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# HIGHER SECONDARY FIRST YEAR

## VOCATIONAL EDUCATION

# OFFICE MANAGEMENT AND SECRETARYSHIP
# &
# TYPOGRAPHY AND COMPUTER APPLICATIONS

## THEORY & PRACTICAL

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# PREFACE

In the view of the changing business environment and suggestions received from experts, this book has been thoroughly planned and updated. This book provides a comprehensive and balanced coverage of the subject. In addition to usual topics, the book presents contemporary topics also. High quality and quantity of topics is maintained for application in global set up. The student and faculty will find the contents of the book short and precise. Explanations are given in understandable language with a sufficient support from real business information. I have great pleasure in presenting the book titled Office Management and Secretarial Practice.

This volume is an attempt to provide the students with thorough understanding of office management and secretarial practice concepts and methods. This book presents the subject in a systematic manner with liberal use of figures applicable to the content.

This book will prove extremely useful to students and teachers alike. It also can be adopted and used successfully. This book is even suited for self study.

This book covers following areas: Office Activities, Functions and organization, Qualities of Office Manager, Office Accommodation and Principles, Office System and Procedures, Office records, Office Committee, Office Communication and Mail Service, Office Automation - Office Machines and Manuals, Importance of Typing in modern era, Book keeping and Accountancy, English and Communication Skills, Business Correspondence, Basis of Information Technology, Internet and Networking, Business Management, Personnel Management and Secretarial Practice

It's sure that this book will be more useful for the student fraternity, teachers, executives and other professionals. Suggestions and comments for the improvement of the books are welcomed.

To get employment opportunities in Industrial Sectors.

**Office Management And Secretaryship** has been revamped by SCERT in collaboration with Tamil Nadu Skill Development Corporation in order to get immediate employment opportunities for the vocational students in the Industrial Sectors in future. The skill certificate for practical assessment is given to every student by concerned Sector Skill Councils (SSCs) which are accredited by National Skill Development Corporation (NSDC) and TNSDC.

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# 1 UNIT – 1

## MODERN OFFICE MANAGEMENT

**Content:**

Introduction – Meaning – Definition – Importance and Functions of Office Management – Types of Office Management – Office Manager – Roles and Duties of Office Assistant – Introduction to Office Automation – Meaning – Objectives of Automation – Importance of Office Automation – Types of Office Automation – Accommodating a Mobile Workforce – Strategies and Techniques – Productive usage.

**Learning Objectives**

- Enable the students to understand the importance and functions of modern office management.
- The students can gain knowledge about the roles and duties of an office assistant, office automation and accommodating a mobile workforce.

### 1.1 Introduction:

The management of the modern office is responsible for obtaining and administrative accomplishments with strategy. The office management functions are concerned with designing, evaluating, implementing the work processes carried out in offices and the traditional office environments. It is a part of the business management function.

Modern office management aims to enhance productivity and efficiency by improving the performance of office work. The office usually is a place for transacting business where clerical and administrative functions are carried out by co-ordination and control activities of the organisation. This provides motivation to the workforce and makes them to realise the ambition of the organisation.

### 1.1.1 Meaning:

Office management helps to maintain a close relationship between the different departments and people. It regularly supplies order, command and instruction to different people. It performs various functions like planning, organising, staffing, co-ordinating , controlling, supervising, motivating and an effective leadership.

### 1.1.2 Definition:

In simple words, office management can be defined as "a distinct process of planning, organising, staffing, directing, co-ordinating and controlling offices in order to facilitate achievement of objectives of any business enterprises".

According to **Mills & Standing ford** "The office is the administrative centre of a business. The purpose of an office has been defined as the providing of a service of communication and record".



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## 1.2 Importance and Functions of Office Management:

### 1.2.1 Importance of office management:

(i) Helps in achievement of targets and managing change if any.

(ii) Optimum use of resources for social benefits.

(iii) Minimization of costs.

(iv) Smooth flow of work and maintain public relations.

(v) Helps in maintaining office efficiency.

(vi) Managing survival and growth.

(vii) Encourages innovation.

(viii) Helps in retaining talent.

(ix) Provides leadership.

### 1.2.2 Functions of Office Management:

**(i) Planning:** Planning is the basic function of office management. It is concerned with deciding in advance what is to be done and how it is to be done. To plan is to produce a strategy to action.

**(ii) Staffing:** Top management determine the number of staff required, their qualification and experience if any, decide the sources of recruitment, receiving applications, conduct the interviews and tests and finally select the right personnel.

**(iii) Organising Resources:** The organising function brings resources together to achieve the goals established in the planning function. Resources include materials, personnel and financial backing.

**(iv) Directing:** Direction can thus be regarded as the process of guiding and supervising staff.

**(v) Training:** The regular training programmes are also conducted for the new recruits as well as existing staff. Orientation training programme is a programme provided to existing staff.

**(vi) Controlling Systems:** Controlling systems refers to all the processes that leaders create to monitor success.

**(vii) Discipline:** The implementation of rules and regulations of the office is in the hands of the office manager. There should not be personal bias while implementing rules and regulations. He also attends to the grievances of office staff. In this way discipline is maintained.

## 1.3 Types of an Office Management:

**(i) Corporate Office Management:** Corporate office management includes the manager at each branch of a given company. The district manager oversees all other branch managers, therefore travelling between company branch locations is often a main aspect of the job.

**(ii) Medical Office Management:** Medical office management requires detailed knowledge of anatomy and lab procedures, as well as health care



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laws. Medical office managers typically work in doctors' offices, where they supervise all medical assistants.

(iii) **Legal Office Management:** Legal office management requires practical law experience and an extensive understanding of law procedures. Law office managers oversee the practices of legal administrative assistants, payroll management and the firms' human resources department.

(iv) **Virtual Office Management:** Rather than work for me at a time as a full time employee, virtual office managers often work for several smaller companies part-time. This is due to the tendency of small businesses to contract out virtual office management.



*Fig.1.1 Old Office*



*Fig.1.2 Modern Office*



*Fig.1.3 Virtual Office or Online Mode of working*

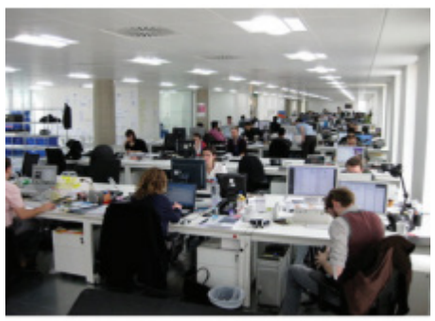


*Fig.1.4 Back Office*

## 1.4 Office Manager:

An office manager is an individual, who is in charge of an office and whose function is to organise and control the activities of the office. He is appointed to head the office. "The office manager is the pivot around which the office function revolves" (Denyer.J.C.).

He extracts the work from the subordinates to achieve organisational goals. It is his responsibility to plan, organise and control the clerical aspects of the organisation, coordination and storage of data to support production and other important operations of industrial establishments. He monitors the work processes and evaluates their outcome. On the whole he is appointed as an administrative head of office.



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*Fig.1.5 Duties of Office Manager*

## 1.5 Roles and Duties of an Office Assistant

### 1.5.1 Role of an Office Assistant:

The role of an office assistant differs from company to company. Small but growing company to manage the day-to-day administrative aspects of running the business. The successful assistant will have a positive attitude, a desire to work as efficiently as possible, and excellent client-facing communication skills. If they have worked in a fast-paced office in the past and they enjoy establishing our own organisational systems.

### 1.5.2 Duties of an Office Assistant:

(i) Overseeing clerical tasks, such as sorting and sending mail.

(ii) Keeping an inventory of office supplies and ordering new materials as needed.

(iii) Maintaining files.

(iv) Welcoming visitors.

(v) Answering phone calls.

(vi) Taking and delivering messages.

(vii) Ensuring the office runs smoothly.

## 1.6 Introduction to an Office Automation:

The term office has undergone drastic changes, "The office is now in a period of transition" where more and more information processing functions are being automated through sophisticated electronic systems. New electronic procedures and systems are becoming more and more popular in modern automated offices which are otherwise called "Paperless offices". A "Paperless office' is one in which paper has been replaced by electronic, digital, micrographic and micro processing systems. Several modern offices provide satellite communication , video teleconferences, electronic mail and computer to computer hook-ups for intra-company use.

### 1.6.1 Meaning:

An automation may be described as usage of advanced technology with the help of specific devices of communication and control in self-regulation without human intervention. It can also be termed as application of information technology to the typical clerical and secretarial tasks such as communication, correspondence, documentation and filing.

### 1.6.2 Objectives of an Automation:

An automation in the office refers to a process whereby sophisticated machines and equipments are introduced in the office with a view to aid the administrative process. Automation in the office has the following objectives.

(i) Automation aims at saving manpower

(ii) Office automation enables promptness.



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(iii) Automation enables completion of work with accuracy.

(iv) Elimination of monotony.

(v) Minimises the chances of fraud in office work.

(vi) Data can be stored for future reference.

### 1.6.3 Importance of Office Automation:

An office automation has got various importance for a modern office management which is listed as follows:

(i) Automation increases the productivity

(ii) Automation eliminates heavy physical labour.

(iii) Automation improves the quality of decision making in business.

(iv) It improves the working conditions and employees safety.

(v) Automation leads to quick completion of work.

### 1.6.4 Types of Office Automation:

a. Telephone, Mobile Phones, Dictation Machines

b. Adding machines, Calculating machines, Billing machines, Copier machines, Fax machines etc.,

c. Franking machines, Impression stamps, Time recording machines

d. Slide rule, Punching machine, Stapler, Calculators etc.,

e. Swipe machine, Laptop, Pen drive, LED/LCD projector, Biometric device, CCTV device



*Fig.1.6 Mobile Phone*



*Fig.1.7 Swipe Machine*



*Fig.1.8 Laptop*

### 1.7 Accommodating a Mobile Workforce:

A mobile workforce is a group of employees that is not bound by a central physical location, Instead of the employees are connected by various types of mobile technology i.e computers, smartphones and other mobile devices. The idea of a mobile workforce goes well beyond simply working from home. A mobile workforce



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is defined as a workforce comprising individuals who work outside of a physical office location. These professional workers are not limited to employees who work from home. Desk-less workers such as retail employees, insurance sales persons and gig workers such as uber/ola drivers are all considered part of accommodating a mobile workforce.

A mobile workforce is more common in industries such as manufacturing, construction, retail and healthcare, where workers are on the field and not in an office. They are commonly known as desk-less workers or field workers.

Washington Post in 1979 titled. "Working at Home can save Gasoline". Portable machines are widely used to record dictation previously taken down in shorthand by secretaries in an office. It is also possible for persons working at home to use the telephone to dictate directly into machines located in their offices and listen to playbacks of relevant passages.

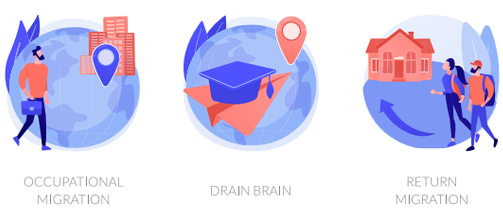



***Fig.1.9* Mobile Workforce**

### 1.7.1 Strategies and Techniques:

(i) Keep communication simple, clear and focused on the relationship.

(ii) Spend more time listening

(iii) Let mobile workers define communication and reporting practices they want to follow.

(iv) Manage deliverables not activities.

(v) Engage in more frequent and informal performance management activities.

### 1.7.2 Productive usage:

The following are the effective elements to be adopted at the workplace to increase overall productivity.

1. Be efficient
2. Delegate
3. Reduce distractions
4. Have the right tool and equipment
5. Improve workplace conditions
6. Offer support and set realistic goals.
7. Practice positive management
8. Ensure employees are happy.



***Fig.1.10 Productive Workforce***



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### Points to be Remembered

- Modern office management is a part of the business management function
- Functions of office management classified as Planning, Organising, Staffing, Directing,Co-ordinating and Controlling.
- Discipline.
- An office manager is in charge of an office
- Automation may be described as usage of advanced technology.
- A mobile workforce is more common in industries

## Evaluation

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### PART – A

### OBJECTIVE TYPES:

**I. Choose the Correct Answer:** **(1 Mark)**

1. The management of the _____ is responsible for obtaining and administrative accomplishments.

   a. Modern Office  b. Traditional Office

   c. Virtual Office  d. Front Office  **Ans. ( a )**

2. Planning is the _____ function of office management.

   a. Best  b. First

   c. Basic  d. Important  **Ans. ( c )**

3. The _____ functions bring resources together to achieve the goals.

   a. Co-ordinating  b. Organising

   c. Directing  d. Decision Making  **Ans. ( b )**

4. A person who is incharge of office is called _____

   a. Office Manager  b. Secretary

   c. Director  d. Administrator  **Ans. (a)**



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5. A _____ office is one in which paper has been replaced by electronic systems.

a. Virtual b. Back

c. Front d. Paperless **Ans. ( d )**

6. _____ aims at saving manpower

a. Automation b. Skill

c. Efficiency d. Workforce **Ans. ( a )**

7. Direction can thus be regarded as the process of _____ staff.

a. Planning b. Organising

c. Guiding and Supervising d. Administrative **Ans. ( c )**

8. The implementation of _____ of the office is in the hands of the office manager.

a. Rules and Regulations b. Characteristics

c. Principles d. Strategy **Ans. (a )**

9. The role of _____ differ from company to company.

a. Officer b. Office Assistant

c. Manager d. Supervisor **Ans. ( b )**

10. Legal office management requires practical _____ experience.

a. Writing b. Typing

c. Law d. Dictating **Ans. ( c )**

## PART – B

**II. Very Short Answers:** **( 3 Marks)**

1. Define the term office management.
2. Who is the office manager?
3. Write short notes on Virtual office management.
4. What is meant by Automation?
5. List out the objectives of Automation.

## PART – C

**III. Short Answers:** **( 5 Marks)**

1. Explain the types of office management.
2. What are the duties of an office assistant?



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3. Write a short note on accommodating a mobile workforce.

## PART – D

**IV. Essay Type Questions:** **(10 Marks)**

1. Explain the importance and functions of office Management.
2. Elaborate the terms office automation.




**Teachers Activity:**

- Should teach basic concepts through classroom discussion.
- Prepare charts on functions and types of office management.

**Students Activity:**

- Students can be asked to conduct role play as office manager.
- Visit an office and observe objectives and importance of office automations.

**References :**


1. *Modern office and its Functions by Dr. R.K. Chopra*
2. *https://en.m.wikipedia.org.*
3. *Source: https://www.slideshare.net*





1. *Administration : The process of running a business.*
2. *Automation: Usage of advanced technology without human intervention.*
3. *Organising : Arranging the work systematically.*
4. *Procedures: An established or official way of doing something*
5. *Systems : A set of principles or procedures according to which something is done.*
6. *Mobile workforce: Comprising individuals who work outside of a physical office location.*



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# 2 UNIT – 2

## OFFICE ACCOMMODATION AND LAYOUT

**Content:**

Introduction to Office Accommodation - Selecting Office Accommodation and its Mobility – Shared Workspace – Navigation, IoT and Sensors – Introduction of Office Layout – Meaning and Definition – Recent Trends in Office Layout, Eco friendly office-Maintaining a Healthy and Safety Office Equipment, Protection of Health and Safety Of Employees, Safety Measures at Workplace.

### Learning Objectives

- To comprehend the students about importance of Office Accommodation and Layout.
- To acquire knowledge and know the new trends in office layout.
- To understand the basic concepts related to Healthy and Safety measures at the workplace.

### 2.1 Introduction:

Office accommodation refers to the selection of the appropriate office location, office building and other facilities required for office. The office accommodation consists of following factors office location, office building, office layout, shape and size of office, convenience to the staff and visitors, physical condition of office, the cost of office accommodation etc.,

The following factors should be considered before making the final choice of location of office building:

(i) Suitability to Neighbourhood

(ii) Proximity to Other Units

(iii) Proximity to Related Business

(iv) Nearness to service Facilities

(v) Nearness of Transport Facilities



*Fig.2.1 Office Accommodation*

### 2.2 Selection of Office Accommodation:

Following factors are to be considered in providing the right type of office accommodation:

1. Location of the office building
2. Securing the required office accommodation

3. Size of office accommodation
4. Lighting and ventilation facilities
5. Layout and facilities for office organization
6. Customer and staff conveniences
7. Cost of office space or accommodation
8. Miscellaneous consideration

**Examples of Reasonable Accommodations in the Workplace:**

Making existing facilities accessible; job restructuring; part-time or modified work schedules; Acquiring and modifying equipment, changing tests, training materials or policies, providing qualified readers and interpreters, reassignment to a vacant position

## 2.3 Shared Workspace:

Physically collaborative shared workspaces, also known as co-working spaces are, spaces that are created in an office that provide employees the ability to collaborate together and work more closely.

**Need for the shared workspace:**

Shared workspace enable you to grow your business and the number of employees they hire. They need not have to commit to inflexible leases in a more traditional building. With a collaborative space, they have the freedom to change the size of their team or even location, without much effort or extra cost.



*Fig.2.2 Shared workspace*

## 2.4 Navigation IoT (Internet of Things) and Sensors:

The act or practice of navigating, the science of getting ships, aircraft or spacecraft from place to place especially. The method of determining position, course and distance travelled. The purpose of navigation is to ascertain the present position and to determine the speed, direction etc., to arrive at the port or point of destination.

A smart office is a workplace incorporated with IoT technology in a bid to allow employees to work faster and more efficiently, while allowing them to have a better time doing so. Examples: There are several top devices in the market. Smart mobiles, smart refrigerators, smart watches, smart fire alarms, smart door locks, smart bicycles, medical sensors, fitness trackers, smart security systems etc., are few examples of IoT products.

Office sensors are indoor motion-detecting devices that use infrared, ultrasonic, microwave or a similar technology to detect occupancy. Sensors can turn any facility into a "smart" workplace that improves efficiency and well-being.



*Fig.2.3 Navigation IoT and Sensors*

## 2.5 Introduction of Office Layout:

According to **Littlefield**, "Office layout may be defined as the arrangement of equipment within the available floor space".

According to, "The problem of layout relates to the arrangement in the space involved so that all the equipment, supplies, procedures and personnel can function at maximum efficiency".

The object of an office layout is to make arrangements for placing of men, materials, machines, furniture and equipment within the available floor space of the office in such a way that everything can be utilized in the best possible manner.

An office layout involves:

(i) The determination of the correct amount of space for each employee and for machinery and equipment they use.

(ii) The correct arrangement of furniture, equipment and machinery.

(iii) The best possible environmental conditions.

**Need for the Office Layout:**

- Be adaptable to meet volume changes
- Provide enough work and storage space

**Principles of Good Office Layout:**

- Layouts need to account for the physical environment and psychological needs of the organization.
- One key layout trade-off is between proximity and privacy.

**Requirements of a Good Layout:**

- An understanding of capacity and space requirements.
- Selection of appropriate material handling equipment.
- Decision regarding environment and aesthetics.



*Fig.2.4 Office Layout*

## 2.6 Recent Trends in Office Layout:

(i) **Landscaped Office:** A landscaped office is an open office where the desks are arranged individually or

in groups and at different angles from one another.

(ii) **Movable Partitions:** Movable partitions are now being used in setting up private offices. These partitions are made of metal, wood, plastic or glass.

(iii) **Modular Units:** Modular units are becoming increasingly popular now. These units normally consist of a combined desk and filing cabinet with small partitions up to a height of four to six feet. The most popular type of modular desk is the L pattern desk unit with a flat surface.

### 2.6.1 Eco-Friendly office:

Being an environmentally friend office simply means **having a lifestyle that is better for ecosystems and the environment**. Environmentally friend office is also known as eco friendly office space, nature-friendly, and green, but ecologically approved doesn't necessarily mean sustainable.

