals, and the internet.
- **Data-Entry Services:** Such types of BPO services include entering data at a fast pace and ensuring that a high degree of accuracy is maintained.
- **Accounting Services:** Such types of BPO include services related to maintaining general ledgers, financial statements, balance-sheets, bank reconciliation statements, assets and liabilities, etc.
- **Online Services**: Such BPO services include online sales and purchases, e-booking, e ticketing, etc. This is one of the fastest modes to reach a majority of customers worldwide in a short period of time and at a lesser cost.

(b) The structure of an IT-BPM industry has been categorized by the following parameters:

- Sector in which the organization is serving.
- Range of services a company is offering.
- Geographic spread of the operations.
- Revenues and size of operations.

Multinational Companies (MNCs): These are the companies whose offices are registered and operational in more than one country. Generally the company has its head-quarters based in a single nation but operates in different countries around the globe.

Indian Service Providers (ISP's): ISP's are only concerned with providing their services in India. These service providers have their headquarters in India, while their offices are situated in other countries too.

Global In-house Centers (GIC): These are offshore centers that perform designated functions for their parent company. They only work for their parent company, and their services are not available to other clients.

(c) IT facilitates the criminal identification and law enforcement departments in:

- **Tracking**: The location of a suspicious person or an accused can now be tracked through their mobile phone signals.

- **Digital Criminal Record**: The criminal investigation departments are now able to maintain the records of each criminal digitally. All crime records are electronically stored in the central computers which can be accessed from anywhere with proper authentication.
- **Analysis**: The criminal investigation departments do comparative analysis of the nature of crimes in each state and watch trends on different crimes through software-generated statistics on computers.
- **DNA Test**: This is a form of identification of hair sample, blood sample, etc. by the use of computer technology to identify people associated with a criminal case.
- **Immigration Records**: There are a large number of foreign nationals and non-residents who travel to a country every year. The Immigration Departments maintain passport and visa records of all these visitors on computers, and accordingly track their entry and exit from the country.

(d) IT helps in digitizing Museum & Library in following ways-

- **Tracking of Resources**: The updated records are fed in computers and visitors can trace their requirements or areas of interest themselves from the user terminals located in libraries and museums.
- **Digital Historical Data**: Records of objects in the museum like the discovery date, location of excavation, relevance of that object in the historic times, and other such details which might interest the visitors are electronically maintained.
- **Book Issue Records:** Records of issue, renewing, and return of books, etc. are maintained more accurately in libraries.
- **Indexing**: Instead of searching different shelves of the library for a particular book, one can speedily search the particular shelf with the data recorded in a computer.
- **Online Access of Books**: One can read eBooks, newspapers, journals, and research papers in a soft copy version..

8. Data Entry & Keyboard Skills

EXERCISE

1. (a) (ii) (b) (i) (c) (ii)

2. (a) Tabs (b) F5 (c) F8 (d) Student Toolbar

3. (a) **Virtual keypad**- It is a type of onscreen keypad which helps to learn typing with all the ten fingers.

   (b) **Lesson Control**- It is used to select the lesson, start, stop, and to restart the current lesson. It also displays the remaining/elapsed time.

   (c) **Overall Rating**- It is the way of calculating the result on the basis of speed, accuracy and slowdown keystrokes. It is displayed with the help of indicator which ranges from 'Could

be better' to 'Excellent'.

4. **(a)** Touch typing is typing of text without looking at the keyboard. It improves typing speed and accuracy.

   (b) The F, D, S, A and J, K, L keys represent the base position in the QWERTY keyboard.

   (c) Student statistics displays the student's performance by analyzing speed, accuracy, mistakes, etc.

   (d) Parameters by which results are calculated in Rapid Typing are -

   - Overall rating on upper slider indicator
   - Typing speed
   - Accuracy
   - Keystroke Slowdown

   (e) In touch typing the middle row of the keyboard beginning with the Caps Lock key is known as home row.

5. **(a)** Stages of 'Touch Typing' are as follows:

   - Stage I- In this stage, the learner begins typing by pressing the keys of home row of the keyboard. This is followed by learning to type using the keys on the lower and upper rows, the number row, the upper-case letters and the special symbols.
   - Stage II- In this stage, the learner memorizes the frequently used letters and types words containing these letters.
   - Stage III- In this stage, the learner types text using the keys of the entire keyboard.