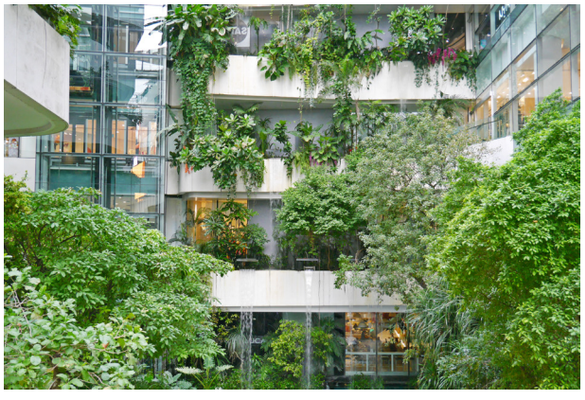


*Fig.2.5 Eco-Friendly office*

## 2.7 Maintaining a Healthy and Safety Office Equipment:

Office environment has an important bearing on the efficiency of employees. It is a common experience that people work better if they are given the surroundings and equipment appropriate to their work.

According to **Terry**, "an individual's performance is significantly familiarized by the environment in which he works".

**Lighting:**

Lighting is the most important of all the physical conditions in the office. Proper lighting is important because it offers the following advantages:

- Increased productivity
- Better quality of work
- It results in fewer errors
- Reduction in eye strain and mental fatigue
- Better employee morale
    - Quantity of Light
    - Brightness of Light
    - Diffusion of Light

**Ventilation:**

Ventilation in the office refers to the supply of clean and fresh air in the right amount, at the right temperature and of the right humidity. Proper ventilation is an important aspect of the office

environment. Fresh air must pass through the office regularly. Arrangements of rooms and partitions should be such as to allow free circulation of fresh and dustless air. The following methods are generally used to maintain proper ventilation:

**(i) Natural Ventilation**

**(ii) Artificial Ventilation**

**Temperature and Humidity:** Temperature and humidity are two vital factors in the offices that exercise a great influence over the worker and their output. Temperature and humidity in the rooms should be maintained at a proper level.

**Freedom from Noise:**
A noisy place is never an efficient office. Noise is one of the great disturbances. Noiseless and quiet atmospheres are must for an office to maintain the efficiency of the employees at a high level.

**Cleanliness:** A clean and tidy office is important as it offers the following advantages:

(i) It is healthier as a workplace for different types of office workers.

(ii) Since people react to their surroundings, a clean and healthy office contributes to accuracy and efficiency.

(iii) A clean and tidy office also projects a good image of the organization in the eyes of the people who visit it.

**Disposal of Waste:** Proper disposal of waste and waste paper is very essential.

**Toilets:** Proper provision of toilets and their proper cleanliness are important. Toilets should be conveniently located with adequate numbers.

### 2.7.1 Protection of Health and Safety of employees:

How do you maintain healthy and safety in workplace?

(i) Train employees well.

(ii) Reward employees for safe behavior.

(iii) Partner with occupational clinicians.

(iv) Use labels and signs.

(v) Keep things clean.

(vi) Make sure employees have the right tools and have regular equipment inspections.

(vii) Encourage stretch breaks.




*Fig.2.6 Pandemic Safety Guidelines*

### 2.7.2 Safety Measures at Workplace:

One of the vital functions of a modern office is to keep and preserve documents and records for future guidance or reference. All documents or records of office should therefore be kept under proper security. The following precautions should be taken to secure documents and employees:

**(i) Fire Precautions:** Adequate fire precautions should be taken for the preservation of office records and documents, machines against risk

of loss or destruction by fire. Similarly precautionary measures to safeguard the employees in the office should also be provided in the office. Fire alarms should be fixed in conspicuous places. Such appliances should be regularly inspected to ensure that they are in working order.

(ii) **Accident Prevention:** Most accidents occur due to overcrowding in the office; use of obsolete machines and equipment, improper and careless handling of machines etc. Hence Adequate precautionary steps to prevent accidents should be taken in the office.

(iii) **Provision of Safe Working Place:** Arrangements should be made to provide a safe working place for the employees. Shape and size of the office rooms, location and size of doors, gangways, etc., must be such as to eliminate hazards of accidents.

(iv) **Provision of First Aid Service:** To ensure immediate treatment to injuries, there should be a first aid box in every office with sufficient medicines.

(v) **Safety Education and Training of Employees:** Each employee should be made thoroughly aware of the dangers of their job. Training should be given to employees and Safety regulations should be carefully framed and strictly enforced.



*Fig.2.7 Safety Equipments*




*Fig.2.8 First Aid Kit*

## Accidents and Emergencies:

An accident is an unplanned, uncontrolled or unforeseen event resulting in injury or harm to people and damages to goods. For example, a person falling down and getting injured or a glassware item that broke upon being knocked over. Emergency is a serious or crisis situation that needs immediate attention and action.

## Workplace Safety:

Workplace safety refers to the working environment at a company and encompasses all factors that impact the safety, health and wellbeing of employees. Work environment is the basic right of every worker.

**Responsibilities of employer at workplace:**

An employer should ensure a safe and healthy workplace for their employees and also for any customers who may visit the workplace.

**Training to employees for prevent accidents and emergencies:**

1. Individual roles and responsibilities
2. Threats, hazards and protective actions.
3. Notification, warning and communication procedures
4. Means for locating family members in an emergency
5. Emergency response procedures

**Points to be Remembered**

Office accommodation refers to the place of work and its surroundings which are important that affect the efficiency of the employees to a large extent.

**Principles of Office Accommodation:**

- Convenient Location
- Sufficient space and scope for expansion.
- Provision for the convenience and amenities for the well-being of the staff
- Service facilities should be available in the office and near the office premises.

**Factors to be Considered While Selecting Office Accommodation:**

- Locating the office building
- Securing the required office accommodation
- Size of office accommodation
- Lighting and ventilation of the space
- Layout and facilities for office organization
- Customer and staff conveniences
- Cost of office space or accommodation
- Miscellaneous considerations

**The Need for Smart Office:**

- Track maintenance with IoT printers
- Enable intelligent lighting with smart bulbs
- Use smart assistants for office awareness
- Replace custodians with smart vacuums
- Save on climate control with smart thermostats
- Track equipment with IoT tagging.

**Office Layout:**

Definition: arrangement of equipment within the available floor space Office Accommodation refers to the place of work and its surroundings which greatly affects the performance of employees

**Principles of Good Office Layout:**

- Layouts need to account for the physical environment and psychological needs of the organization.
- One key layout trade-off is between proximity and privacy
- Open concept offices promote understanding and trust
- Flexible layouts incorporating "Office landscaping" help to solve the privacy issue in open office environments.

**How do you maintain healthy and safety in workplace:**

- Train employees well.
- Reward employees for safe behavior.
- Partner with occupational clinicians.
- Use labels and signs.
- Keep things clean.
- Make sure employees have the right tools and have regular equipment inspections.
- Encourage stretch breaks.
- Implement safety protocols from the start.
- Evaluation

## Evaluation

FIYRE

### PART - A

### OBJECTIVE TYPES:

**I. Choose the Correct Answer:** **(1 Mark)**

1. Arrangement of equipment within the available floor space is _____.

   (a) Office Accommodation (b) Office Layout

   (c) Office Environment (d) Office Building **Ans (a)**

2. Shared workspace also known as _____.

   a) Co-working Spaces b) Private Space

   c) Public Space d) Common Space **Ans (a)**

3. _____ must provide good and satisfactory working conditions.

   a) Office Accommodation b) Office Layout

c) Office Environment d) Office Building **Ans (c)**

4. A well planned layout brings a number of benefits to the office and to the _____.

a) Employees b) Outsiders

c) Customers d) Manager **Ans (a)**

5. Air conditioner provides _____.

a) Natural Ventilation b) Artificial Ventilation

c) Humidity d) Air Circulation **Ans (b)**

6. Environmentally friendly office is also known as _____.

a) Eco Friendly Office b) Modular Office

c) Open Office d) Private Office **Ans (a)**

7. Office environment is an important bearing on the _____ of the employees.

a) Efficiency b) Quality

c) Work force d) Performance **Ans (a)**

8. Roof ventilation and internal tube ventilators provide _____ventilation.

a) Natural b) Artificial

c) Direct d) Indirect **Ans (a)**

9. The ideal office temperature is approximately _____ Fahrenheit.

a) 58 degree b) 68 degree

c) 78 degree d) 48 degree **Ans (b)**

10. The cleaning work should be undertaken _____the business hours in the office.

a) During b) Before

c) After d) Either before or after **Ans (d)**

## PART - B

**II. Very Short Answers:** **(3 Marks)**

1. What is meant by office accommodation?
2. How do you select office accommodation?
3. What is a shared workspace?

4. What is an IoT?
5. Give a note on smart offices.
6. What is the office layout?
7. Define the term office environment.
8. What is artificial ventilation?
9. How do you prevent accidents in the workplace?
10. What are safety measures?

## PART - C

**III. Short Answers:** **(5 Marks)**

1. What are the factors to be considered in choosing office accommodation?
2. Bring out the recent trends in office.
3. State the objectives and importance of office layout.
4. Explain the factors determining lighting System.
5. Describe the importance of maintaining cleanliness.
6. How do you maintain healthy and safety in the workplace? Explain
7. Discuss the general safety measures to be followed in office.

## PART - D

**IV. Essay Type Questions:** **(10 Marks)**

1. Write a note on Office Accommodation.
2. Explain the advantages and disadvantages of office layout.
3. Explain in detail about office environment.

ACTIVITY

**Teachers Activity:**

- Take students to an office and expose them about office accommodation, layout, office environment & safety measures.
- Organize a debate amongst students on how office plays a vital role in the workplace?

**Students Activity:**

- Visit an office and observe office layout, environment and safety measures provided.
- Prepare model of office layout in groups

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GLOSSARY

1. *Amenities : A desirable or useful feature or facility of a building.*
2. *Cubicles : A very small enclosed area.*
3. *Diffusion of Light : Spreading of light.*
4. *Fluorescent : Fluorescence is the emission of light by a substance that has absorbed light or other electromagnetic radiation.*
5. *Humidity : A quantity representing the amount of water vapour in the atmosphere.*
6. *Incandescent : Producing a bright light from a heated filament.*
7. *Landscape : A landscape includes the physical elements of landforms and different forms of land use, buildings and structures.*

3

# UNIT – 3

## MODERN OFFICE FURNITURES AND STATIONERIES

**Content:**

Introduction - Modern Office Furniture – Office Furniture, Fittings and Accessories - Selecting, Purchase Procedure and Methods of using Office Furniture - Uses of Office Furniture - Purchasing and Safeguarding the Assets - Introduction - Office Stationeries - Classification of Office Stationeries - Importance of Managing Stationeries - Selection and Purchasing of Stationeries

**Learning Objectives**

- To know the various factors to be considered for selecting furniture.
- To enable the students to learn and understand the classification of office stationeries.
- To understand the factors have to be considered for selection and purchasing of stationeries.

### 3.1 Introduction:

Furniture refers to movable objects intended to support various human activities such as seating, eating, storing items, eating and/or working with an item, and sleeping. Furniture is also used to hold objects at a convenient height for work or to store things. Office furniture means any furnishing that is free standing and does not require installation with component parts. Examples are desks, chairs, file cabinets, tables, lounge seating and computer desks.

(i) **Modern Office Furniture**: It sleek, clean and simple, it does not resemble the old traditional office furniture. Because of its simplicity it makes the office space feel sleek instead of cluttered. In earlier times weight of the furniture and its dull appearance was associated with success mantras. Modern furniture can be described as furniture that is lightweight and is made up of a lot of steel and glass or wood.

(ii) **New Design Furniture**: Modern furniture available in new materials, fabrics, new fabric designs, shapes and sizes. With the days going by rates of modern office furniture are getting more and more economical, especially when purchased in a large amount. It is very important for a business to project itself with the right image in front of their clients, customers and prospective employees. For this it is important that to do something creative for the office furniture arrangements.

(iii) **Professionalism and Competence**: The office furniture increases the confidence of employees. This can only be achieved by cheap, trendy, stylish and sleek modular office furniture. Modern furniture is available in vast designs and shapes and so, it is suggested that when you are looking to refurbish an office, you must select modern office furniture.

(iv) **Functionality and Flexibility:** It incomparable with other types of furniture. Even comfort and safety features are much enhanced in comparison to the other types of furniture available. Some common items of modern office furniture are office chairs, executive chairs, office desks, conference table, executive table, manager's tables, reception table, cabinets and executive collections.

## 3.2 Office Furniture, Fittings and Accessories:

Office furniture is necessarily a part of the total environment in which the employees work. Right kind of furniture must be provided so as to provide maximize comfort to the employee.

The number and the type of furniture to be purchased for any office will depend on the number of departments and office workers, the nature and volume of work to be performed and the office space available for their accommodation.

Generally office fittings include desk lamp, telephone stand, waste paper basket, etc. When choosing or selecting such items, their colour may be considered, because the colour of these must not ruin the pleasing atmosphere of the office. Clerks should be provided with certain accessories in order to perform their work efficiently. Such items may be pen holders, sorting trays, boxes, cabinets, etc.



*Fig.3.1 Modern Office Furniture*

### Types of Furniture Used in Office:

Every office requires different types of furniture. Furniture can be classified on the basis of its physical appearance and the purpose for which it is used. E.g. Executive furniture, Special purpose furniture, Built-in furniture and General clerical furniture.

**Desk:** The performance of an office employee is very much influenced by the type of desk he uses. The primary function of any desk is to provide a suitable surface for writing, checking, sorting and examining.

**Executive Desk:** These are designed to suit individual tastes and quite often they are designed as a show piece of an organisation. Their purpose is also to

impress visitors. Sharp edges and corners are eliminated. Table top is covered with a sheet of glass.

**General Purpose Desk:** It is a general purpose single pedestal desk with less elaborate design.

**Computer Desk:** Computer desks are generally standard flat-topped, single or double pedestal desk with provision for placing keyboard.

**Tables:** Tables are generally needed for sorting of mail despatch, for holding meeting of committees, etc. However, in some office tables fitted with drawers and other devices are still used by clerks for writing purposes.

**Chairs:** There is a need for providing the right type of chairs to the office employees as they spend most part of the day in the office. Chairs meant for computer operators should have adjustable back rest to enable the user to perform their work efficiently.

**Filing Cabinet:** A filing cabinet is a piece of office furniture usually used to store paper documents in file folders. The two most common forms of filing cabinets are vertical files and lateral files. A vertical file cabinet has drawers that extend from the short side of the cabinet. A lateral file cabinet has drawers that extend from the long side of the cabinet.

**Modular Furniture:** Modular furniture is pre-made or readymade furniture which can be used according to the need and room spacing. It is easy to install and dismantle according to need. It gives a modern look to the office. It is also available in various colours and designs. There are various types of modular furniture-Two in one furniture. This type of furniture has two purposes. Three in one furniture. This type of furniture has three purposes.

### 3.2.1 Selecting, Purchase Procedure and Methods of using Office Furniture:

Buying office furniture can be hard because it is so difficult to find the



*Fig.3.2 General Purpose Desk (Office Chairs and Tables)*

information you need, upfront, before being pulled into a consultation with a salesperson. Depending on your situation, there are many different factors to keep in mind when choosing the office furniture. The list of potential factors considered for selection is as follows:

### Aesthetics:

The look of your workplace can play a critical role in the success of your company. Studies have shown that an aesthetically pleasing office can help with attracting and retaining top talent.

### Ergonomics:

The science of designing a workplace with the abilities and needs of the employees in mind, also known as ergonomics, should be factored into every piece of office furniture you purchase.

From footrests to adjustable monitor arms or chairs that properly support the lower backs of your employees, ergonomics can have a significant impact on the productivity, health, and happiness of team members. Choosing office furniture built with ergonomics in mind is essential for any efficient workplace.

### Adjustability and Flexibility:

Employees come in all different shapes and sizes, which is why the office furniture you choose needs to have the flexibility required to meet their individual needs. Many desks and table solutions are height adjustable to ensure employees can be productive while maintaining proper posture. Likewise, the office chairs should include features such as adjustable arm, head, and backrests. Investing in furniture that can be adjusted to the specifications of your employees can help keep everyone in the office comfortable and focused on their work.

### Warranty:

Office furniture is a substantial investment, and you want to be sure that dependable warranties are provided to the furniture. This will ensure that if you experience an issue with your office furniture, you'll be able to have it dealt with quickly and at a reasonable cost.

### Impact on Employee Wellness:

The right office furniture can greatly impact the lives of employees. Several studies have found that choosing office furniture that is both comfortable and ergonomically considered can have a noteworthy impact on employee happiness, as well as their productivity.

### Multi-functionality:

Many desks are designed primarily to function as single employee workstations, but can easily be transformed into collaborative hubs. Similarly, tables can be designed to move around the office as they're needed, making them perfect for in-house presentations, training programs, strategy sessions in the boardroom, and much more.

### Brand Reputation:

When choosing office furniture, it is essential to work with a brand that has earned a reputation as a leader. Always




*Fig.3.3 On-line purchase*

choose products from office furniture brands who are all known for using quality building materials and are committed to deliver the best furniture in an environmentally responsible way.

### Office Furniture Purchase Procedure:

The process of buying office furniture is based on key stages:

(i) **Searching:** The purchase team of the company will first search for various vendors who provide good office furniture at low cost.

(ii) **Identification:** In this stage the purchase team will identify the best furniture supplying company based on their reputation, company brand image , their overall sales , market share and other company feedback.

(iii) **Placing Order:** In this stage the list of required furniture is created and order is placed to the selected furniture company.

(iv) **Payment:** Once furniture is received payment is made to the furniture company.

(v) **Put to use**: The furniture is put to use by the various employees for their work and any problems faced will be complained to the furniture supplied company and it will be resolved.

## 3.2.2 Uses of Office Furniture:

- It increases the efficiency of work
- It makes the office more attractive and pleasant.
- It helps to maintain the prestige of office
- It provides better working environment for the employees
- It helps in reducing fatigue.
- It helps in protection of documents from fire, dust, insects etc.
- It helps in proper storage of files

## 3.3 Purchasing and Safeguarding the Assets:

Many business owners are discovering that their assets are not as well protected as they thought. Smaller businesses with one or two employees managing all of the finances are particularly susceptible to misappropriation of assets. Often there are no checks and balances to verify that transactions are accurate or appropriate.



*Fig.3.4 Uses of Office Furniture*

**How to Safeguard the Assets:**

Different assets have different kinds of risks associated with them. Since the goal is to prevent or at least minimize those risks, different measures can help safeguard the assets.

**Proper Documentation and Monitoring:**

It must keep all records of the assets and track the activities associated with it. For example, maintaining accurate inventory records can help to trace any missing or stolen goods. Regular machinery checks can also helps to notice faults or potential damage risks more easily and fix them before they result in any serious harm.

**Insurance:**

Physical assets are susceptible to dangers such as robbery, fire outbreaks, and other environmental hazards. So, there is a need to get good insurance coverage for vehicles, buildings, and other tangible assets. Thats' way, don't have to worry much about repairing or replacing them.

**Regular Maintenance:**

Machinery can wear and tear with time and consistent usage. It need to have a regular maintenance schedule to keep them in steady proper working conditions. Even employees also need vacations, annual assessments, and other routines to maintain high productivity and efficiency.

**Intellectual Property Protection:**

Brand recognition and reputation, for instance, go a long way in determining the competitive edge and even volume of sales. It can employ professional legal services to help guard against intellectual thefts or copyright infringements.

**Physical, Digital, and Data Security:**

Employ a viable security team or contract a security company can protect all physical properties. The use of security cameras can also help you monitor activities around company environment right from the comfort of an office. Also use vehicle tracking systems to monitor company vehicles or even recover stolen machinery.

## 3.4 Introduction - Office Stationeries:

Stationery refers to commercially manufactured writing materials, including cut papers, envelopes, writing implements, continuous form papers, and other office supplies. Stationery includes materials to be written on by hand (e.g., letter paper) or by equipment such as computer printers.

### 3.4.1 Classification of Office Stationeries:

- Business Stationery: Business card, letterhead, invoices, receipts
- Desktop instruments: hole punch,

stapler and staples, tapes and tape dispensers.

- Drawing instruments: brushes, colour pencils, crayons, water colour.
- Erasers.
- Ink and toner:
  - Dot matrix printer's ink ribbon
  - Inkjet cartridge
  - Laser printer toner
  - Photocopier toner
- Filing and storage:
  - Expandable file
  - File folder
  - Hanging file folder
  - Index cards and files
  - Two-pocket portfolios
- Mailing and shipping supplies:
  - Envelope
- Paper and pad:
- Notebooks, wire bound notebook, writing pads, college ruled paper, wide-ruled paper.




*Fig.3.5 Classification of Office Stationeries*

- Office paper: Dot matrix paper, Inkjet printer paper, Laser printer paper, Photocopy paper.

- Writing instruments: ballpoint pen, fountain pen, pencil, porous point pen, rollerball pen, highlighter pen.

### 3.4.2 Importance of Managing Stationeries:




*Fig.3.6 Importance of Stationeries*

**(i)** **Productivity**: Having the right office supplies is essential for the day to day running of the business. Objects such as pens, pencils, paper, calculators and other office equipment such as printers, need to be available for employees to work productively and efficiently.

**(ii)** **Quality and comfort:** When looking for items, make sure that they are fit for the job and that they are of a quality and comfort. For example a company sends lot of internal mail provide the type of envelopes need, or if staff are often on the phone call provide the right type of notepad to them.

**(iii)** **Operations department:** From the basic pen, highlighter and pencil to more complex items such as binding machines, data storage and projectors – the operations department of the company should ensure that the office will have everything it need, whilst ensuring the price is just right.

### 3.4.3 Selection and Purchasing of Stationeries:

Certain factors have to be considered for selection of quality stationery items to the office as follows:

**Standard** – Proper criteria for standard has to be followed while selecting stationery and popular brands can be identified in this regard by concerned departments.

**Suitability** – Stationery items have to be purchased according to the preferences of concerned departments
like for accounts, ledgers, and register books, are needed.

**Durability** – Cheaper quality standards should not be taken into consideration while purchasing stationery items as they do not guarantee durability. Hence, superior quality products should be taken care of.

**Goodwill** – To create a best impression on the organisation, items with proper and catchy headings are selected.

**Performance** – The purchasing authority should consider the quality of stationery items they purchase as a specific brand gives longer performance and satisfaction.

**Preservation** – Multiple copies can be taken with the help of quality carbon sheets and hence carbon papers are preserved for future purpose in offices.

**Quality** – Cheaper quality stationery items are short-lived and hence may create loss and tampering while handling by specific departments. Hence, superior quality which may be little expensive should be purchased in order to save time and cost.

### Purchasing Stationery:

The office manager has to purchase the stationery if the business office is very small. In the case of large business organizations, a separate department is created to buy all the stationary items. Hence, the department's manager must have a good knowledge of purchasing quality stationery in an economical way.

(a) Receipt of purchase requisition, which is a request of purchase from the required departments.

(b) After receipt of requisition the amount of stationery to be purchased is determined.

(c) The sources of supply are selected.

(d) Placing order for supply of stationary.

(e) Taking follow-up measures when supplies are not received in the proper time.

(f) Receipt of supplies and checking their quality as per the standards set.

### Points to be Remembered

- Office furniture means any furnishing that is free standing and does not require installation with component parts.
- Modern office furniture is sleek, clean and simple.
- Professionalism and competence of the office increases confidence of office employees.
- Physical assets are susceptible to dangers such as robbery, fire outbreaks and other environmental hazards.

## Evaluation

## PART – A

### OBJECTIVE TYPES:

**1. Choose the Correct Answer : (1 Mark)**

1. _____ makes office space feels sleek instead of cluttered

   a. Simplicity b. Requirement

   c. Classification d. Clarity **Ans. (a)**

2. Furniture can be classified on the basis of _____ appearance.

   a. Company b. Physical

   c. Individual d. Group **Ans. (b)**

3. _____ are designed to suit individual tastes

   a. General purpose b. Meeting

   c. Executive d. Computer **Ans (c)**

4. Modular furniture is _____ furniture

   a. Popular b Cheapest

   c. Highly risk d. Ready-made **Ans (d)**

5. The science of designing a workplace is known as _____

   a. Ergonomics b. Office

   c. Department d. Enterprise **Ans (a)**

6. Office furniture is a _____ investment.

   a Systematic b Strong

   c Substantial d Natural **Ans (c)**

7. _____ to create a best impression on the organisation

   a. Good will b. Information

   c. Functions d. Administration **Ans (a)**

8. Office furniture is necessary a part of the total environment in which the _____ work.

   a Employer b. Employees

   c. Owner d. Worker. **Ans (b)**

9. The use of Security cameras can _____ activities

a Supervise b. Check

c. Evaluate d. Monitor **Ans. (d)**

10. _____ is essential for the day to day bus

a Office Supplies b. Office Stationeries

c. Office Furniture d. Office Accommodation **Ans. (a)**

## PART – B

**II. Very Short Answers:** **( 3 Marks)**

1. Write a short note on modern office furniture.
2. What is new furniture design?
3. What is meant by modular furniture?
4. What is intellectual property protection?
5. Write a short note on office stationeries

## PART – C

**III. Short Answers:** **( 5 Marks)**

1. Explain the classification of office stationeries.
2. Explain the importance of managing stationary.
3. What are the uses of office furniture?

## Part – D

**IV. Essay Type Questions:** **(10 Marks)**

1. Explain the types of furniture used in the office.
2. Explain the selection and purchasing of stationeries

## ACTIVITY

**Teachers Activity :**

1. Must teach basic concepts about office furniture
2. Can take the students to a nearby office to show various modern furniture used in the office.

**Students Activity :**

1. Students can be asked to prepare assignments on modern office furniture and their usage.
2. Students can be asked to prepare models on office furniture.

**References** :


*1. http://www.themob.com.tr/office/furniture.*

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*3. www.pinterest.com*


## GLOSSARY

1. **Modular :** *Employing or involving a module or modules as the basis of design or construction.*

2. **Sleek :** *Make smooth and glossy.*

3. **Filing Cabinet :** *It is a piece of office furniture usually used to store paper documents in file folders .*

4. **Multi-functionality :** *Many desks are designed Primarily to function as single employee work stations.*

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4

# UNIT – 4

## RECORDS, FILING AND INDEXING

**Content:**

Introduction - Meaning of Records - Types of Records - Records Management - Introduction - Filing - Classifications of Filing - Uses of Filing - Introduction - Indexing - Types of Indexing - Selection of Suitable Indexing System - Advantages of Indexing

**Learning Objectives**

- To know the importance of records for day to day business activities and its functions.
- To analyse the principles of maintaining records.
- To understand the types of filing and classification of files.
- To know about the essence of indexing and its advantages.

### 4.1 Introduction:

Business enterprises, government agencies, and other social institutions all depend on records to function. Any firm highly depends on accurate reporting. The record-keeping system should be accurate, consistent, simple to use, and consistent in terms of the principles employed. Good record keeping is essential for satisfying the firm's financial obligations and providing information on which to build future business operations. While businesses maintain records to monitor and document typical company activity, they are also required under taxes regulations. These documents are official documents that can also be used as legal proof in the event of an emergency.

Many documents are received, sent out, and prepared on a daily basis in the course of business. These documents are important in the functioning a firm and in making decisions. Such documents should be kept on hand to make sure they are required. Every organization has developed a file system to do this. Any organization's memory is its filing system.

### 4.1.1 Meaning of Records:



*Fig.4.1 Office Records*

A document used by an organisation to carry out its different tasks is referred to as a record. A record is some form of physical evidence of an organization's



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activity. It could be a letter, circular, invoice, voucher, image, report, payroll, contracts, deeds, work in progress, orders, stock records, estimates, progress reports, financial and statistical statements.

### 4.1.2 Types of Records:

***1. Correspondence:*** Correspondence includes letters, notices, circulars, memorandums, reports and other items that the business receives, as well as copies of letters that are sent out. Telegrams and fax communications are also included.

***2. Accounts Department Records***: All papers or documents pertaining to the firm's accounts are included in this category. Invoices, petty cash vouchers, receipts, bank statements, accounting ledgers, and other documents are examples.

***3. Purchases and Sales Records:*** These comprise all documents related to the firm's purchases, sales, and inventory management, such as price lists, quotes, samples and copy orders.

***4. Personal Records:*** These contain all documents relating to the firm's workers, such as completed application forms and records of employee attitude, absenteeism and turnover.

***5. Administrative Records:*** Insurance policies, car registration books, licences, hire purchase agreements, share certificates, and other records that are important for the management of the company, either because of legislative obligations or otherwise.

***6. Miscellaneous Records:*** Modern businesses keep records that do not fit into any of the previous categories, such as records pertaining to advertising campaigns and marketing research.

### 4.1.3 Records Management:

**Meaning:** Records management is a modern business program that embraces filing and is improved by the design and review of business forms and records. It is that area of office administration which is concerned with creation, presentation, and use and disposal of records.

**Definition:** According to **Jane K Crucible** "Records management refers to the activities designed to control the lifecycle of a record from its creation to its ultimate disposition"

### Functions:

**1. Creation of Records:** New forms and records should be developed only when their need is fully satisfied. The design of the forms should be given careful utilized by an organization to carry out its various functions.

**2. Storage of Records:** The storage is concerned with the classification of records and then filing in the suitable filing equipment which is in the easily accessible location.

**3. Retrieval of Records:** An efficient procedure must be established so that records may be retrieved and delivered in time.

**4. Disposal of Records:** The last stage in the record cycle is the disposal stage which is concerned with preserving valuable documents and disposing the expired documents.



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## Objectives of Record Management:

**Leffingwell and Robinson** were identified the objectives of record management, which as follows:

1. To keep an orderly account of progress
2. To facilitate comparison
3. To deduct errors and wastes
4. To follow up the legal formalities

## Conclusion:

As a result, filing is the act of keeping official documents in a systematic and scientific manner for future reference or evidence. It includes filing documents, letters, and other correspondence. It is a scientific and systematic method of maintaining important documents for future access.

## 4.2 Filing:

**Meaning:** Filing can be described as the core of records management. It is rightly said that the keystone of office organization is the maintenance of a comprehensive, simple and efficient filing system. Filing cannot be treated as an unimportant function of the office, perhaps it is the most important amongst its functions.

**Definition: G.R Terry** has defined filing as "the placing of documents and papers in acceptable containers according to some predetermined arrangement so that any of these may be located quickly and conveniently, when required".

**Organization of Filing:** In any large business establishment, the management has to decide whether filing should be centralized. The main object of filing is speedy and accurate location of records at minimum cost.

## 1. Centralized Filing:

Centralized filing of records refers to graphing and storing of records in the same place where they are accessible to a number of persons. In other words, the records pertaining to activities of all the departments of an enterprise are preserved in the centralized index plan. Central file comprises papers relating to general correspondence, office branch correspondence, orders, invoice, vouchers, estimate, quotations, credit and debit memos and other papers which several departments need to refer.

## 2. Decentralized Filing:

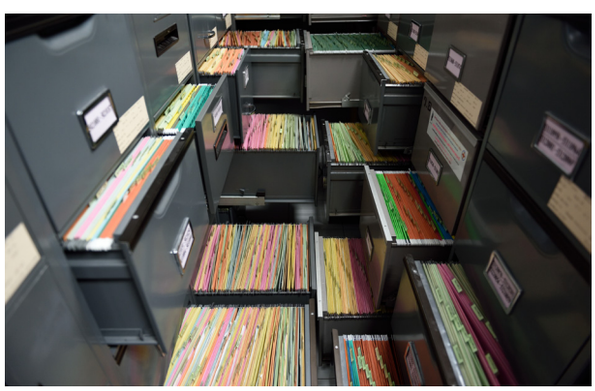


*Fig.4.2 File Cabin*

In this system, files relating to different departments are kept in the respective departments. Decentralized filing is necessary for maintaining records of work-in-progress, such as unexecuted orders, unpaid bills etc. Further there are certain records which will be used only by certain departments, for e.g. Price



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quotation in the purchase department, blueprints and drawings in the engineering department.

### Types of Filing:

The important types or methods of modern filing are:

**1. Horizontal or Flat Filing:** Under this method the documents or letters are placed in a horizontal or flat position one on the top of another in order of date and the latest is on the top. The letters are filed along with their replies. These files come in a variety of folders. More important of horizontal files are **Lever Arch Files and Flat Files.**

**2. Vertical Filing:** This method of filing can be said to be the most modern. It is so named because the contents are kept in an upright or standing position. This method of filing is the result of the growing needs of business organizations. The greatest drawback of the horizontal filing is the time consumed in locating a paper or document. As the business expands the bulk of papers increases and location of a paper becomes difficult and time consuming activity, vertical filing eliminates this drawback of horizontal filing. Hence it has become a very popular method of filing in large offices where the number of subjects is large.

### 4.2.1 Classification of Files:

There are five methods of classification. They are:

**1. Alphabetical Classification:** Alphabetical classification is based on the occurrence of the letters in the alphabet as it is done for the dictionary.

**2. Numerical Classification:** In this method of classification, each folder or record is given a number, and the files are placed in strict numerical order.

**3. Geographical Classification:** As the name implies, this classification is based on the geographical origin of a document or paper. This system is combined with one of the two systems already discussed. The classification can be town-wise, district-wise, state wise, country-wise and continent-wise.

**4. Subject Classification:** It is a method of classification in which all documents relating to a subject are brought together in one file, even though they may have come from different sources and from many different people.




*Fig.4.3 Online Files and Offline Files*



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**5. Chronological Classification:** Under this method various records are identified and arranged in strict date order and sometimes even according to the time of the day. It is a useful method for filing invoices and other vouchers associated with accounts.

### 4.2.2 Uses of Filing:

Records are stored under a suitable system of filing in order to achieve the following purposes and benefits.

- Ready reference
- Safety of records
- Documentary proof
- Prompt handling of correspondence
- Statutory requirements
- Barometer of progress
- Decision making and policy formulation
- Increased efficiency

## 4.3 Introduction - Indexing :

### Meaning:

Index is anything that "points out" or indicates. Indexing can be described as a method of providing indicators for a body of data or collection of records. The term ``indexing" should not be confused with the term "classification". Classification is the method of filing while indexing is basically the method used for making reference to the matter filed.

### Objectives of Indexing:

The principal objective of indexing is to assist filing so that filed papers are located easily and quickly whenever they are needed. Indexing thus adds to the efficiency of the filing method. It ensures speed and consequently economy results due to increased speed. The objective of indexing is best achieved where the right type of indexing system is chosen.






*Fig.4.4 File Indexing*

### Essentials of a Good system of Indexing:

In order to achieve its objectives, a good system of indexing should have the following essential features;



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*1. It should be simple.*

*2. It should be economical in operation.*

*3. It should allow for speed.*

*4. It should go well with the system of filing in the organization.*

*5. It should be flexible to allow for expansion when needed.*

### 4.3.1 Types of Indexing

Indexing may be classified into the following main categories, namely:

*(a) Page Index;*

*(b) Card Index and*

*(c) Visible Index.*

(a) **Page or Book Index:** This system is also known as alphabetical indexing as classification is based on the letters of the alphabet. One page or leaf is allotted for each letter of the alphabet, fitted with a tab showing the letter and quoting the relevant page numbers. The pages may be held in a loose form or in a bound book form. Each page consists of a list of all the correspondents whose names begin with the letter to which that page or sheet is allotted. For example, all names beginning with the letter 'A' like Anuradha, Aruna, Akila will be written on the page allocated to the letter 'A'. The folder number of correspondents relating to a particular person will appear against his/ her name. Page Index is divided into three forms

*(1) Bound Book Index*

*(2) Loose Leaf Book Index and*

*(3) Vowel Index.*

**i. Bound Book Index:** It is in the form of a bound book or register which is divided into alphabetical sections where the names of persons are entered. Each section has the leaves cut away at the right hand side so that the initial letters of all the sections are visible at a glance. The book index is very cheap and is a good long term record.

**ii. Loose leaf Book Index (or) Vertical Card Index:** Loose sheets are used for indexing and the fastened are metal rings or hinges or some other device which allows the pages to be taken out and also helps in insertion of additional pages. This type of index is also fitted with a lock.

**iii. Vowel Indexing:** In cases where the number of correspondents is very large the alphabetical indexing is further classified. The names of the correspondents are entered on one page or the other according to the letter with which his name begins and first vowel in his name. This sort of indexing is known as "Vowel Indexing". E.g. Ashika the first vowel in the name is "I". It will be classified under "Ai"

**(b) Card Index:** Under this method references are entered on the cards of uniform size. These cards bear the names, number of the files and other particulars to be indexed. Cards are arranged in either alphabetical or numerical order and are placed in drawers or boxes which may have a rod running from one ending to the other end for holding cards in their places.

**(c) Visible Index:** The major defect of card indexing is that a large number of cards cannot be seen at one glance. This defect is



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overcome by visible indexing under which a large number of cards are visible at one glance. Visible card index, strip index and wheel index are the systems of visible indexing.

**1. Visible Card Index:** Visible card index system has gained more popularity in recent years. It is based on the principle "look at the card, not for it". Visible card indexing can be used for retaining records such as accounts receivable, personal history of employees and specimen signatures of customers in a fairly permanent position for frequent reference. The speed in which the cards can be located and the necessary entries made, justifies the use and cost of visible card filing equipment.

**2. Strip Index:** It is a type of visible indexing which is used when the entries are limited to a few lines (names, addresses, etc.,) It consists of a frame into which strips of stiff paper can be fixed in any required order. Frames containing these strips may be either fixed on the wall or arranged on a rotary stand which can be turned round to look at any part of the index.

**3. Wheel Index:** It is an improvement over visible card index. Cards are arranged about the circumference of the wheel. A single wheel can hold as many as 1000 cards. Cards can be inserted into or taken out of the slits of the metal rod whenever needed. An entry can be made on the card by applying the brakes to keep the wheel fixed.

### 4.3.2 Selection of a Suitable Indexing System:

Every system of indexing has its own merits and demerits. Some methods are rigid while others are flexible and expensive. The installation of a suitable indexing system depends mainly on the following factors.

- The type and extent of information needed.
- The cost of equipment in each system.
- The cost of labour in each system.
- The space required for each system.
- The frequency of adding or deleting.

### 4.3.3 Advantages of Indexing:

**1. Easy Location:** The required papers and documents are located very easily with the help of their index. Referencing is not a painful process.

**2. Easy Cross-Referencing:** A good system of indexing also ensures easy cross-referencing and thus saves on time and botheration.

**3. Lower Costs:** The operating costs of records administration are also low due to improved efficiency of the records administration. Time is not wasted in locating the necessary documents or papers.



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### Points to be Remembered

- A document used by an organization to carry out its different tasks is referred to as a record.
- Types of Record : Correspondence, Account Department Records, Purchases and Sales Records, Personal Records, Administrative Records & Miscellaneous Records.
- Records Management is defined by Jane K. Crucible, "It refers to the activities designed to control the lifecycle of a record from its creation to its ultimate disposition".

**Functions of Records Management :**

- Creation of Records, Storage of Records, Retrieval of Record and Disposal of Record.
- Filing can be described as the core of records management.
- Organization of Filings : Centralized Filing and Decentralized Filing.
- Types of Filing : Horizontal or flat filing and vertical filing.
- Classification of Filing : Alphabetical, Numerical, Geographical, subject and chronological classification of filing.
- Indexing can be described as a method of providing indicators for a body of data or collection of records.
- Indexing may be classified into main categories. Such as,

  a. Page Index

  b. Card Index

  c. Visible Index

- Advantages of Indexing: Easy Location, Easy Cross – Referencing and Lower costs.