   (b) Correct position of the hands and body while typing:

   -        We should sit straight while typing.
     - We should keep our elbows bent at the right angle.
     - We should face the screen by slightly tilting forward.
     - We should keep at least 40-75cm of distance between our eyes and the screen.

   (c) Status bar lies above the virtual keyboard. It displays the lesson length, progress of the lesson, and sound controller. Status bar consists of two progress bars which are -

   - Green progress bar – It shows the percentage of completion of the current lesson.
   - Yellow progress bar – It reflects the acceptable time for typing a character.

   (d) Result interpretation is a way to check accuracy, speed, slow keystrokes, common errors, etc. in a Rapid Typing window. Each time the typist completes a lesson, the Results window displays the achievements in that lesson and offers a range of further actions. Different tabs of result window are-

   - Next Step- It suggests options for the next step viz., 'Go to the next lesson' and 'Try again'.
   - Detailed Statistics- In this tab one can see the lesson statistics in detail along with the typing speed and errors/slowdowns for each character/keystroke.
   - Errors overview- In this tab, one can check the errors that occurred during the typing lesson.

   (e) In the 'Error Overview' tab, the different colours indicate the following information:

   - Green colour indicates a correct character.

- Yellow colour indicates that the duration allowed for typing is over.
- Red colour indicates an incorrect character.
- Orange colour indicates both an incorrect character as well as crossing the time limit.

9. Digital Documentation: Word Processor

E X E R C I S E

1. (a) Status Bar   (b) .odt   (c) AutoCorrect   (d) pointer

2. (a) Ctrl + A   (b) Ctrl + Shift + F8   (c) Shift + Down

3. **(a)** **OLE-** OLE (Object Linking and Embedding) is a feature that enables the import of objects from a document or an application and places them in another document.

    (b) **Insertion point-** Insertion Point also called cursor. It is the blinking vertical line that indicates the place where we add text or image in a document.

    (c) **Clipboard-** Clipboard is a temporary storage area that stores the object which has been cut or copied for future use.

4. (a) Word processor package is a type of application software that provides page layout and enables us to type text and create documents. It also helps us in editing, formatting, modifying, printing, and storing the contents of the document. Some examples of word processing packages are: OpenOffice Writer, Microsoft Word.

    (b) Work area refers to the layout of an active document where the text is typed.

    (c) Characters like alphabet, number and special characters are visible on the screen while typing but whenever Enter key, Tab key, Spacebar key etc. is pressed, it does not appear on the screen within a document . Such characters which are non- printable in nature are known as non-printing characters.

    (d) AutoSpellCheck is a feature in word processors that checks each word automatically as it is typed and displays a red wavy line under the mis-spelt words. When the word is corrected, the red wavy line disappears.

    (e) Undo is an option that helps to retrieve previously made modifications in a document or reverse the previous action. The redo option helps to reverse the changes which were applied by undo. It cancels the undo action.

    (f) Some common word processors are - OpenOffice Writer, Microsoft Word, AbiWord, WordPerfect, Kwords, Lyx, etc.

10. Formatting in Word Processor

E X E R C I S E

1. (a) Indent   (b) Left   (c) merged   (d) splitting

2. (a) (i)   (b) (i)   (c) (i)

3. (a) Superscript and Subscript

Superscript	Subscript
(i) It is a formatting option that helps to display the characters or text above the standard baseline (placement) of the textual matter.	(i) It is a formatting option that helps to display the characters or text below the standard baseline (placement) of the textual matter.
(ii) Example- $(a+b)2$, Here 2 is the superscript	(ii) Example- H2O, Here 2 is the subscript

(b) Merging and Splitting cells

Merging cells	Splitting cells
(i) Combining two or more adjacent cells in the same row or column into one cell is known as merging of cells.	(i) Division or breaking of a cell into two or more cells is known as splitting of cells.

4. (a) **Text Alignment -** Text alignment refers to where and how the text lines up in a document. It is the layout of the text in a paragraph with respect to the page margins.