## Evaluation

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### PART – A

### OBJECTIVE TYPES:

**I. Choose the Correct Answer:** **(1 Mark)**

1. Records of employee attitude belong to the _____ type of Record.

   a. Accounts Department  b. Personal

   c. Administrative  d. Purchase and Sales  **Ans (b)**



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2. A modern business program that embraces filing and is improved by the design and review of business forms and records is known as _____

a. Indexing b. Filing

c. Record Keeping d. Records Management **Ans (d)**

3. The _____ stage which is concerned with preserving valuable documents and disposing the expired documents.

a. Disposal b. Storage

c. Creation d. Retrieval **Ans (a)**

4. _____ can be described as the core of Records Management.

a. Indexing b. Filing

c. Records d. Vowel indexing **Ans (b)**

5. _____ Filing is a very popular method of filing in large offices where number of subjects is large.

a. Horizontal b. Flat

c. Vertical d. Centralized. **Ans (c)**

6. There are _____ methods of classification of files.

a. 4 b. 3

c. 5 d. 6 **Ans (c)**

7. _____ can be described as a method of providing indicators for a body of data or collection of Records.

a. Records b. Indexing

c. Filing d. Record Management. **Ans (b)**

8. _____ index is not classified under page Index.

a. Bound Book b. Loose Leaf Book

c. Vowel d. Visible **Ans** (d)

9. Records Management refers to the activities designed to control the life cycle of a record from its creation to its ultimate disposition is defined by _____

a. Jane K Crucible b. G.R. Terry

c. Denyer d. Letting well and Robinson **Ans (a)**



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10. _____ is referred as a document used by an organization to carry out its different tasks.

a. Filing b. Record

c. Indexing d. Personal Record. **Ans (b)**

## PART – B

**II. Very Short Answers:** **( 3 Marks)**

1. What are the types of records ?
2. Define records management.
3. What is decentralized filing ?
4. What are the essential features of indexing ?
5. What is a visible card index?
6. What is meant by filing ?
7. Define the term filing.

## PART - C

**III. Short Answers:** **( 5 Marks)**

1. Explain the types of records
2. What are the differences between centralized and decentralized filing ?
3. What are the advantages of indexing ?
4. What are the types of filing ?

## PART - D

**IV. Essay Type Questions:** **(10 Marks)**

1. Elaborate the term records management.
2. Explain the types of indexing.



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ACTIVITY



**Teachers Activity:**

- Ask the students to file all their test papers and prepare an index of the same.
- Ask the students to submit the assignment on various filing systems and indexing methods followed in offices by referring to the net.

**Students Activity:**

- Download the materials regarding various filing and indexing systems followed in offices and submit the assignment on the same.

**Reference :**

1. *https://www.document-logistics.com*
2. *https://kullabs.com*
3. *https://myeglearning.com*

GLOSSARY

1. *Chronological : (of a record of events ) following the order in which they occurred.*
2. *Horizontal filing : A technique to store documents horizontally.*
3. *Alphabetical – based on the occurrence of the letters in the alphabet.*
4. *Retrieval – The process of getting something back from somewhere.*



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# 5 UNIT – 5

## OFFICE MANAGEMENT SOFTWARE

**Content:**

Introduction to Office Management Software -Various Functions of Office Management Software-Introduction to Cloud Computing-Activity based Working-Bring Your Own Device (BYOD) and its Concepts.

**Learning Objectives**

- To comprehend the students about the importance of Office Management Software.
- To acquire knowledge about Activity based working by using office tools.
- To understand the basic concepts related to own devices that can be used to office management.

### 5.1 Introduction

The most common software currently being used for office work is word processing software like Microsoft Word, spreadsheet software like Microsoft Excel, and presentation software like Microsoft PowerPoint.

### Office Tools

MS-PowerPoint:

Retail Cross-Platform presentation tool/ Lotus Freelance: proprietary software presentation tool. Google Slides: Freeware Cloud Based presentation tool. LibreOffice Impress: Open Source presentation tool.

Office Tools are a type of application software. They help the users to perform office-related tasks easily and efficiently. Therefore, these tools help to create, manage, and manipulate large amounts of data and documents. Moreover, they help create presentations, reports, databases, etc.

### Meaning of Office Management Software

Office management software gives us much-needed storage space. By using office management software to scan the existing business documents and store them on the desktop computers or in the cloud, we'll get rid of file cabinets and the stacks of paper that are taking up precious space in your facility.

### Management Software:

Management software is that which is designed to streamline and automate management processes in order to lessen the complexity. Many other projects and tasks, trying to encourage or facilitate team cooperation, collaboration and proper project reporting.

### 5.2 Various Functions of Office Management Software

### E-Office Management system in PHP (Hypertext Preprocessor)



*Fig.5.1 Office Management Software*

- Office management
- Employee manager
- Attendance system
- Leave application manager
- Payroll
- Accounts management
- Transactions
- Employee portal

## Key Benefits of Using Task Management Software

(i) Managing everything from a single place

(ii) Make task prioritization easier

(iii) Access data from anywhere time

(iv) Keep an eye across all tasks

(v) Boost your productivity

(vi) Make task delegation easy

(vii) Improve team collaboration

(viii) Track time spent on projects

## Advantages of Office Management Software

1. Collaboration
2. Sharing resources
3. Cost and time
4. Flexibility and automation
5. Report preparations

## Disadvantages of Office Management Software

1. Unnecessary investment
2. Difficult to adapt
3. Vulnerability
4. Added complexity
5. Software dependency






*5.2 Office Management Software*

### 5.2.1 Application of Office Management Software

### Top free software for small businesses

- **Wix** – Best free software for creating websites
- **Mailer lite** – Best free software for email marketing

- **Profit books** – Top free accounting software
- **Google docs** – Best free office suite
- **Canva** – Best free image editor
- **Buffer** – Top free social media manager
- **Calendly** – Best free tool for scheduling meetings
- **Hubspot** – Best free Customer Relationship Management (CRM) software
- **Slack** – Best free tool for team communication
- **Trello** – Free software for managing projects
- **Fresh desk** – Free helpdesk system
- **Xtensio** – Create and share beautiful documents

## Ten Best Software Tools for Small Businesses in 2021

1. The best accounting software – **Xero**
2. The best e-commerce software – **Shapify**
3. The best project management software - **Trello**
4. The best time tracking software – **Toggl**
5. The best online payment software – **Paypal**
6. The best email marketing software – **Mail chimp**
7. The best collaboration tools – **Slack**
8. The best document management software – **G-suite**
9. The best human resources / payroll software : **Gusto**
10. The best customer relationship management software – **Act**

## Most Popular Office Management Software Examples

a. Making sure no one's too hot or cold – **Comfy**

b. Communicating and sharing information – **Slack**

c. Managing task and monitoring projects – **Trello**

d. Worry-free video conferencing – **Zoom**







*Fig.5.3 Popular Office Management Software*

Office managers should be very experienced with Microsoft office. It's great to mention their level of proficiency. They acquired very good knowledge in each program, reference, and also any other related software skills that they have.

**Common types of Software used in Business are**

1. Word processing programs
2. Accounts software
3. Billing software
4. Payroll software
5. Database software
6. Asset management software
7. Desktop publishing software

**Software that we use Daily**

- Microsoft office
- Mozilla Firefox
- Google apps
- Adobe Photoshop
- Adobe acrobat professional

## 5.3 Introduction-Cloud Computing

### 5.3.1 Meaning

Cloud Computing is the delivery of computing services such as servers, storage, databases, networking, software, analytics, intelligence, and more, over the Cloud (Internet). Cloud Computing provides an alternative to the on-premises datacenter.

**Purpose of Cloud Computing**

Cloud computing makes data backup, disaster recovery and business continuity easier and less expensive. The data can be mirrored at multiple redundant sites on the cloud provider's network.

**Types of Cloud Computing**

Cloud computing services fall into 3 main categories: Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS). Functions as a Service (FaaS) is a relatively new Cloud service model. These are sometimes called the Cloud computing stack because they build on top of one another.

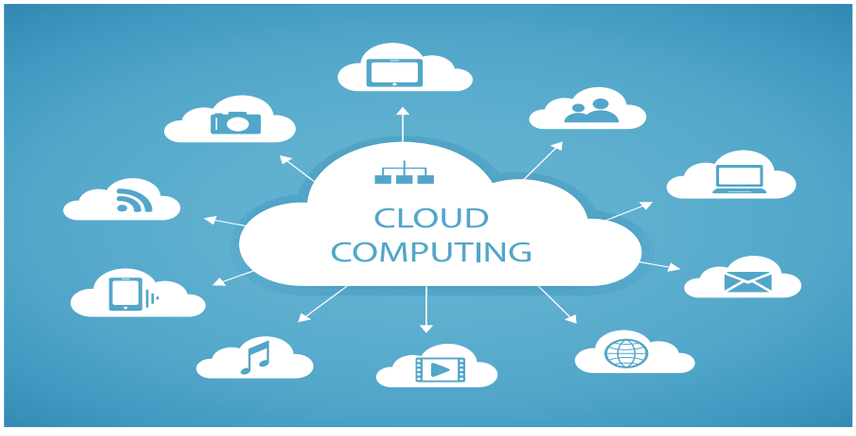



*Fig.5.4 Cloud Computing*

**There are basically 5 essential characteristics of Cloud Computing.**

- On-demand self-services
- Broad network access
- Rapid elasticity
- Resource pooling
- Measured service

**Challenges of Cloud Computing**

- Security issues
- Cost management and containment
- Lack of resources/expertise
- Governance/Control
- Compliance
- Managing multiple clouds
- Performance
- Building a private cloud

**Components of Cloud Computers** are 1) Client Infrastructure, 2) Application, 3) Service, 4) Runtime Cloud, 5) Storage, 6) Infrastructure, 7) Management, 8) Security, and 9) Internet. Cloud computing makes a complete Cloud computing system simpler.

**Future of Cloud Computing**

Cloud computing is powerful and expansive and will continue to grow in the future and provide many benefits. Cloud computing is extremely cost-effective and companies can use it for their growth. The future of cloud computing is bright and will provide benefits to both the host and the customer.

**5.4 Activity Based Working:**

Activity-based working is a work style. It allows employees to choose from a variety of settings according to the nature of what they are doing, combined with a workplace experience that empowers them to use those spaces throughout the day.

The concept of activity-based working (ABW) revolves around the idea of giving people the possibility to do their work tasks in a setting that is fully optimized to do that specific activity. Examples of such a setting are silent zones, collaboration zones, learning zones, social zones, etc.




*Fig.5.5 Activity Based Working*

### Need for Activity Based Work

Activity-based office design empowers employees and is more conducive to creativity and collaboration. It also makes it easier to encourage employees to come into the office a few times a week, rather than every day

### Activity Based Office Design

The activity-based workspace or workplace (ABW, also known as activity-based working) is one that moves away from traditional assigned seating and empowers employees. This is done by giving them the necessary tools and spaces to direct their own work.

## 5.5 Bring Your Own Device (BYOD) :

Bring your own device (BYOD) refers to the trend of employees using personal devices to connect to their organizational networks and access work-related.

What does "Bring Your Own Device" mean? "Bring Your Own Device," or "BYOD" for short, refers to the practice of using personal electronic devices for professional purposes.

There are some key advantages to operating a BYOD strategy, including increased employee satisfaction (they can work more flexibly), cost savings (reduced hardware spend, software licensing and device maintenance) plus productivity gains (employees are happier, more comfortable and often work faster on their own).

Bring your own device refers to employees bringing personal devices such as laptops, smartphones or tablets to the workplace. BYOD may also refer to employees using such devices to connect to work-related systems from out of the workplace.

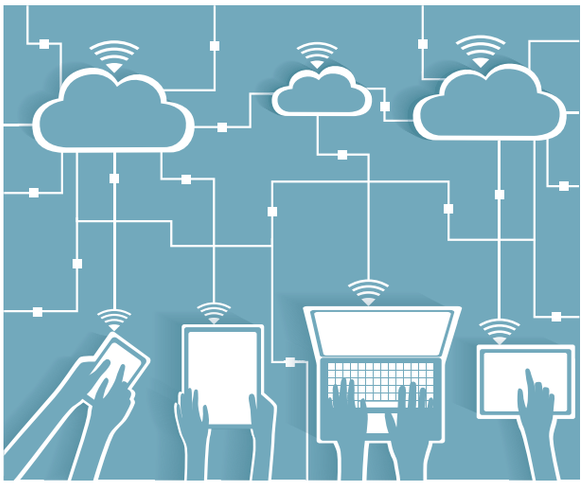


*Fig.5.6 Bring Your Own Device*

### BYOD Policy

BYOD (bring your own device) is a policy that allows employees in an organization to use their personally owned devices for work-related activities. Those activities include tasks such as accessing emails, connecting to the corporate network, and accessing corporate apps and data.

### Importance of BYOD

Users can take advantage of devices they already own, and the enterprise saves on cost. There are less security concerns if users operate with their own devices. The organization does not have to pay for a replacement if a device is lost or stolen.

Employee satisfaction is another reason employers adopt BYOD policies. Employees often have specific preferences

regarding what phones and computers they like to use and can use most efficiently, so allowing your workers to use their preferred devices can make them happier and more efficient while working.

With the BYOD approach, companies can save on costs while increasing employee satisfaction and productivity. The company can provide predictable stipends for user equipment and IT only need focus on providing a secure access method and ecosystem.

### Top 10 Companies Supporting Bring-Your-Own-Device Culture

- **Air Watch:** Air Watch is a VMware company, so you would imagine it has all the virtualization tools necessary to enable BYOD in a variety of environments
- Qlik
- Parallels
- Riverbed Technology
- Trustonic
- Wombat Security Technologies
- 3CX
- Last Pass

### How to Manage and Monitor BYOD (Bring Your Own Device)

Step 1: Understand the Benefits of BYOD. ...

Step 2: Consider BYOD Risks. ...

Step 3: Determine Which Employees Will Be Permitted to Use BYOD and What Type of Use Will Be Permitted

Step 4: Establish a BYOD Policy

Step 5: Provide BYOD Training to Employees and Supervisors

**Security of BYOD**

Make passwords compulsory on all BYOD devices

- Create a blacklist of prohibited applications
- Restrict data access
- Invest in reliable security solutions for devices
- Backing up device data
- Educate your staff about security

## Points to be Remembered

### Office Tools:

**MS-PowerPoint:** Retail Cross-Platform presentation tool. **Lotus Freelance:** proprietary software presentation tool. **Google Slides**: Freeware Cloud Based presentation tool. **Libreoffice Impress:** Open Source presentation tool.

### Advantages of Office Management Software:

- Collaboration
- Sharing resources
- Cost and time
- Flexibility and automation
- Report preparations

### The Most Popular Office Management Software Examples:

- Making sure no one's too hot or cold – Comfy
- Communicating and sharing information – Slack
- Managing task and monitoring projects – Trello
- Worry-free video conferencing – Zoom

### Software that we use Daily:

- Microsoft office
- Mozilla Firefox
- Google apps
- Adobe Photoshop
- Adobe acrobat professional

### Challenges of Cloud Computing:

- Security issues.
- Cost management and containment.
- Lack of resources/expertise.
- Governance/Control.
- Compliance.
- Managing multiple clouds.
- Performance.
- Building a private cloud.

### Activity Based working.

Activity-based working is a work style that allows employees to choose from a variety of settings according to the nature of what they are doing, combined with a workplace experience that empowers them to use those spaces throughout the day.

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Step 1: Understand the benefits of BYOD.

Step 2: Consider BYOD risks.

Step 3: Determine which employees will be permitted to use BYOD and what type of use will be permitted.

Step 4: Establish a BYOD policy.

Step 5: Provide BYOD training to employees and supervisors.

## Evaluation

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### PART - A

**OBJECTIVE TYPES:**

**Choose the Correct Answer:** **(1 Mark)**

1. Office Tools are a type of _____

   a. Application Software  b. Office related Tasks

   c. Microsoft Office  d. Database Management System.  **Ans (a)**

2. Office Management Software Gives You Much-Needed _____

   a. Storage Space  b. Computer Space

   c. Physical Space  d. Software Space  **Ans (a)**

3. _____ is the Best free software for creating websites.

   a. Mailer Lite  b. Profit Books

   c. Google Docs  d. Wix  **Ans (d)**

4. _____ is the free software for managing projects.

   a. Canva  b. Xtensio

   c. Trello  d. Fresh Desk  **Ans (c)**

5. The best collaboration tools _____.

   a. Merge  b. Slack

   c. Sleek  d. Slim  **Ans (b)**

6. Office managers should be very experienced with _____

a. Over all Working b. Microsoft Office

c. Books of Accounts d. Computer **Ans (b)**

7. Cloud Computing provides an alternative to the on-premises_____.

a. Data Center b. Data Software

c. Data Systems d. Clouding **Ans (a)**

8. _____ is the component of cloud computers.

a. Infrastructure b. Structure

c. Inbuilt Structure d. Hardware **Ans (a)**

9. ABW stands for _____.

a. Array Bounds Write b. All Being Well

c. Alternatives for Battered d. Activity Based Workplace **Ans (d)**

10. BYOD Stands for _____.

a. Bring your own desk b. Bring Your own digital

c. Bring your own device d. Bring your own Diary **Ans (c)**

## PART - B

**II. Very Short Answers:** **(3 Marks)**

1. What is meant by Office tools?
2. What is management software?
3. Give any two examples for office management software.
4. Write a note on cloud computing.
5. List out the types of cloud computing.
6. What is ABW?
7. What is BYOD?
8. Give a note on BYOD policy.

## PART - C

**III. Short Answers:** **( 5 Marks)**

1. What are the key benefits of using task management software?
2. State the advantages of office management software.

3. State the free software for small businesses.
4. What are the characteristics of cloud computing?
5. Explain the components of cloud computers?
6. Are there any challenges for cloud computing? Explain.
7. Discuss the importance of BYOD.

## PART - D

**IV. Essay Type Questions:** **(10 Marks)**

1. Explain Office management software elaborately.
2. Explain the advantages and disadvantages of cloud computing.
3. Explain in detail about BYOD.



**ACTIVITY**

**Teachers Activity:**

1. Field visit can be made to nearby banks/software companies along with students.
2. IT industries visit can be planned to explain about BYOD, Cloud computing and Task management software.

**Students Activity:**

1. Students Can prepare assignments on "Cloud computing" topic.
2. Charts can be prepared and displayed in class room for "Office management software".

**References:**


1. *https://www.productdossier.com*
2. *https://www.taskopad.com*

## GLOSSARY

1. *Management Software: It is that which is designed to streamline and automate management process.*

2. *PHP: Hypertext preprocessor.*

3. *ABW: Activity based working.*

4. *Cloud Computing: It makes data backup, disaster, recovery and business continuity easier.*

5. *BYOD: Bring your own device*

# 6 UNIT – 6

## OFFICE SYSTEMS AND PROCEDURES

**Content:**

Introduction - Office Systems and Procedures - Meaning - Definition - Principles of Office Systems and Procedures - Importance of Office Systems and Procedures - Distinguish between Office Systems and Procedures - Introduction - Office Manuals - Meaning - Definition - Types of Office Manuals - Steps in Preparation and Writing of Office Manuals - Revision and Distribution of Office Manuals

### Learning Objectives

- To study the meaning and definition of office systems and procedures
- To understand the principles of office systems and procedures.
- To know the importance of office systems and procedures
- To gain knowledge about office manuals.

### 6.1 Introduction -

A good office system and procedures shall bring in a lot of laurels to an organisation. An efficient way of maintaining office systems provides a sound environment and peaceful atmosphere inside an office, which results in a controlled working atmosphere. Similarly office procedures are considered to be very important for an efficient office system. So office systems and procedures are like double barrel guns, unless we have an effective and dynamic office system and procedures it is very difficult to achieve the organisation goals and objectives successfully.

Therefore, each organisation shall have well equipped and technology supported office systems and procedures so as to produce good results for their day to day routine business activities.




*Fig.6.1 Office Procedures*

### 6.1.1 Meaning:

All the business undertakings, establishments and other organisations shall have clear vision and well defined objectives. These objectives can be



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attained only when it is approached in an orderly manner. Any office systems and procedures of a business establishment comprising various other sub-systems.

Management experts say that each business has a number of subsystems like production control system, marketing system, office system, purchase system, finance system etc., thus the office system itself they call it as a sub-system of the whole business.

### 6.1.2 Definition:

According to **Milton Reitzfeld** "Success in business, government and non-profit ventures is determined by the maximum utilisation of people, information and resources. Such utilities can be achieved only through the development, installation and supervision of appropriate systems and procedure".

### 6.1.3 Principles of Office Systems and Procedures:

At present, modern offices are functioning with their own systems. Moreover the systems are not the same in all offices. They differ with the type and size of business. Whatever system is followed, it should ensure maximum efficiency. Following are some of the important principles of office systems and procedures.

(i) Good flow of work

(ii) Repetition of work should be avoided.

(iii) Required staff should be maintained.

(iv) Unnecessary paper can be minimised and writing work can be avoided.

(v) Best use of specialisation should be made.

(vi) Principles of management by exception should be used.

(vii) Unnecessary checking should be avoided.

(viii) Best use of Machine should be provided.

(ix) The overall system should be simple and easy to follow.



*Fig.6.2 Office Systems and Procedures*



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### 6.1.4 Importance of Office Systems and Procedures:

(i) In the system concept an uniform procedure is followed for similar transactions. So it helps to reduce overall operations cost.

(ii) The cost of conducting routine office work is also reduced.

(iii) Responsibility can be easily assigned.

(iv) Smooth functioning of office systems and procedures helps to reduce delay in work.

(v) To maintain better coordination between departments.

(vi) Helps management to provide training to the staff.

(vii) To improve overall efficiency of the organisation.

(viii) Helps to have flow of information from top to bottom of the organisation.

### 6.1.5 Distinguish between Office Systems and Procedures:

Office work is composed of a pattern of office system, procedure and methods. The word office system has been used in different senses. In the ordinary sense of the term office system means a particular set of work arranged in sequence. It gives a complete picture of personnel, forms, records, machines and equipment involved in completing all the work of the office routine.

## 6.2 Introduction - Office Manuals:

An office manual is a guidebook, printed and bound and/or in digital format, which provides information regarding the organisational policies and procedures that are adopted within the office. It contains instructions for standard practices relating to the organisation, the office, workplace, the work itself and about the employees and workers.

The importance of office manuals is to save time, create standard guidelines for everyone in the organisation, and provide a solid foundation of knowledge. Manuals can be used for policies, organisational means, departments, systems and procedures, or any combination of the above.

**Difference between Office Systems and Procedures**

| Office Systems | Office procedures |
|---|---|
| 1.It is a plan of work | 1. It denotes the steps comprising a plan of work. |
| 2. It states what work is to be done. | 2. It shows how the work is done. |
| 3. It denotes a broad division of work. | 3. It denotes a small part of each division. |
| 4. A system is prepared once for all. | 4. Routines are used again and again. |
| 5.A system includes number of routines | 5. A routine does not include a system because it is a guide to work. |



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*Fig.6.3 Office Manuals*

### 6.2.1 Meaning:

An office manual is a kind of handbook which contains the standard practices as well as the organisational policies to give effect to those practices meant for an office. It is a guidebook for the members of the staff and employees. It sets out the guidelines along which the jobs have to be carried out and finished. It is a constant source of information available to all the staff members or employees of an organisation.

### 6.2.2 Definition:

According to George R. Terry, an office manual has been defined as "a document disclosing the information about an organisation, its set up, conditions of employment and the established system, routine, procedures, methods, standards, rules and regulations of an office operation."

### 6.2.3 Types of Office Manuals:

Types of office manual are mentioned as follows:

a. Policy Manual

b. Organisation Manual

c. Rules and Regulations Manual

d. Departmental Manual

### 6.2.4 Steps in Preparation and Writing of Office Manuals:

The preparation and/or revision of an office manual is the responsibility of an individual executive in a small size organisation. Whereas, if it is a bigger organisation a committee is formed, to prepare and/or revise the office manual. This committee consists of heads of various departments. It is expected that update information and instructions should be given in the office manual.

A standard and an orderly procedure should be followed while preparing office manuals. If so, the completed manual should have clear, accurate and comprehensive information. The preparation work should be completed within reasonable time.

The following steps are taken while preparing an office manual:

(i) Assigning an individual or formation of a committee according to the nature of organisation.



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(ii) To prepare a list of subjects to be covered in the preparation of the office manual.

(iii) Receiving of ideas and suggestions from the functional departmental heads and supervisors.

(iv) Verification of ideas and suggestions whether it is relevant or not.

(v) Classification and arrangement of subject-wise information.

(vi) Prepare a Draft Manual (on trial basis)

(vii) Revision of the Draft Manual, wherever correction or amendment is required.

(viii) Submission for approval of Top level management.

(ix) Actual Production of Final manual

(x) Distribution of Office manual based on need basis.

### 6.2.5 Revision and Distribution of Office Manuals:

It is very much necessary to update your company or office manuals with current affairs, expectations from employees, such as attendance, safety rules, legal compliances with employment laws, facilities management and dress codes etc., Policies are guidelines that define company rules and procedures and the consequences are not following them. Policy manuals should be regularly reviewed and updated when necessary.

Law changes, new issues arise, and the manual must be updated and kept current. And if your handbook is in multiple languages, each version needs to be updated as well. For this reason, a strategic approach to revising your policy manual means taking a fresh look at each and every policy to determine that they are

(i) Accurate

(ii) Up to-date



*Fig.6.4 Department wise Office Manuals*



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(iii) In compliance

(iv) Complete

(v) Understandable

Office manuals are useless unless they are properly distributed amongst various employees for whom they are meant. It is the employees or staff responsibility to adhere to the rules and regulations mentioned in the office manuals. Organisation manuals may be distributed only at the top level management and in rare cases amongst those with lesser responsibility. The departmental manuals should be distributed to various other departments and employees as they are directly affected by them.

### Points to be Remembered

- Systems and Procedures: It is defined as "Success in business, government and non-profit ventures is determined by the maximum utilisation of people, information and resources. Such utilities can be achieved only through the development, installation and supervision of appropriate systems and procedures.
- Office Manuals : An office manual is a kind of handbook which contains the standard practices as well as the organisational policies to give effort to those practices for an office.

## Evaluation

### PART – A

**OBJECTIVE TYPES :**

**1. Choose the Correct Answer :** **(1 Mark)**

1. A good office _____ shall bring in lot of laurels to an organisation.

   a. Atmosphere  b. Systems and Procedures

   c. Policy Manual  d. Practice Manual  **Ans. (b)**

2. Office systems and Procedures of a business establishments comprising of various _____ .

   a. Subsystems  b. Equipments

   c. Methods  d. Services  **Ans. (a)**



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3. Modern offices are functioning with its _____

a. Own Policy b. Own Structure

c. Own Systems d. Own Rules **Ans (c)**

4. Smooth functioning of office systems and procedures helps to reduce _____ .

a. Delay in Work (b) Stress

c. Repeated Work d. Overlapping of Work **Ans (a)**

5. An office manual is a _____

a. Guide Book b. Report

C. Statement d. Diagram **Ans (a)**

6. An office manual is a _____ disclosing the information about an organisation .

(a) Report (b) statement

(c) Document (d) chart **Ans (c)**

7. The completed manual should have clear, accurate and comprehensive _____ .

a. Information b. Communication

c. Forms d. Systems **Ans (a)**

8. _____ should be regularly reviewed and updated when necessary.

a Office Manual b. Practice Manual

c. Organisation Manual d. Policy Manual **Ans (d)**

9. _____ may be distributed only at the top level management.

a Department Manual b. Organisations Manual

c. Policy Manual d. Office Manual **Ans. (b)**

10. _____ is composed of a pattern of office system, procedure and methods

a Administration Work b. Office Work

c. Organisation Work d. Group Work **Ans. (b)**



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## PART – B

**II. Very Short Answers:** **( 3 Marks)**

1. What is meant by the office system and procedures?
2. Define the term office system and procedures.
3. Write a short note on office manual.
4. Define the term office manual.
5. What are the types of office manuals?

## PART – C

**III. Short Answers:** **( 5 Marks)**

1. What is the importance of office systems and procedures?
2. Distinguish between office systems and procedures.
3. Explain Revision and distributions of office manuals.

## PART – D

**IV. Essay type questions :** **(10 Marks)**

1. Explain the Principles of office systems and procedures.
2. What are the steps in preparation and writing of office manuals?




**Teachers Activity:**

- Can show a chart regarding the formation of procedure. Types of manual.
- PowerPoint Presentation on office systems and procedures can be made.

**Students Activity:**

- Can give assignments on office systems, procedures and manuals.
- Collect various office manuals and submit



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**References :**


1. *Pressurearticles.com// office systems and office*
2. *Office manual : Your article library.*





1. *Laurels : An award or praise on recognition of an achievement.*
2. *Systems : Several procedures integrated together.*
3. *Procedures : Planned sequence of operations.*
4. *Manual : A Book giving instructions or information.*



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# Unit – 7

## DATABASE MANAGEMENT SYSTEM(DBMS)

**Content:**

Introduction – Database Management System – Meaning – Definition – Features of DBMS – Concept of DBMS – Steps to Create a Table using Table Wizard – Table Data View Dialog Box - Perform Operation on Table – Retrieve Data using Query – Grouping of Data. Structured Query Language (SQL) – Create Forms and Reports using Wizard –Forms in Base.

**Learning Objectives**

- Enable the students to understand the concept of DBMS.
- To know about the steps to create a table using table wizard and to retrieve data using query.
- To know about Structured Query Languages ( SQL).
- To analyze and create forms and reports using wizard.

### 7.1 Introduction:

A Database Management System (DBMS) is a software tool to organize (create, retrieve, update and manage) data in a database.

A database management system is a computerized record – keeping system. It is a container for collection of computerized data files.

### 7.1.1. Meaning :

A database is a collection of logically related data items stored in an organized manner. According to the requirements of the user, the datas being stored in a database can be added, modified, deleted or displayed. The software that is used to create, update and retrieve date is known as Database Management System (DBMS).

### 7.1.2 Definition:

Database defined, A Database is an organized collection of structured information or data, typically stored electronically in a computer system. A database is usually controlled by a Database Management System (DBMS).

### 7.1.3 Features of DBMS:

- Controls who can access and edit the data
- Create backups
- Allows data to be shared by many users
- Provides user interfaces to work with the data
- Provides high level of security.
- Permanent storage of data.

### 7.1.4 Concept of DBMS:

A Database Management System (DBMS) is a software package designed to define, manipulate, retrieve and manage data in a database.

A DBMS generally manipulates the data itself, the data format, field names, record structure and file structure. It also defines rules to validate and manipulate this data.



Data Base Application



*Fig.7.1 Database Management System*

### Concept and examples of Relational Database :

The Relational Database Model was proposed in 1970 by E.F. Codol. Relational database model is the most common type of database model. The data elements are stored in different tables made up of rows and columns.

Eg. Oracle, MYSQL, IBM, etc.,

**Field** : A field is the smallest entity in the database.

**Record:** A collection of fields makes a record.

**Table:** A collection of records makes a table.

**Database:** Collection of tables make a database.

### Primary Key:

A primary key is a column or a group of columns that uniquely identifies the rows in that table.

| Register No. | Name of the Student | DOB | Marks |
|---|---|---|---|
| ^ ←Primary Key | | | |

### Composite Primary Key :

A primary key having two or more attributes is called composite primary key. It is a combination of two or more columns.

| Register No. | Name of the Student | DOB | Marks |
|---|---|---|---|
| ←----------> Composite Primary Key | | | |

### Foreign Key :

A foreign key is the one that is used to link two tables together via the primary key.

| Register No. | Name of the Student | DOB | Marks |
|---|---|---|---|
| PRIMARY KEY | | | |

| Register No. | Group | Student / STD |
|---|---|---|
| Foreign Key | | |

### DataBase Management System (DBMS) Software:

One of the DBMS software Libre Office Base.

### Introduction :

Libreoffice Base is a free and open source DBMS. It can be downloaded from www.libreoffice.org and is available for both Linux and windows operating systems. Data has to be stored in an organized manner using a DBMS. Also, the data being stored can be a text, number, date or in any other form. Steps to create the database are as follows:

1. Start the Libreoffice Base as per the standard process of starting the application in Windows or Linux.
2. In windows, click start. In Libreoffice double/click on the Libreoffice icon on the desktop (or) select base DataBase option form the bottom left pane.
3. A Database wizard opens. It allows you to create a new database or open an existing database.
4. Click create a new database ratio button.
5. Gives the option to register our database with Libre office.org.
6. Open option enables the user to edit the database.
7. Click the Finish button to complete the database creation process.
8. The Save As dialog box appears.
9. Browse for the drive and folder where you want to store your database.
10. Type the name in the file name text box.
11. Click the Save button.

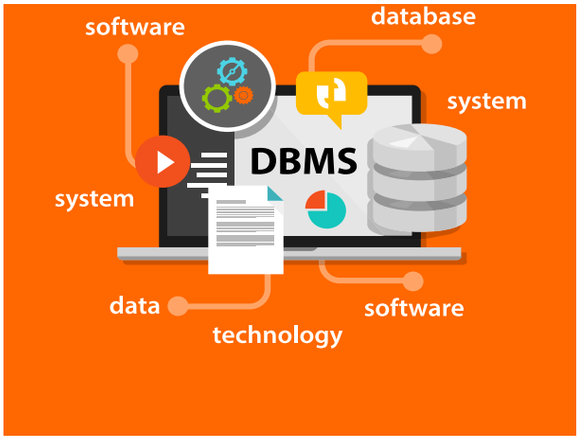



*Fig.7.2 Database Management Software*

## 7.2 Create a Table using Table Wizard:

### 7.2.1 Steps to create a table using table wizard

Once the database is created, we can start working with objects of the database. First and foremost is the creation of the table.

In Libreoffice Base, a table can be created using a wizard or using the design View.

To create a table at the time of creating a database in database wizard, select the radio button with option "create tables using the table wizard", then click on the Finish Button.

In Base, ready-made tables are available.

- Step 1 - Click the sample tables List Box and select any one table.
- Step 2 - Click on Next Button
- Step 3 - Click on Next Button
- Step 4 - Click on Next Button – to complete the process of creating a table using wizard.
- By default the "Insert data immediately" option is selected.
- Step 5 - Click on the Finish Button.

### Data Types

Data types are used to identify which type of data (value) we are going to store in the database.

Data types are broadly classified into five categories are listed below :

1. Numeric Types (0 to 9)
2. Alphanumeric Types (a/A to z / Z & 0 to 9)
3. Binary types (storing photos, music files, etc.,)
4. Date & Time (DD/MM/YYYY) & (HH:MM)
5. Other variable types.

### Option to Set Primary Key :

Once the take is created, it will ask the user to set a primary key. The user can select the appropriate option to set the primary key or leave the table without a primary key.

### 7.2.2 Table Data View Dialog Box :

Table data view dialog box enables the user to define the layout of the table and insert the data into the appropriate fields of the table.

### 7.3 Perform Operations on Table :

### Inserting data in the table.

To insert the data in the table, select the table and double click on it. The table will open in the Datasheet view in which data can be inserted.

### Edit Records in the Table :

To edit the data either click on the edit icon or double click on the data in the cell of a label and modifications can be done.

### Deleting Records from the table :

To remove the data from the table follow the steps :

Select the data – right click on selected data – select delete option.

### Sorting Data :

Sorting means to arrange the data in either ascending order or descending order. Select the columns, then click on sort buttons. The data will be displayed accordingly.

### Referential Integrity :

Referential integrity used to link between two or more tables with the help of primary key and foreign key constraints.

Creating and Editing Relationships between Tables :

A relationship refers to an association or connection between two or more tables. When the user relates two tables, then the same data need not be entered in separate tables.

There are three types of relationships which can be created in tables.

1. One to One
2. One to many or many to one
3. Many to Many

### One to one relation :

In this relationship, both the tables must have a primary key column.

| Register No. | Name of the Student | DOB | Marks |
|---|---|---|---|
| PRIMARY KEY | | | |



| Register No. | Group | Student / STD |
|---|---|---|
| PrimaryKey | | |

### One to Many or Many to one Relation :

In relational databases, one – to – many relationships exist when one row in table A may be linked with many rows in table B, but one row in B is linked to only one row in table A.

In this relationship, one of the table must have Primary Key column.

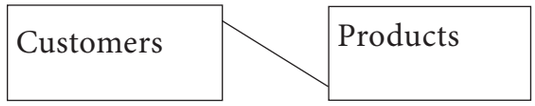
| Table A | | Table B |
|---|---|---|
| | | Record |
| Record | <—---> | |
| | <—---> | Record |
| | <—---> | |
| | | Record |

### Many to Many relationship :

In many to many relationship no table has the primary key column.

A many to many relationship occurs when multiple records in a table are associated with multiple records in another table.

Eg. A Many – to – Many relationships exist between customers and products.




Customers can purchase various products and products can be purchased by many customers.

## 7.4 Retrieve Data using Query

As the name suggests, query is to collect specific information from the pool of data.

A query is one of the most important features of any DBMS. Using a query, we can retrieve and display data from one or more tables in a database.

A Query can be created in three ways.

1. Using a Wizard
2. In design View
3. In SQT View

**Steps :**

1. In the Database Design Window, click the queries button.
2. In the Tasks Area, click on use wizard to create a query option.
3. Select fields from the respective tables.
4. From the list box, select the event name field.
5. Click on the next button that will display the screen to select the storing order.
6. To set the search conditions or the criteria on the basis of which records will be filtered from the table.
7. Select field from Fields drop down list, is equal to from condition,
8. Steps 4,5,6 given in the steps pane deal with tasks like summarizing and performing numerical calculations.
9. To give an alias name i.e. the column header name will be displayed when we run the query.
10. Displays the entire overview of the query
11. Click on the finish button.
12. Creation of query using design View :

This is a more flexible method to create a Query from either a single or a multiple table of a database.

1. Click the Queries icon on the objects pane in the Database window.
2. Click create Query in design view… icon in the tasks Pane. The Query Design window appears.
3. Click on the Event table to be used in the Query and then click on Add button.
4. Similarly add table to tables Pane of The Query Design Window.
5. Click the close button in the ADD Table or Query dialog box to close it.
6. Next step is to select the fields.
7. In the grid, there is a row titled Alias. As mentioned before, it can be used to display meaning names in the output.
8. By default, the data that is displayed as a result of the query is not sorted. To sort the records in either ascending or descending orders of a particular field, the sort row is given in the grid.
9. Once the query is designed, click Run Query Button on the toolbar or press F5 key.
10. Click on save button to save the query.
11. By default, the query name will be displayed. Type a different name if required. Click on the OK button to save the query.

### 7.4.1 Structure and Query language (SQL):

SQL stands for Structured Query Language. It is used for storing and managing data in Relational Database Management Systems (RDMS). It is a standard language for Relational database System. It enables a user to create, read, update and delete relational databases and tables.

SQL comprises both data definition and data manipulation languages. Using the data definition properties of SQL, one can design and modify database scheme, whereas data manipulation properties allow SQL to store and retrieve data from a database.

SQL uses the following set of commands to define a database.

**a. CREATE**

Create new databases, tables and views from RDMS.

**Syntax :**

Create database students record

Create table article

Create view for – students

**b. DROP**

Drops commands, tables and databases from RDMS.

Syntax : Drop database students record

Drop Table article.

**c. ALTER:**

Modifies database

Syntax : Alter table article add subject varchar & Datetime

**A SELECT :** Statement retrieves zero or more rows from one or more database tables or database views. In most applications, select is the most commonly used Data Manipulation Language (DML) command.

**The SELECT**

Statement has many optional clauses :

**WHERE** specifies which rows to retrieve

**Order by** specified an order in which to return the rows.

To retrieve all the columns in a table.