(b) **Pair Kerning-** It is a formatting option that helps to adjust the spacing between the characters or letters in a document.

(c) **Paragraph Spacing-** Paragraph spacing refers to the space or the gap between two paragraphs in a textual document. Space can be specified in lines or in points.

(d) **Table-** A table is a grid of cells / boxes framed by horizontally aligned rows and vertically aligned columns. Tables are useful for various tasks such as numeric data, date-sheets, time-table, etc.

5. (a) Character formatting includes manipulation of size, style, colour, position and attributes of characters in a document.

Steps to format characters:

- Select the character, word, or block of text.
- Select the character option from the format menu.
- Select the formatting options as per the requirements.

(b) A margin refers to the gap between the edge of a page and the beginning of text i.e., the outer boundaries of the text in a document beyond which the contents of the document do not flow.

Types of margins are -

- Left margin
- Right margin
- Top margin
- Bottom margin

(c) Line spacing refers to the vertical gap between different lines of text in a paragraph. It is measured in line or in points.

Types of line spacing options:

- Single
- 1.5 line
- Double
- Proportional
- Leading
- Fixed

(d) Indentation refers to the space (gap) between the text (a line or paragraph) and the edge/margin of the page. Indentation sets the distance of a paragraph from the margin with respect to the rest of text that is below or above it.

Types of indentation:

- Left Indent
- Right Indent
- First Line Indent

6. (a) Types of alignment are:

- Left Alignment - It aligns the text towards the left.
- Right Alignment - It aligns the text towards the right.
- Center Alignment - It aligns the text centrally.
- Justified Alignment - It aligns the text equally towards both the sides.

(b) By default, header or footer is printed keeping a 0.5″ gap from the edge of the page.

(c) Steps to insert a Page Break are –

- Put your mouse cursor where you want to end one page and begin the next page.
- Click on Insert .
- Select Page Break. Page break will be applied at the desired place in the document.

11. Mail Merge

EXERCISE

1. (a) Mail merge   (b) Track changes   (c) Orange

2. (a) (iv)   (b) (ii)   (c) (ii)   (d) (iv)

3. **(a)** Mail Merge is a feature of word processing package that enables users to send copies of the same letter or document to multiple recipients. It enables connecting a single form template with a data source that contains information about the recipient's name, address and other predefined and supported data. Steps to perform mail merge are:

    - **Select starting document**: This step helps in making or selecting the Main Document that has to be sent to the recipient.
    - **Select document type:** This step helps in selecting whether the document has to be sent as a simple letter or as an e-mail.
    - **Insert address block:** This step helps in selecting and creating a database of the addresses of target recipients.
    - **Create salutation:** This step helps to add a salutation mark based on the type of recipient.
    - **Adjust layout:** This step helps to provide a layout for the contents of the letter.
    - **Edit document:** This step helps to modify and position the contents of a document.
    - **Personalize document:** This step helps to edit and personalize the document (if required).
    - **Save, Print, or Send:** This step helps to Save, Print, or Send the document (as an e-mail).

    (b) The 'Track Changes' feature enables a user to keep a record of formatting, text insertions, deletions, and comments made by multiple editors. It helps a user to see the changes that were made in the document.

    (c) Data source refers to a file that contains the information related to the name and address of recipients that has to be merged with the main document (letter). It is organized under different fields of information, e.g., in a letter, Name and City might be two fields.

    (d) To send mails by Mail Merge, the most important requirements are:

    - Main document – It contains the contents of the letter that remains the same for each of the merged documents.
    - Data source – It is the file that contains the name and address of the recipients to be merged with the document.

    (e) Mail Merge

12. Electronic Spreadsheet

EXERCISE

1. (a) 1024   (b) Text Orientation   (c) .ods   (d) three

   (e) Cell Pointer   (f) right

2. (a) (i)   (b) (iv)   (c) (i)   (d) (ii)

3. **(a)** Workbook and Worksheet

Workbook	Worksheet
(i) Workbook is a collection of several worksheets.	(i) Worksheet denotes a single sheet or page of a workbook.
(ii) A Workbook cannot be added to a worksheets.	(ii) Worksheets can be added to a workbook.