The syntax is SELECT from < TableName > ;

In order to execute queries click on the Queries option available on the left side under the database section, click create query in SQL view.

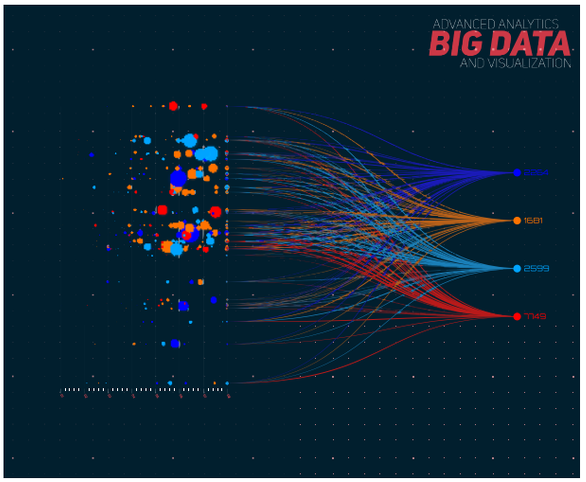



*Fig.7.3 Data Sorting*

### 7.4.2 Grouping of Data :

To display the records containing the same type of values “WHERE” clause can be used with the select SQL command.

Ex. : To get details about the list of students whose favorite color is blue

Syntax used : Select from S Details Where color = 'Blue';

## 7.5 Create Forms and Reports Using Wizard :

Libreoffice base provides the form & reports feature for data entry purposes.

Both reports and forms are considered as objects of the database and are present in the database pane of the libreoffice Base user interface.

### 7.5.1. Forms in Base :

A form is an object of the database that has a user-friendly interface where data can be entered and seen in an attractive and easy to read format.

### 7.5.2 Creating a Form Using Wizard :

This is the simplest way to create a form.

Steps to create form using form wizard

**Step 1 :** Open the Database created in Libreoffice and click the form icon on the database pane.

**Step 2 :** To select the tables or queries for which the form has to be created,

**Step 3 :** After selecting the table, all the fields of the table will be listed in the available fields list Box.'

**Step 4 :** To appear all the fields in the form, shift all the fields of table form available fields list box to fields in the form list box using >> button.

Click on the next button to move forward.

**Step 5 :** To apply styles to the form being created

**Step 6 :** Click the next button to set the name of the form.

**Step 7 :** Click the Finish button.

**Managing a Form :**

To manage a form click on the forms object in the Database pane and select the form from the forms pane.

Use the forms toolbar to open, edit, enter or remove data, to modify data, to change label background, to search record and to insert and delete the data in forms.

### 7.5.3. Steps to Create REPORT using Wizards :

Report helps to present information from the database in an easy to read, visually printable format.

Libreoffice Base makes it easy to create and customize a report using data from the database.

To create Reports using wizard is the recommended method for quickly and easily creating a report.

**STEPS :**

**Step 1:** From the database pane view select reports.

**Step 2:** Task view will appear from that click "Use wizard to create Report" options.

**Step 3:** In this step, select the tables' fields

that are to be displayed in the report.

Eg. From the 'student record' Database, choose fields in reports.

Reg. No./ Name of the student / DOB

**Step 4 :** Click the next button and the report generates labels for each field.

**Step 5 :** A Report can group the results by one or more fields

Eg. : Reg no:, Name of the student:, and Date of Birth:

**Step 6 :** In this step, choose the layout for the data & the headers and footers of the report.

**Step 7 :** Here we specify the 'Title' and the 'Type' of the report

**Step 8 :** Click "Create Report Now" option

**Step 9:** Click the 'finish' button.

**Points to be Remembered**

- A DBMS is a software tool.
- A database is a collection of data in an organized manner.
- A Database is usually controlled by a database management system.
- Data in the database can be grouped or segregated using primary, composite primary and Foreign Keys.
- Libreoffice Base is one of the DBMS software.
- SQL is a standard language for storing, retrieving and managing data in a database.

## Evaluation

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### PART – A

**OBJECTIVE TYPES:**

**I Choose the Correct Answer** **(1 Mark)**

1. DBMS stand for _____

a. Database Management System
b. Data Building Master System
c. Data Bundle Management System
d. Databank Management Services. **Ans (a)**

2. A Database is Collection of _____

a. Unorganized Data b. Logically Related Data

c. Irrelevant Data d. Queries Ans (b)

3. The relational Database Model was proposed in _____

a. 1980 b. 1975

c. 1970 d. 1972 **Ans (c)**

4. A collection of _____ make a table

a. Field b. Table

C. Database d. Record **Ans (a)**

5. _____ key is uniquely identified the rows in a table

a. Composite Primary Key b. Foreign Key

c. Primary key d. Composite Key **Ans ( c)**

6. Which one is the DBMS software from the following?

a. Linux b. Windows

c. Libreoffice Base d. Mac **Ans (c )**

7. _____ is the recommended method to quickly and easily create a report.

a. Design View b. Wizard

c. SQL View d. Table View **Ans ( b)**

8. _____ can present data in the database in an attractive and easy to read format.

a. Forms b. Report

c. Table d. Wizard **Ans ( a)**

9. _____ key is used to link two tables together via theh primary key.

a. Primary Key b. Composite Key

c. Foreign Key d. Composite Primary Key **Ans ( c)**

10. _____ Types of relationships in creation of table.

a. 3 b. 4

c. 2 d. 5 **Ans ( a)**

## PART – B

**II. Very Short Answers:** **(3 Marks)**

1. Define DBMS.
2. What is the primary key?
3. Classify data types in database?
4. What are the types of relationships in tables?
5. What is a Query ?

## PART – C

**III. Short Answers:** **(5Marks)**

1. What are the features of DBMS ?
2. Define the concept of relational database and its elements.
3. Explain about different types of keys in relational database.

## PART – D

**IV. Essay Type Questions:** **(10Marks)**

1. Explain about creating and editing relationships between tables.
2. Explain about types of operations performed on table.




**Teachers Activity:**

1. Teach the students about the procedure to download Libreoffice Base DBMS Software.
2. Teach the students about the functions of DBMS software.

**Students Activity:**

1. Perform step by step procedure for creating a form losing a wizard.

**References :**

*1. www.psscove.ac.in*

*2. http://en.m.wikipedia.org*




1. *Data: Data are individual facts, statistics, or items of information, often numeric. In a more technical sense.*
2. *Database: A database is an organized collection of structured information or data, typically stored electronically in a computer system.*
3. *SQL: SQL stands for structured Query Language. It is used for storing and managing data in relational database management systems (RDMS).*
4. *DBMS: A database management system (DBMS) is a software tool to organize (create, retrieve, update and manage) data in a database.*

# 8 UNIT – 8

## OFFICE MANAGEMENT RELATED BANKING SERVICES

**Content:**

Introduction-Meaning - Procedure for Opening Bank Accounts - Maintaining of Bank Statements - Different Forms used in Banks Modern Banking Services – Types of Accounts/Deposits – Core Banking Solutions – No Frills Account - Common Banking Services.

### Learning Objectives

- To understand the procedure for opening bank account
- To familiarize with different forms used in banks.
- To know various deposits available in banks.

## 8.1 Introduction

Modern office management needs banking services for its day to day operations. At every stage of its business operations, an organisation is required to open bank accounts irrespective of its nature, size and volume of business. Amongst various services like education, transport, insurance, health, information technology etc, Banking services are very important as it involves in commercial activities called profit making. Business is mainly conducted to mobilize funds. All the business entities regardless of its nature and size of commercial activities, aims to gain profits out of its operations. Therefore, soon after its establishment, it becomes mandatory for the business unit to open a bank account from one or more banks for easy financial dealing.




*Fig.8.1 Office Management Related Banking Services*

### 8.1.1 Meaning:

The word "Bank" is derived from an Italian word "Banco" which means bench for keeping, lending and exchange of money or coins. A bank is generally understood as an institution which provides fundamental banking services such as accepting deposits and providing loans. Banking is a customer oriented service industry. The customers may be an individual, organisation or firms. Organisation needs to run the business. Many of the organisations approach banking services to run their business successfully.

"Banking is defined as accepting for the purpose of lending or investment of deposits of money from the public, repayable on demand or otherwise and withdrawable by cheque, draft, order or otherwise" – **The Banking Regulation Act, 1949**

### 8.1.2 Procedure for Opening Bank Accounts:

- Choose a Bank or Credit Union
- Visit the convenient Bank Branch or Website.
- Pick the product you want whether savings or current account etc.,
- Provide your information
- Consent to the terms
- Fund your account

Basic steps required to open bank accounts**:**

(i) At least two forms of government issued photo identification such a valid driver's license or passport.

(ii) Social security number or individual taxpayer identification number.

(iii) Utility bills with current address information.

### 8.1.3 Maintaining of Bank Statements:

Basically, the bank statements are required to keep tracking of routine business transactions and to monitor other transactions through bank account. Generally a savings account is opened for individual operations of a person, whereas, we have to necessarily open a current account for our business operations. The periodical bank statements are collected either in person or through mail to do Bank Reconciliation statements at our office regularly.

Having all of statements available when prepare your taxes will help the confirm income and track deductible expenses accurately. This holds true whether receive statements by mail or electronically.

Statements from bank and credit card companies arrive regularly, either by mail or electronically. Reviewing them is an important step in keeping finances in order, but several factors affect how long should hold on to bank and credit card

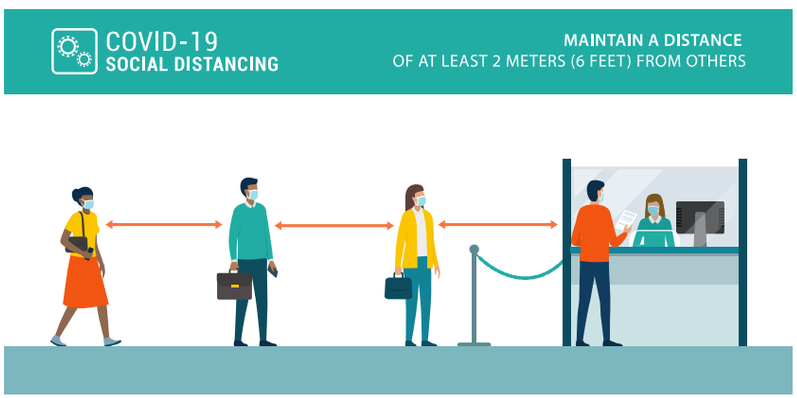



***Fig.8.2 Banking Services***

statements. In most cases should save them at least until filed taxes for that year and resolved any pending fraud disputes, but storing them away for longer may pay off in the future.




*Fig.8.3 Online Banking*

### 8.1.4 Different forms used in banks:

Generally speaking a deposit challan is called bank form. A deposit slip is a small paper form that a bank customer includes when depositing funds into a bank account. A deposit slip by definition, contains the date, the name of the depositor, the depositor's account number, and the amounts being deposited.

Some of the important forms used in banks other than challan form:

- Withdrawal slips
- Cheque Book
- Demand draft form
- Debit card / Credit card form
- Bank Statement requisition form
- Personal Loan/Business Loan Application/agreement form/Cash credit application form
- Letter of credit form
- Identity verification form
- KYC form

### 8.1.5 Modern Banking Services:

During the year 1991-1996, after the successful implementation of Liberalisation, Privatisation and Globalisation (LPG) our economy had touched new heights, not only in our economy and also in our trade and commerce. All Indian banks were forced to compete with world banks that were permitted to open their branches in India. As a result, all banking customers were offered multiple and model banking products which are different from traditional and conventional banking systems in India and these banking functions are mostly based on information technology.




*Fig.8.4 Bank Statements and Pass Book*

### 8.1.6 Types of Accounts/Deposits:

**(i) Savings Accounts:**

Savings accounts are meant for encouraging savings habit among the customers and also giving a protected environment to their savings.

**(ii) Current Accounts:**

Current accounts are normally maintained by business people. Banks are not offering any interest to such current accounts. Withdrawals from current accounts are not restricted.

**(iii)Term Deposits:**

Term deposits are maintained for the depositors who want to earn fixed return by way of interest. Term deposits are normally divided into short term deposits, medium term deposits and long term deposits.

**(iv) Recurring Deposits:**

Recurring deposits are other types of deposits which are also considered as a term deposit in which a fixed sum of money is regularly deposited at regular intervals.

**(v) Special Term Deposits:**

This deposit can be opened in the same way as the term deposit accounts. The interest on this account is compounded at quarterly intervals and the principal and interest are paid on maturity.

## 8.2 Core Banking Solutions:

Modern banking services include new products such as Core Banking Solutions: No frills account; Demat accounts; Net Banking /E-Banking; Mobile Banking; Debit card/Credit cards; Automated Teller Machines (ATM); Insurance etc.,

## 8.3 No-Frills Account:

These accounts are opened mostly in rural areas as a part of a financial inclusion project encouraged by the Reserve Bank of India. These accounts are opened by banks without the condition of maintaining minimum balance.

This was until the Reserve Bank of India introduced a "no-frills Account" which aims at providing all necessary banking facilities to consumers at minimum or nil charges. No-frills bank accounts require zero or very low minimum balance. Banking services such as withdrawals and ATM and Debit card facilities at zero charges to enable universal access to banking facilities. No-frills bank accounts are now known as Basic Saving Bank Deposit Accounts.

## 8.4 Common Banking Services:

**(i) Introduction**: An establishment authorized by a Government to accept deposits, pay interest, clear cheques, advance loans, act as an intermediary in financial transactions, and provide other financial services to its customers. People earn money to meet their day-to-day expenses on food, clothing, education of children, housing, etc.

**(ii) Savings Money**: They also need money to meet future expenses on marriage, higher education of children, house building and other social functions. These are heavy expenses, which can be met if some money is saved out of the present income. Saving money is also necessary for old age and ill health when it may not be possible for people to work and earn their living.

**(iii) Necessity of Banking services:** The necessity of saving money was felt by people even in older days. They used to keep money in their homes. With this practice, savings were available for use whenever needed, but it also involved the risk of loss by theft, robbery and other accidents. Thus, people were in need of a place where money could be saved safely and would be available when required.

**(iv) Banks:** Banks are such places where people can deposit their savings with the assurance that they will be able to withdraw money from the deposits whenever required. People who wish to borrow money for business and other purposes can also get loans from the banks at a reasonable rate of interest. Bank is a financial institution that accepts deposits and channels the money into lending activities.

**(v) Lawful Organisation:** "Bank is a lawful organization, which accepts deposits that can be withdrawn on demand. It also lends money to individuals and business houses that need it." Banks also render many other useful services – like collection of bills, payment of foreign bills, safe-keeping of jewellery and other valuable items, certifying the credit-worthiness of business, and so on. Banks accept deposits from the general public as well as from the business community. Anyone who saves money for the future can deposit his savings in a bank. Businessmen have income from sales out of which they have to make payment for expenses. They can keep their earnings from sales safely deposited in banks. Banks give two assurances to the depositors :

a. Safety of deposits, and

b. Withdrawal of deposits,

**Banking Deposits:** Whenever needed On deposits, Banks give interest, which adds to the original amount of deposits. It is a great incentive to the depositors. It promotes saving habits among the public. On the basis of deposits banks also grant loans and advances to farmers, traders and businessmen for productive purposes. Thereby banks contribute to the economic development of the country and well-being of the people in general. Banks charge interest on loans. The rate of interest is generally higher than the rate of interest allowed on deposits. Banks also charge fees for the various other services, which they render to the business community and public in general. Interest received on loans and fees charged for services are the main sources of income for banks from which they meet their administrative expenses.

The activities carried on by banks are called banking activities. 'Banking' as an activity involves acceptance of deposits and lending or investment of money. It facilitates business activities by providing money and certain services that help in exchange of goods and services. Therefore, banking is an important auxiliary to trade. It not only provides money for the production of goods and services but also facilitates their exchange between the buyer and seller. You may be aware that there are laws which regulate banking activities in our country. Depositing money in banks and borrowing from banks are legal transactions. Banks are also under the control of the government. Hence they enjoy the trust and confidence of people. Banks depend a great deal on public confidence. Without public confidence Banks cannot survive.

### Points to be Remembered

**Meaning :**

A Bank is generally understood as an institution which provides fundamental banking services such as accepting deposits and providing loans.

**Types of Deposit :**

Saving Deposit, Current Deposit, Recurring Deposit, Term Deposit and Special Term Deposit.

**Procedure for opening bank account :**

- Choose the Bank
- Visit the convenient branch
- Select the accounts
- Provide information
- Consent to the terms.
- Find your account.

## Evaluation

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### PART – A

**OBJECTIVE TYPES:** **(1 Mark)**

**1. Choose the Correct Answer :**

1. _____ are very important as which involved in commercial activities.

   a. Banking Services b. Transport Services

   c. Insurance Services d. Maintenance Services **Ans. (a)**

2. The Banking is a _____ oriented service industry.

   a. Seller b. Buyer

   c. Customer d. People **Ans. (c)**

3. The bank statements are required to_____ the bank account.

   a. Monitor b. Accept

   c. Read d. Check **Ans (a)**

4. All Indian Banks were forced to compete with _____

   a. Govt Bank b Reserve bank

   c. World Bank d. Other Bank **Ans (c)**

5. Current accounts are normally maintained by _____ people

a. Working b. Business

c. Rural d. Royal **Ans (b)**

6. _____ Bank accounts require zero or very low minimum balance.

(a) Demat (b) Savings

(c) Current (d) No frills Ans (d)

7. _____accounts encouraging savings habit among customers

a. Savings b. Current

c. Recurring d. Fixed **Ans (a)**

8. _____ are normally divided into short term, medium term long term deposits.

(a) Recurring Deposit b. Term Deposit

c. Current Deposit d. Special Term Deposit **Ans (a)**

9. Bank is a _____ institution that accepts deposits and lending activities

a Non financial b. Financial

c. Service Oriented d. Technical **Ans. (b)**

10. Banks depend a great deal on _____ confidence

a Public b. Private

c. Government d. Companies **Ans. (a)**

## PART – B

**II. Very Short Answers:** **( 3 Marks)**

1. Define the term Banking.
2. Write a short note on core banking solutions.
3. What is meant by no frills account?
4. Write a note on Modern banking services.
5. What are the basic steps required to open bank accounts?

## PART – C

**III. Short Answers:** **( 5 Marks)**

1. What are the procedures for opening a bank account?
2. Write short notes in maintaining bank statements.
3. Explain the types of accounts.

## PART – D

**IV. Essay Type Questions:** **(10 Marks)**

1. What are the forms used in banks? Explain elaborately.
2. Explain common banking services elaborately.




**Teachers Activity:**

- Teacher can arrange for a guest lecture by inviting bank manager
- Teacher can arrange a field trip to visit a nearby bank.
- Teacher can discuss how to open a savings bank account.
- Teacher should explain how to deposit and withdraw money from the bank.

**Students Activity:**

Students should be asked to collect forms for opening an account, various deposit forms from the bank and fill it.

**References :**

*1. https://www.brainkarl.com/article.*

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## GLOSSARY

1. **No-frills account:** These accounts are opened mostly in rural areas without the condition of maintaining minimum balance.
2. **KYC Forms:** KYC means to "Know your Customer" which is an effective way for an institution to confirm and thereby verify the authenticity of a customer.
3. **Current account:** A current deposit account meant for the business class, where no interest is paid and withdrawal is allowed without notice.
4. **Customer:** The Individual who purchases the services from the bank.
5. **Fixed deposit:** A deposit kept for a specified term to earn interest.
6. **Recurring deposit:** A stipulated sum of money deposited at regular interval in a bank which is payable at the expiry of the fixed period.

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# 9 UNIT – 9

## IT AND ITES SERVICES

**Content:**

Introduction – IT and ITeS – Meaning – Business Process Outsourcing (BPO) Services- Advantages of BPO Services – BPO services in India – Business Process Management ( BPM) Industry in India – Definition – Structure of the IT – BPM Industry – Meaning – Parameters of IT – BPM Industry – Various IT Application.

### Learning Objectives

- Enable the students to gain knowledge about IT and ITeS, that performing in Business operations.
- To acquire knowledge about various IT applications used now-a-days.

## 9.1 Introduction:

Information and communication technology (ICT) has become one of the inevitable requirements of the day to day activities of our modern society. Daily usage of mobile phones, laptops, electronic gadgets brings a lot of benefits to the common people and also to the industries those who are engaged in various fields of expertise. Information Technology (IT) is one of the world's fastest growing economic activities, which envisages easier flow of information at various levels in the desired pattern. The Information Technology enabled Services (ITeS) sector has also made significant contributions to the growth and development of our country.




*Fig. 9.1 Information Technology*

### 9.1.1 Meaning:

Information technology (IT) means creating, managing, storing and exchanging information. It includes all types of technology used to deal with information, such as computer hardware and software technology used for creating, storing and transferring information. Computer takes data as input and processes it and produces the results as output.

Information technology that enables the business by improving the quality of service is Information Technology enabled services (ITeS) is also called web-enabled services or remote



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services that cover the entire operations which exploit Information Technology for improving the efficiency of an organisation.




*Fig. 9.2 Information Technology Enabled Services*

## 9.2 Business Process Outsourcing (BPO) Services:

Business Process Outsourcing (BPO) services means performing business operations through an outside service provider. BPO also comes under IT services as IT plays a very useful role in optimising the business performance.

### 9.2.1 Some of the Important BPO Services are listed below:

(i) Financial and accounting services

(ii) Taxation and insurance services

(iii) E-Publishing and web promotion

(iv) Legal Services and content writing

(v) Multimedia and design services

(vi) Health care services




*Fig. 9.3 Business Process Outsourcing*

### 9.2.2 Advantages of BPO services:

Some of the important benefits or advantages of BPO services as follows:

(i) Decreased costs: Outsourcing reduces costs for labour, generally when it comes to staffing and training

(ii) Able to concentrate on core competencies

(iii) Increased flexibility

(iv) Expand global presence

(v) Improved speed and efficiency

(vi) Security issues

(vii) Communication issues

### 9.2.3 BPO Services in India:

Business Process Outsourcing (BPO) service in India refers to tasking out certain functional tasks to a third-party service provider. Internal business



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functions such as billing and purchasing are outsourced, while front-of-house functions including customer support, marketing, and product customization are outsourced. All you need to do is to understand what services you wish to outsource and services you want to keep in-house. BPO services in India are growing at a fast pace and expanding to assist with services like conventional back and front office functions to services like digital marketing services and social media marketing. Moreover, BPO services can help you save big on cost, offer flexibility, agility, and access to tools and processes.

### 9.2.4 Classsification of major BPO Services:

(i) Information Technology enabled Services (ITeS)- It is a type of BPO service that manages and handles IT solutions over the internet. It involves handling IT services like technical support, production support analyst, and service desk analyst.

(ii) Knowledge Process Outsourcing (KPO)- In this type of outsourcing, the service provider offers advanced expertise for any particular business process.

(iii) Legal Process Outsourcing (LPO)- It offers services related to a high level of legal work. They also perform complex tasks like writing legal agreements, doing legal research, and drafting patent applications.

(iv) Recruitment Process Outsourcing (RPO) - It is when a company transfers all or part of its permanent recruitment to an external provider.

### 9.2.5 Advantages of BPO Service Industry:

(1) BPO service providers in India invest in hi-tech hardware and software to deliver the best of services. They follow quality checks to ensure error free and exceptional service.

(2) Government of India is encouraging the BPO Industry in India by providing necessary Infrastructure and logistical support.

(3) BPO Industry in India is highly developed and capable of delivering numerous types of BPO services in exceptional quality.

## 9.3 Business Process Management (BPM) Industry in India:

The IT-BPM (Business Process Management) industry has been fuelling India's growth. In addition to contributing towards the country's Gross Domestic Product (GDP) and exports, the growth of the IT BPM industry has provided India with a wide range of economic and social benefits which includes creating employment, raising income levels, and promoting exports. It has placed India. On the world map with an image of a technologically advanced and knowledge-based economy. This sector attracts amongst the largest investments by venture capitalists and has been credited with enabling the entrepreneurial ventures of many in the country. The IT-BPM industry has almost doubled in terms of revenue and contribution to India's GDP over the last decade (2008–18).



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*Fig. 9.4 Business Process Management*

### 9.3.1 Definition:

Business process management (BPM) is "an organizational discipline where a company takes a step back and looks at all of these processes in total and individually. It analyses the current state and identifies areas of improvement to create a more efficient and effective organization."

## 9.4 Structure of the IT-BPM industry:

(a) Multinational Companies (MNCs): MNCs have their headquarters outside India but operate in multiple locations worldwide including those in India. They cater to external clients (both domestic and/or global).

(b) Indian Service Providers (ISPs): ISPs started with their operations in India. Most of these organisations have their headquarters in India. While having offices in many international locations. While most have a client base, which is global as well as domestic, there are some that have focussed on serving only the Indian clients.

(c) Global In-house centres (GIC): GIC organisations cater to the needs of their parent company only and do not serve external clients.

(d) The Indian IT industry has more than 16,000 registered companies in the sector across GIC, MNC and SME categories as of 2016. Concentration Ratio in the IT-BPM industry is very high with 11 players contributing to more than 40% of the revenue. The Indian IT-BPM sector is home to the world's 3rd largest start-up community with more than 2000 start-ups across e-Commerce, aggregator platforms,



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analytics, consumer services and IoT alone.

### 9.4.1 Parameters of IT-BPM industry:

The organisations within the IT-BPM industry are categorised along the following parameters:

- Sector the organisation is serving
- Type as well as range of offering the organisation provides
- Geographic spread of operations
- Revenues and size of operations

## 9.5 Various IT applications:

In technologically developed nations, Information Technology has become a part of everyday life. For a user, a computer is a tool that provides the desired information, whenever needed. The use of computer and Information Technology can be observed at home, workplace, in the modern service industry and in all aspects of our life. It includes listening to music, watching movies, playing games, doing office work, chatting and sending messages, managing daily planner, reading books, paying utility bills, booking tickets to travel, bank operations, etc. Computers and ICT are used in industries, in offices, and in houses also. The various application areas are business, banking, insurance, education, marketing, and health care, engineering design, military, communication, animation, research, agriculture and government.

Information and communication technology (ICT): It can impact student learning when teachers are digitally literate and understand how to integrate it in to curriculum. Schools use a diverse set of ICT tools to communicate, create disseminate, store and manage information.

**Points to be Remembered**

- Information technology means creating, managing, storing and exchanging information.
- IT that enables the business by improving the quality of service is ITes.
- BPO means performing business operations via an outside service provider.
- IT BPM industry provides India, wide range of social and economic benefits.
- MNC, ISP and GIC are the structure of the IT – BPM Industry.



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## Evaluation

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### PART – A

### OBJECTIVE TYPES:

**I . Choose the Correct Answer : (1 Mark)**

1. One of the world's fastest growing economic activities, which envisages easier flow of information at various levels in the desired pattern in _____

   a. Information technology b. Informative theory

   c. Information theory d. Internet Times **Ans ( a)**

2. BPO stands for _____

   a. Business Process Optimization b. Business Process Object

   c. Business Process Outsourcing d. Business Programs Office. **Ans ( c)**

3. _____ is one of the advantages of BPO Services.

   a. Increased costs b. Decreased flexibility

   c. Decreased costs d. Inefficient. **Ans (c )**

4. _____ _ is the type of outsourcing, offers advanced expertise for any particular business process.

   a. RPO b. BPO

   c. KPO d. LPO **Ans ( c)**

5. G D P stands for _____

   a. Gross Domestic Product b. Good Distribution Practice

   c. General Data Processor d. General Domestic Product **Ans (a)**

6. Which one identifies areas of improvement to create a more efficient and effective organization?

   a. Business process outsourcing b. Business process management

   c. Information technology d. Level process outsourcing **Ans (b)**

7. _____ organization caters to the needs of the parent company only and does not serve external clients.

   a. Indian service providers b. Global In – house centres

   c. Multinational companies d. SME **Ans ( b)**



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8. Indian IT Industry has more _____ registered companies in the sector across GIC, MNC and SME categories as of 2016.

a. 18,000 b.17,000

c. 16,000 d. 15,000 **Ans ( c)**

9. ICT Abbreviation is _____

a. Information & Communication technology b. Information & Computer technology

c. Information Centre technology d. International Currency technologies. **Ans (a)**

10. The IT – BPM Industry has almost _____ in terms of revenue and contribution to India's GDP over the last decade.

a. Doubled b. Singled

c. Tripled d. First **Ans ( a)**

## PART - B

**II Very Short Answers: ( 3 Marks)**

1. Write important BPO Services ?
2. Write any 5 advantages of BPO services?
3. Define BPM
4. What are the various IT applications area?
5. What are the parameters of IT – BPM Industry.

## PART - C

**III Short Answers: (5 Marks)**

1. What is Business Process outsourcing (BPO) service and write important of BPO services.
2. Write structure of the IT-BPM industry.
3. Write abbreviations for the following

a) ICT, b) IT c) ITeS d) BPO e) BPM f) KPO g) GDP h) ISP



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## PART - D

**III Essay type questions:** **(10 Marks)**

1. Explain BPO services in India.
2. Define BPM and explain BPM industry in India



ACTIVITY

**Teachers Activity:**

1. Field visit to various BPO service can be arranged to understand the functions of BPO services
2. Can take the students to nearby MNC to show the working of MNC

**Students Activity:**

1. List out the major BPO services in Tamilnadu
2. Chart preparation of leading BPO companies with short profile

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## GLOSSARY

1. *IT-Information Technology (IT) is one of the world's fastest growing economic activities, which envisages easier flow of information at various levels in the desired pattern. The Information Technology enabled services*

2. *ITes-ITeS sector has also made significant contributions to the growth and development of our Country.*

3. *Business-A business is defined as an organization or enterprising entity engaged in commercial, industrial, or professional activities. Businesses can be for-profit entities or non-profit organizations.*

4. *Information-Information is processed, organized and structured data*

5. *Technology-Technology refers to methods, systems, and devices which are the result of scientific knowledge being used for practical purposes*

6. *BPM-Business process management (BPM) is "an organizational discipline where a company takes a step back and looks at all of these processes in total and individually.*

7. *Outsourcing-Outsourcing is the business practice of hiring a party outside a company to perform services or create goods that were traditionally performed in-house by the company's own employees and staff.*

8. *BPO services-Business Process Outsourcing (BPO) services means performing business operations through an outside service provider.*



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## MODEL QUESTION PAPER

**Standard** – XI

**Office Management and Secretaryship**

**Marks : 90**

**Duration : 3 hrs.**

**PART – A**

**Answer all the questions:** **Marks : 15x1 = 15**

**I. Choose the best Answer:**

1. Planning is the ---------- function of office management.
   a) Best b) First
   c) Basic d) Important
2. Direction can thus be regarded as the process of ---------- staff.
   a) Planning b) Organising
   c) Guiding and Supervising d) Administrative
3. ---------- must provide good and satisfactory working conditions.
   a) Office Accommodation b) Office Layout
   c) Office Environment d) Office Building
4. Roof ventilation and internal tube ventilators provide ---------- ventilation.
   a) Natural b) Artificial
   c) Direct d) Indirect
5. The use of Security cameras can ---------- activities.
   a) Supervise b) Check
   c) Evaluate d) Monitor
6. There are ---------- methods of classification of files.
   a) 4 b) 3
   c) 5 d) 6



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7. ---------- is referred as a document used by an organization to carry out its different tasks.

a) Filing b) Record

c) Indexing d) Personal Record.

8. ---------- is the free software for managing projects.

a) Canva b) Xtensio

c) Trello d) Fresh Desk

9. Cloud Computing provides an alternative to the on-premises ----------.

a) Data Center b) Data Software

c) Data Systems d) Clouding

10. A good office ---------- shall bring in lot of laurels to an organisation.

a) Atmosphere b) Systems and Procedures

c) Policy Manual d) Practice Manual

11. ---------- is composed of a pattern of office system, procedure and methods.

a) Administration Work b) Office Work

c) Organisation Work d) Group Work

12. A collection of ---------- make a table.

a) Field b) Table

C) Database d) Record



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13. ---------- accounts encouraging savings habit among customers

a) Savings b) Current

c) Recurring d) Fixed

14. Bank is a ---------- institution that accepts deposits and lending activities.

a) Non-financial b) Financial

c) Service Oriented d) Technical

15. ICT Abbreviation is ----------

a) Information & Communication technology b) Information & Computer technology

c) Information Centre technology d) International Currency technology

## PART – B

**II. Answer any TEN questions:**
**Question number 28 is compulsory.** **Marks: 10x3 = 30**

16. Who is the office manager?

17. What is meant by Automation?

18. What is a shared workspace?

19. What are safety measures?

20. Write a short note on modern office furniture.

21. Write a short note on office stationeries.

22. What is meant by Filing?

23. Give any two examples for office management software.

24. What is ABW?

25. What are the types of office manuals?



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26. What is the primary key?

27. Explain the types of accounts.

28. Write short notes on Multinational company.

## PART - C

**III. Answer any FIVE questions**
**Question number 35 is compulsory.** **Marks: 5 x 5 = 25**

29. State the objectives and importance of office layout.

30. What are the uses of office furniture?

31. What are the types of filing?

32. Discuss the importance of BYOD.

33. Explain about different types of keys in relational database.

34. What is Business Process Outsourcing (BPO) service and write important of BPO services.

35. Explain about banking deposits elaborately.

## PART- D

**IV. Answer all the questions:** **Marks: 2x10= 20**

36. Explain the importance and functions of office Management.

(or)

Explain the advantages and disadvantages of office layout.

37. Explain the advantages and disadvantages of cloud computing.

(or)

Explain BPO services in India.



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# TYPOGRAPHY AND COMPUTER APPLICATIONS

## PRACTICAL



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# INTRODUCTION OF TYPEWRITING

## *Introduction Typing:*

Typing is the art and technique of using letters and characters in a readable, legible and appealing format when displayed. The arrangement of type involves selecting typefaces, point sizes, line lengths, the spacing, letter spacing and adjusting the space between pairs of letters.

## *Introduction – Typewriter*

Typewriter is a small machine, either manual or electrical. It has keys that produce letters on a piece of paper when operating it.

In 1714, Englishman Henry Mill filed a patent for a machine for the impressing or transcribing of letters progressively one after another.

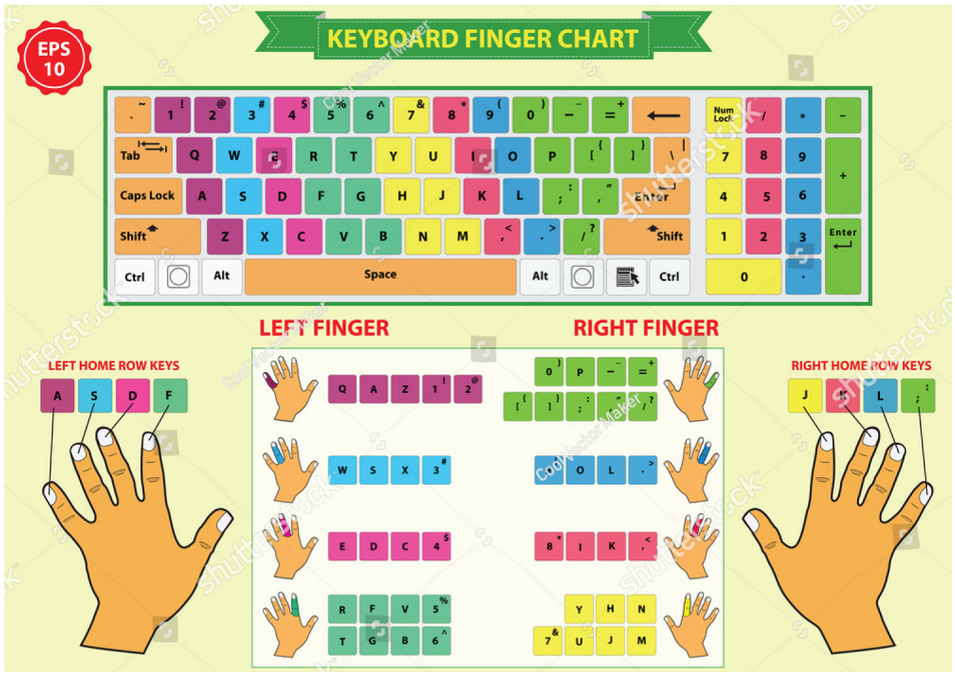
Noiseless typewriter was developed by Wellington Parker Kidder in 1947.

## 1. Fingering charts :

Keyboard finger charts left and right finger, include home row keys, for lessons, to improve or learn how to type faster. Each finger rests on a particular key in the home row of the keyboard when not typing.

### Fingering charts

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **1st Row** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| **2nd Row** | Q | W | E | R | T | Y | U | I | O | P |
| **3RD Row** | A | S | D | F | G | H | J | K | L | ; |
| **4TH Row** | Z | X | C | V | B | N | M | , | . | / |






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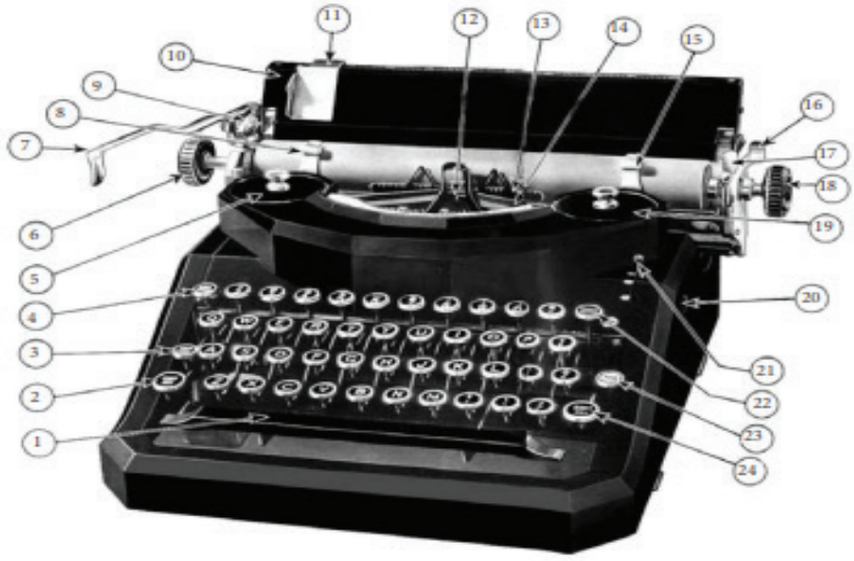
Left hand Covers the "asdf" in the home row keys while the right hand covers the "lkj;" and the thumb covers space bar.

### 1.2.2. Mechanism of typewriter and its parts

1. Handle / Line Space Lever
2. Plunger knob
3. Thumb Wheel
4. Cylinder Release Lever
5. Line Space Lever
6. Carriage Release Lever Left
7. Left Hand Margin
8. Margin Scale
9. Type bar guide
10. Ribbon Carrier
11. Segment
12. Paper bail Roller
13. Right hand Margin
14. Cylinder (Platen Roller)
15. Carriage Release Roller Right
16. End of the Paper Indicator
17. Cowl Cover
18. Carriage
19. Margin Release Key
20. Shift Lock
21. Shift Key
22. Tabulator Bar
23. Space Bar
24. Ribbon Colour Indicator

## 1.4 Typing ergonomics

Manual typewriters are independent from electrical and digital networks. It can be used at remote locations where electrical service is intermittent.






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**Tools Required for Experiments (1-23)**

| S.No | Name of the tools/equipment | Range/Value | Quantity in Nos |
|---|---|---|---|
| 1 | Typewriter | Metal Casting | 1 |
| 2 | Ribbon/Colour | Nylon ribbon/Commonly used Navy Blue, Black & Red | 1 |
| 3 | Paper | A4 size | 2 |

## EXPERIMENT : 1

## FIRST FINGERING – FIRST STEP

**Objective :**

To start typing practice as First Fingering – First Step.