   (b) Undo and Redo

Undo	Redo
(i) Undo command helps the user to reverse a series of actions.	(i) Redo helps to reverse the actions that have been executed by the Undo command.
(ii) Ctrl+Z is the shortcut key for Undo.	(ii) Ctrl+Y is the shortcut key for Redo.

4. **(a)** A spreadsheet package is an application software that does analysis, calculations, and comparisons and displays information in the form of a table, i.e., rows and columns. It helps a user to arrange and store data in a systematic manner.

   Some important features of a spreadsheet package are:

   - In a spreadsheet, bulk volumes of data can be kept and handled in an easier way.
   - In a spreadsheet, complex and long calculations can be solved quickly and accurately.
   - Data can be expressed in tabular (rows and columns) or pictorial form.
   - The formula for doing calculations can be automatically applied to a set of data in different cells.

   (b) Steps to hide a worksheet:

   - Select the sheet to be hidden.
   - Select the 'Sheet' option from the 'Format' menu.
   - Click the 'Hide' option.

   (c) Steps to add a new sheet in a workbook:

   - Right click the 'Sheet' tab and select the 'Insert Sheet' option. 'Insert Sheet' dialog box appears.

- Click the 'OK' button. A new sheet will be added to the workbook.

(d) Types of data that can be entered in the cells of a spreadsheet are - .

- **Numeric Data**- It consists of digits (0-9), exponential, decimal, and numeric operators like +,-,/,*,%,$.
- **Alphanumeric or Text Data**- It refers to the data which is a combination of alphabets, space, digits and special characters.
- **Date and Time-** It displays data in the form of date and time.
- **Formula-** It is an expression which helps to perform arithmetical calculations and also executes non-arithmetical tasks.

(e) The different alignment options available in a spreadsheet like 'Calc' are - .

- **Right alignment** – It shifts the data in the cell to the right side of the cell.
- **Left alignment** – It shifts the data in the cell to the left side of the cell.
- **Center alignment** – It shifts the data to the center of the cell.

(f) **Cell address** refers to an alphanumeric value that is used to identify the location of a specific cell in a spreadsheet. It is identified with the column position followed by its row number. For example: F3 refers to the cell at the intersection of column F and row 3.

5. **(a)** **Formula bar-** Formula bar lies below the formatting toolbar. Formulas that perform different calculations in cells are entered and displayed here. It is denoted by 'fx'.

(b) **Operands-** The values or variables on which the calculations are performed are called operands.

(c) **Sheet Tabs-** They lie below the active sheet of the screen. The names of the worksheets appear in the sheet tabs at the bottom of the workbook.

(d) **Cell-** A rectangular box formed by the intersection of a row and a column is called a cell. A cell is the basic unit of a worksheet where data is entered.

6. **(a)** Rohit can make the text appear properly by using the 'shrink to fit cell size' option.

(b) AutoSum

(c) E9

(d) An application software like Spreadsheet

13. Formatting Cells in Spreadsheet

E X E R C I S E

1. (a) 0   (b) Chart   (c) Column   (d) Typeface

2. (a) (ii)   (b) (ii)   (c) (i)

3. **(a)** **Alignment-** Cell alignment refers to the position of the characters in the cell. You can align them vertically, towards the top, middle, or bottom, and you can also align them horizontally, to the left, center, or right.

   (b) **Formatting Cells-** Formatting a cell involves changing the contents of the cell with respect to appearance, i.e., changing text, styles, alignment, font, font style, font size, border patterns, etc.

   (c) **Charts-** Chart is a visual graphical representation of data from a worksheet which is very useful for instant analysis of the data and decision-making.

   (d) **Axis Titles-** It refers to the title given to the three axes, i.e. X, Y, and Z axis.

4. (a) Wrap text and shrink to fit cell

Wrap text	Shrink to fit cell
(i) It is a formatting option that wraps the text in multiple lines to accommodate the text within the column width by increasing the row height.	(ii) It automatically reduces the font size of the contents to accommodate it within the column width.

   (b) Area chart and Line chart

Area chart	Line chart
(i) Area chart is a version of a line or column graph.	(i) Line chart is used to view information that is shown by lines at equal intervals.
(ii) It is useful to emphasize the volume of change in data.	(ii) It depicts the change in data over a period of time.

5. **(a)** In vertical alignment, information in a cell can be located at the top of the cell, middle of the cell, or bottom of the cell. The default is bottom.

   (b) In a 3-D chart, the base area or the plane in X-Y axis is called the floor and the vertical areas, i.e., planes in X-Z and Y-Z axis are called walls.

   (c) It is a formatting option that helps to rotate the direction of contents in a cell. The user can either type the degree of angle of rotation or drag the angle indicator and display the content in the required position.

6. **(a)** X-Axis- It is the horizontal axis which is also known as category axis.
   - Y-Axis- It is the vertical axis and is also known as value axis.
   - Data series- It is the set of values which are to be plotted in the chart.
   - Chart area- It is the total area covered by the chart.
   - Plot area- It is that area of the chart in which the data is plotted.
   - Chart Title- It is the heading text that helps to identify the chart.
   - Axis titles-They are the titles given to the three axes of the chart.
   - Legend- It helps to identify the plotted data series. Unique colours or patterns are given to identify such series.
   - Gridlines- The vertical and horizontal lines in the plot area are the gridlines. The gridlines help to enhance the readability of the chart.
   - Data label- It helps to provide additional information about the data marker.

- Wall and Floors- In a 3-D chart, the base area or the plane in the X-Y axis is called the floor and the vertical areas, i.e., planes in the X-Z and Y-Z axes are called walls.

(b) The various Horizontal alignment options are as follows-

- **Default-** The content will be aligned according to the default settings of the type of data being entered.
- **Left-** The content will be aligned towards the left side of the cell.
- **Right**- The content will be aligned towards the right side of the cell.
- **Center-** The content will be aligned towards the center of the cell.
- **Filled**- The content will be displayed within the column width. If the data does not get accommodated in the cell width it gets hidden in the cell.
- **Justified**- The content will be displayed completely within the column width by increasing the column width.

(c) The advantages of charts are as follows-

- Charts are visually appealing and it makes it easy for the users to compare and understand the information.
- It helps to forecast trends on the basis of the comparisons done.
- It helps to estimate key values at a glance.

(d) The steps to make a chart are as follows:

- Select the range of cells with the desired data.
- Select Insert option from the menu bar.
- Select Chart.
- Use the Chart editor to change the chart type, and customize aspects of the chart.

(e) Four types of charts:

- **Line Chart-** It is used to view information that is shown by lines at equal intervals. It depicts the change in data over a period of time.
- **Bar Chart-** A bar chart represents the data in horizontal columns. The measurement of values are organized horizontally.
- **Area chart-** An area chart is a version of a line or column graph. It is useful to emphasize the volume of change in data.
- **Pie Chart-** A pie chart represents the data or value of each item in proportion or percentage to the consolidated or the sum value of all items.

14. Digital Presentation

EXERCISE

1. (a) Presentation　　　　(b) Slide Pane　　　　(c) Workspace

　　(d) F5　　　　(e) Notes, Handout

2. (a) **Handout-** These are the paper copies of your Powerpoint presentation that you give to the audience.

(b) **Speaker's Note-** During the presentation, a set of notes is required as a reference to help the demonstrator. Such notes are known as Speaker's Notes. It is a small hint about the information present in slides.

(c) **Outline-** Outline is a miniature or summarized view of the slides in a presentation. In outline only the title, sub-titles and the main text of all the slides, excluding pictures, tables or charts are displayed.

(d) **Template-** A Template is the predefined format, background, and colour layout that can be applied to a presentation. It does not include any content.

3. (a) The software that is used to organize and display information through text, pictures, figures, etc. is known as Graphic Presentation Package. A presentation package helps to create and display an eye-catching and systematic visual show with the help of slides.

(b) Some examples of presentation packages are: Open office Impress, MS PowerPoint, Adobe Director, and 3-D Studio.

(c) Five tabs present in workspace are :

- Normal
- Outline
- Notes
- Handout
- Slide Sorter

(d) Watermark is a faded image of a design / text that is printed as a background. In slides, it appears as a shadow. Watermark acts as identification on the screen and it is used to show the logo, mark of products, etc.

(e) Template is a predefined format, background and colour layout that can be applied to a presentation. It does not include any content. This option helps to make a presentation with the use of the existing designs.

(f) Normal View is the default view of the presentation. It displays a blank slide that enables a user to make a presentation as per the needs. It is the standard view used for creating, editing, and viewing presentation slides.

(g) The slide pane is the thin strip on the left side of Powerpoint that contains thumbnails of all the slides of a presentation in sequence of display. If any of the slides in this pane is clicked, that particular slide opens in the workspace.

(h) This option helps the user by providing reference or details on various topics of operations. To activate it, click on 'Help' menu or press 'Alt+H' keys.

4. (a) Presentation package can be used in:

- On screen presentation- It is used to create exciting and effective on-screen presentations that can be displayed through LCD projectors or LED TV's.
- Web presentation- It is used for displaying presentation on the web. It helps people to access presentations while staying at remote places in the world.

- Overhead transparencies- It helps to print the slides of the presentation on transparent sheets.
- Handouts and references- It helps to print an outline of the slides on paper for reference purposes, which can be distributed amongst the audience.

(b) Slide layout refers to the basic look or the type of frame of slide in which contents can be added. Some frequently used layouts are Title Slide, Content, Title-Only, Blank Slide, etc.

(c) **Normal view**- In normal view (by default) a blank slide appears on the workspace. It enables a user to make a presentation as per the requirements.

Outline View- Outline View displays the slides of a presentation in the miniature format, which is without background, colour, graphics, etc.

Notes View- In the notes view, the slides are displayed in a reduced form on top of the page.

Handout View- The handout view enables a user to prepare a hard copy or summary of the presentation.

Slide Sorter View- In Slide Sorter View, the user can view all the slides in a small size on the screen.

Slide Show- The 'Slide Show' view is used to view the complete presentation in full screen view, with each slide being displayed one by one.

5.
- Spelling & Grammar
- Zoom
- Slide Show
- Font Size

15. Digital Slides

EXERCISE

1. (a) Insert   (b) Picture   (c) from file   (d) Open

2. (a) (i)   (b) (iii)

3. (a) **Zoom Control Slider-** 'Zoom Control Slider' is used to adjust the size for viewing a slide. Click and drag the slider to use the zoom control. The number next to the slider displays the current zoom percentage.

(b) **Shapes in Presentation-** Shapes are the form of an object which consists of outline, boundary, contours, etc. Shape is used to enhance the visual effect in a presentation.

4. (a) Duplicate option enables the user to quickly copy and paste a slide with all its content. The slide must be active/selected before initiating the 'duplicate' operation.

(b) Different pictures and objects can be combined together to be displayed as a single object. This process of combining objects/pictures is known as grouping.

(c) Animations are visual effects for the objects in your Powerpoint presentation. This displays the contents of a presentation in a special sequence of typical effects, leading to an interesting and lively presentation. It includes multiple types of media controls like graphics, video, sound, music, movies, etc.

(d) Custom animation is a set of effects which can be applied to objects in a presentation so that they will get animated in the slide show. It also allows the user to set timings for the display of the content or objects of the slides and to apply different whirling effects to animate the objects.

(e) Slide transition is the effect applied when a slide changes to another during an on-screen presentation or a slide show. It enables the user to set the style of of the slides as they appear one by one during the presentation.

(f) Types of animation effects available in Custom Animation are

Entrance Effect – The entrance effect controls how the item enters a slide in the presentation.

Emphasis Effect – It draws attention to an element by changing its size or appearance or by making it move. It can make an object grow, shrink, fade, change colors, change fonts, become transparent, or blink etc.

Exit Effect - The exit effect is controls how an object leaves the screen in the presentation.

Motion Path Effect - The motion path effect allows a presenter to create movement in a presentation. Motion paths are used to move images across the screen.

5. • Select the content to be copied, then click the 'Copy' command on standard toolbar.

• Place the insertion point on the desired area where content is required to appear.

• Press 'Ctrl+V' keys from the keyboard.

• The copied text will appear at the insertion point.