**Procedure :**

**Step 1**:Insert the papers properly

**Step 2**:Type the following line 50 times for 2 days.

**Subject :**

**asdf ;lkj asdf ;lkj asdf ;lkj**

**Step 3:** Typed papers should be filed properly



**Result:**

Thus First Fingering - First step was typed successfully.



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## EXPERIMENTS – 2

### TO START TYPING PRACTICE AS FIRST FINGERING – SECOND STEP.

**Objective :**

Students can practice typing of Ist fingering II step

**Procedure :**

**Step 1**:Insert the papers properly

**Step 2**:Type the following line 100 times for 4 days.

**Subject :**

| asdfgf ;lkjhj asdfgf ;lkjhj asdfgf ;lkjhj |
|---|

**Step 3:**Typed papers should be filed properly

**Result :**

Thus First fingering - Second step was typed successfully.



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## EXPERIMENT : 3

### FIRST FINGERING – WORDS PRACTICE

**Objective :**

To start typing practice as first Fingering – Words.

**Procedure:**

**Step 1**:Insert the papers properly

**Step 2**:Type the following each lines 15 times

**Subject:**

| | | | | | |
|---|---|---|---|---|---|
| ask | jag | dash | kala | shal | flash |
| fad | slag | hash | alga | ladak | allah |
| has | all | lash | dass | salad | dhall |
| gal | lash | gall | sash | kajal | jaffa |
| sad | aha | lass | aska | fagal | slash |
| sag | lala | gaff | shed | safal | lakhs |
| had | gag | fall | half | alkal | halsh |
| ash | flag | glas | shag | halka | sagas |
| lag | gad | shah | agad | fills | jalal |
| gas | hall | saga | kaka | glass | algas |

**Step 3**:Typed papers should be filed properly.

**Result :**

Thus fingering - Words was typed successfully.



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## EXPERIMENT : 4

## SECOND FINGERING – FORWARD LETTERS

**Objective :**

To start typing practice as Second Fingering – Forward Letter.

**Procedure :**

**Step 1:**Insert the papers properly

**Step 2:**Type the following line 100 times for 4 days.

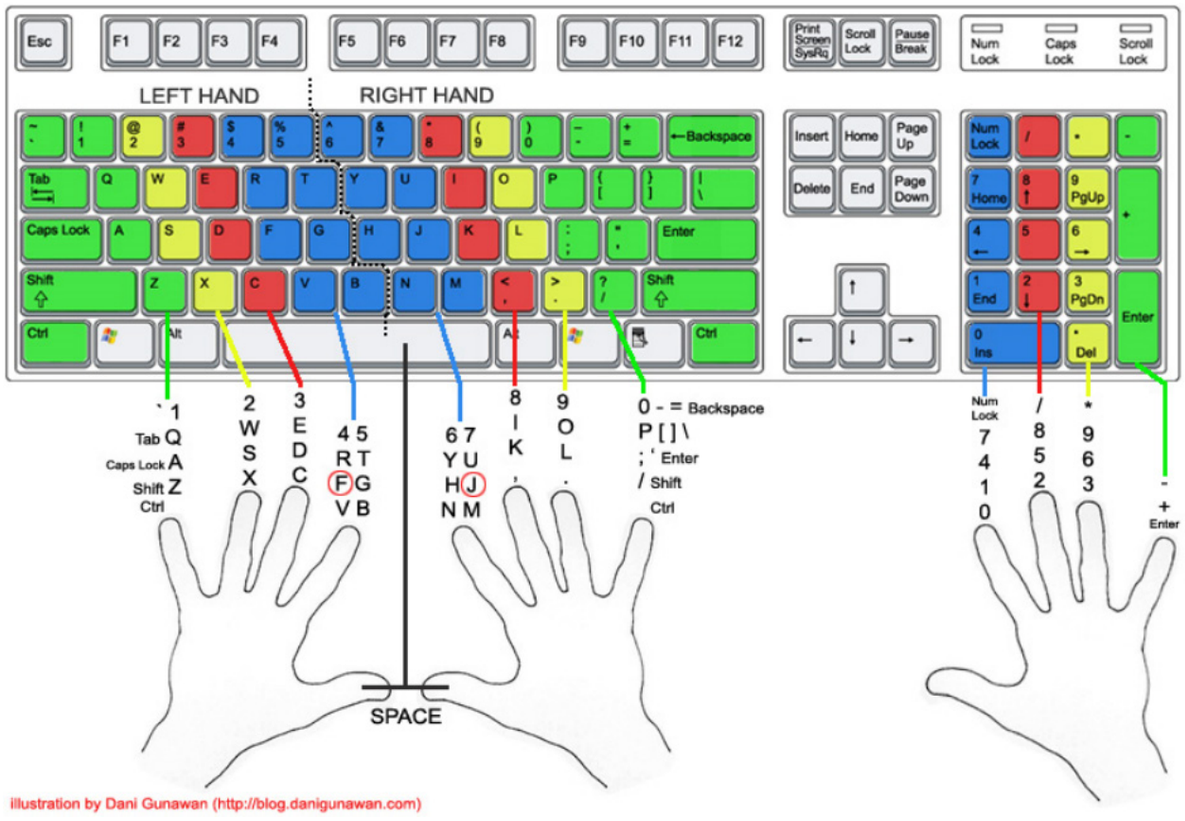
**Subject :**

| awerqfa ;oiupj awerqfa ;oiupj awerqfa ;oiupj |
|---|

**Step 3:**Typed papers should be filed properly.

**Result :**

Second Fingering – Forward Letter was typed successfully.






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## EXPERIMENT : 5

### SECOND FINGERING – FORWARD – WORDS PRACTICES

**Objective :**

To start typing practice as Second Fingering - Forward words.

**Procedure :**

**Step 1:**Insert the papers properly

**Step 2:**Type the following each line 15 times

**Subject:**

| | | | | |
|---|---|---|---|---|
| **asp** | **were** | **grass** | **herald** | **federal** |
| **dug** | **sale** | **equip** | **jaguar** | **leopard** |
| **oak** | **idle** | **fakir** | **girder** | **sparkle** |
| **que** | **joke** | **horse** | **perish** | **esquire** |
| **who** | **rise** | **arrow** | **differ** | **illegal** |
| **irk** | **keep** | **pedal** | **squash** | **worship** |
| **kid** | **urge** | **laugh** | **washer** | **quarrel** |
| **use** | **fish** | **grape** | **afresh** | **require** |
| **low** | **guid** | **irish** | **oppose** | **hopeful** |
| **ego** | **rusk** | **sidle** | **liquor** | **jealous** |

**Step 3:**Types papers should be filed properly

**Results :**

Second Fingering - Forward words was typed successfully.



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## EXPERIMENT : 6

### SECOND FINGERING – REVERSE – LETTERS PRACTICE

**Objective :**

To start typing practice as Second Fingering - Reverse letters.

**Procedure :**

**Step 1:**Insert the papers properly

**Step 2:**Type the following line 50 times for 2 days.

**Subject :**

| | | | | | |
|---|---|---|---|---|---|
| **gftfrf** | **hjyjuj** | **gftfrf** | **hjujyj** | **gftfrf** | **hjujyj** |

**Step 3:**Typed papers should be filed properly

**Result :**

Second Fingering - Reverse letters was typed successfully.



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## EXPERIMENT : 7

### SECOND FINGERING – REVERSE – WORDS

**Objective :**

To start typing practice as Second Fingering - Reverse words.

**Procedure :**

**Step 1:**Insert the papers properly

**Step 2:**Type the following line 15 times

**Subject :**

| | | | | |
|---|---|---|---|---|
| **apt** | **east** | **tight** | **gaiety** | **iterate** |
| **joy** | **sway** | **hasty** | **future** | **oratory** |
| **day** | **host** | **party** | **quarry** | **whistle** |
| **let** | **just** | **ought** | **yellow** | **satisfy** |
| **hut** | **lady** | **kitty** | **repeat** | **tragedy** |
| **was** | **gift** | **quest** | **outlay** | **royalty** |
| **toy** | **kite** | **jolly** | **poetry** | **lateral** |
| **yet** | **quit** | **lotus** | **trophy** | **destroy** |
| **jet** | **fray** | **tough** | **strike** | **yoghurt** |
| **spy** | **west** | **draft** | **august** | **utility.** |

**Step 3:**Typed papers should be filed properly

**Result :**

Second Fingering - Reverse words was typed successfully.



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## EXPERIMENT : 8

### THIRD FINGERING –FIRST STEPS

**Objective :**

To start typing practice as Third fingering – First steps.

**Procedure :**

**Step 1:**Insert the papers properly

**Step 2:**Type the following line 15 times for 4 days.

**Subject:**

| | | | |
|---|---|---|---|
| **azxcvf** | **;,mnbj** | **azxcvf** | **;,mnbj** |
| **azxcvf** | **;,mnbj** | **azxcvf** | **;,mnbj** |

**Step 3:** Typed papers should be filed properly

**Result :**

Third fingering – First step was typed successfully.



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## EXPERIMENT : 9

## THIRD FINGERING –WORDS

**Objective :**

To start typing practice as Third fingering – Words.

**Procedure :**

**Step 1:**Insert the papers properly

**Step 2:**Type the following lines Each 15 times.

**Subject:**

| | | | | | | |
|---|---|---|---|---|---|---|
| **wind** | **equip** | **colour** | **brough** | **penalize** | **convinced** | **hereditary** |
| **have** | **night** | **answer** | **realise** | **fortieth** | **dorminates** | **excitement** |
| **give** | **woven** | **verbal** | **elegant** | **machines** | **formulate** | **tremendous** |
| **verb** | **enemy** | **nerves** | **minimum** | **exponent** | **doubtless** | **extinguish** |

**Step 3:**Typed papers should be filed properly.

**Result :**

Third fingering – Words was typed successfully.



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## EXPERIMENT : 10

### FULL ALPHABETS (FORWARD & REVERSE)

**Objective :**

To start typing practice as Full alphabets (forward & reverse).

**Procedure :**

**Step 1:**Insert the papers properly

**Step 2:**Type the following lines 75 times for 3 days.

**Subject :**

| |
|---|
| **abcdefghijklmnopqrstuvwxyz., ;zyxwvutsrqponmlkjihgfedcba** |

**Step 3:**Typed papers should be filed properly.

**Result :**

Full alphabets (forward & reverse) was typed successfully.



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## EXPERIMENT : 11

## FULL ALPHABETS – WORDS

**Objective :**

To start typing practice as Full Alphabets – Words.

**Procedure :**

**Step 1:**Insert the papers proper

**Step 2:**Type the following lines each 15 times

**Subject:**

| | | | | | | |
|---|---|---|---|---|---|---|
| **terms** | **banker** | **receipt** | **midnight** | **community** | **vocabulary** | **philosopher** |
| **dozen** | **victim** | **forward** | **invested** | **patronage** | **honorarium** | **diversified** |
| **mount** | **ultimo** | **proximo** | **esteemed** | **materials** | **experience** | **subordinate** |
| **bonus** | **parcel** | **furnish** | **expected** | **newspaper** | **competitor** | **appropriate** |
| **bunch** | **liquid** | **instant** | **vehicles** | **endeavour** | **convenient** | **rationalism** |

**Step 3:** Typed papers should be filed properly

**Result :**

Full Alphabets – Words was typed successfully.



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## EXPERIMENT : 12

## PRACTICE OF SIGNIFICANTLY USED WORDS

**Objective :**

To start typing practice as Significantly used words.

**Procedure :**

**Step 1:**Insert the papers properly

**Step 2:**Type the following lines each 15 times

**Subject:**

| | | | | |
|---|---|---|---|---|
| **Monday** | **January** | **Srinagar** | **Bangalore** | **Refreshing** |
| **Ulysses** | **Destructive** | **Sunday** | **variety** | **Material** |
| **September** | **Population** | **Therein** | **Opportunity** | **Wright** |
| **Quality** | **Adultery** | **Knowledge** | **Government** | **Neutral** |
| **Deteriorate** | **Yellow** | **Zoology** | **Hertzian** | **Dimension** |
| **Industrial** | **Lottery** | **Environment** | **Museum** | **Fortune** |
| **Umbrella** | **Catalogue** | **Pedestrian** | **Yielder** | **Recognition** |

**Step 3:** Typed papers should be filed properly

**Result :**

Significantly used words was typed successfully.



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## EXPERIMENT : 13

### PRACTICE OF ALPHABETS WITH NUMERICAL NUMBERS

**Objective :**

To start typing practice as alphabets with numerical numbers.

**Procedure :**

**Step 1:**Insert the papers properly

**Step 2:**Type the following lines each 75 times for 3 days.

**Subject:**

| | | | | | |
|---|---|---|---|---|---|
| **912345f** | **;09876j** | **912345f** | **;09876j** | **912345f** | **;09876j** |

**Step 3:**Typed papers should be filed properly

**Result :**

Alphabets with numerical numbers was typed successfully.



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## EXPERIMENT : 14

## PRACTICE OF NUMERICAL NUMBERS

**Objective :**

To start typing practice as numerical numbers.

**Procedure :**

**Step 1:**Insert the papers properly

**Step 2:**Type the following lines each 15 times.

**Subject:**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **23487** | **28958** | **76390** | **61851** | **64891** | **14021** | **19659** | **64813** |
| **85232** | **92831** | **65481** | **57342** | **57842** | **62835** | **56021** | **37254** |
| **75273** | **72160** | **40825** | **83651** | **83651** | **12525** | **90643** | **59642** |
| **23258** | **13829** | **18456** | **24375** | **24875** | **53826** | **12065** | **45273** |
| **37257** | **06127** | **52804** | **15638** | **15638** | **52521** | **34609** | **24695** |

**Step 3:**Typed papers should be filed properly.

**Result :**

Numerical numbers was typed successfully.



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## EXPERIMENT : 15

## PRACTICE OF LARGE NUMERICS

**Objective :**

To start typing practice as Large numbers.

**Procedure :**

**Step 1:**Insert the papers properly

**Step 2:**Type the following lines each 15 times.

**Subject:**

| | | | | | |
|---|---|---|---|---|---|
| **281652** | **6,45,910** | **7,56,083** | **2,75,083,** | **4,05,464** | **1,92,654** |
| **7,02,934** | **3,69,237** | **5.84,903** | **8,20,648** | **9,50,909** | **8,68,321** |
| **5,80,712** | **1,47,015** | **3,64,781** | **6,08,426** | **7,27,676** | **6.29,422** |
| **2,71,085** | **5,10,741** | **1,87,4632** | **6,24,908** | **6,96,291** | **2,64,916** |
| **2,56,182** | **0,19,495** | **1,80,695** | **3,05675** | **4,64,506** | **4,59,29** |

**Step 3:**Typed papers should be filed properly

**Result :**

Large numbers were typed successfully.



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## EXPERIMENT : 16

## PRACTICE OF SMALL SENTENCES

**Objective :**

To start typing practice as small sentences.

**Procedure :**

**Step 1:**Insert the papers properly

**Step 2:**Type the following sentences each 10 times.

**Subject :**

**Pack my box with five dozen liquor jugs**

**May we have Jack squires fix the big lamp for Andy Zieler?**

**Untouchability is a sin. Untouchability is a crime and also inhuman.**

**We must be proud of our Nation.**

**The French war was sin the year 1709**

**Step 3:**Typed papers should be filed properly.

**Results :**

Small sentences were typed successfully.



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## EXPERIMENT : 17

## PRACTICE OF PASSAGE

**Objective :**

To start typing practice as to make "Passages".

**Procedure :**

**Step 1:**Insert the papers properly

**Step 2:**Type the following passage 5times each.

**Subject :**

**Our flag is a tri-colour saffron is the symbol of sacrifice and a strong mind. White is the symbol of purity, love and peace. Green is the symbol of plenty and joy. We hoist and salute our flag. We are ready to make sacrifices for our county. We want peace and progress. We want the purse. Our National Flag has the Ashok Chakra on it. This wheel is a symbol of DHARMA. If we always do the right things, we follow DHARMA. The twenty four spokes in the wheel show the differences between our – people. A small circle connects these spokes. It shows that we are alike. The wheel also shows that we are going forward.**

**Step 3:**Typed papers should be filed properly.

**Result :**

"Practice" was typed successfully.



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## EXPERIMENT : 18

## PRACTICE OF MAKING INVITATIONS.

**Objective :**

To start typing practice to make"invitation typing".

**Procedure :**

**Step 1:**Insert the papers properly

**Step 2:**Type the following invitations 2 times each.

**Subject :**

**Advertisement – Invitation**

**NIRMALA RAVINDRAN IAS ACADEMY**

Cordially invites you to the Inaugural

Function of Academy's

**SIVASWAMY EDUCATIONAL AND**

**CHARITABLE TRUST**

To ensure upliftment of the differently abled

Students, economically, socially, deprived rural and Urban students.

**RUSH ! HURRY – UP !**

SEATS ARE FIRST CUM FIRST BASIS

**CONTACT : OFFICE**

Plot No 869/24, 6th Avenue, Sai Baba Colony, Rani Nagar,

AB Block, Rani Nagar

Chennai – 600 088.

On

**2nd June, 2018@ 5.00 P.M.**

**Director, Swamy IAS Academy**



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**RECEPTION**

**Place :** Rani maniammai Marriage Hall,

No. 79, Krishnappa Nagar,

Kavangarai,

Chennai – 72.

Date : 12th June, 2018

Time : Evg 6 pm. to 9.00 p.m.

Music Party :

Film Famous BackGround Singer

Murali Krishna

Presents – 'Subh Raag'.

**Step 3:**Typed papers should be filed properly.

**Result :**

Invitation was typed successfully.



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## EXPERIMENT : 19

## PRACTICE OF MAKING NOTICE

**Object :**

To start typing practice to make "notice".

**Procedure :**

**Step 1:**Insert the papers properly

**Step 2:**Type the following notice 2 times each

**Subject :-**

**NOTICE**

**SUGANTHI TEXTILES PRIVATE LIMITED**

**Registered Office :**
4, SBI Main Road,
Chittoor – A.P.

**NOTICE**

Notice is hereby given that the 20th Annual General Meeting of the Company will be held at its. Registered thereon Office at 3.00 pm. On Monday the 28th February 2010 to transact the following business:

To adopt the audited statement of Accounts for the year ended 31st December, 2009, And the Directors thereon.

To elect two Directors

To appoint an Auditor and fix his remuneration.

(By order of the Board)

Chittoor, S.J.Pradeepkumar,

5th February 2010 Secretary.

**Step 3:**Typed papers should be filled properly



Typography_Exp1-23.indd 123 26-04-2022 18:52:35

**Result :**

"Notice" was typed successfully.

## EXPERIMENT : 20

## PRACTICE OF ABBREVIATIONS AND SYMBOLS

**Object :**

To start typing practice as abbreviations and symbols.

**Procedure :**

**Step 1:**Insert the papers properly

**Step 2:**Type the following abbreviations and symbols 2 times each

**Subject :-**

**List of standard Abbreviations**

| SYMBOL | MEANING |
|---|---|
| w/ | With (something) |
| w/o | Without |
| w/i | Within |
| i.e | That is |
| e.g | For example |
| Etc | Et cetera, so forth |
| Bc | Because |
| B4 | Before |
| Re: | Regarding, about |
| Esp | Especially |
| Min | Minimum |
| Max | Maximum |
| Govt | Government |
| ASAP | As soon as possible |
| Wrt | Write |
| Rt | Right |
| Yr / yrs | Year, years |
| c. | Circa, about, around, from the year |



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| SYMBOL | MEANING |
|---|---|
| Vs | Versus, as opposed to |
| Ch | Chapter |
| Q a | Question answer |
| Ex | Example |
| Wd wds | Word words |
| Ref | Reference |
| Diff | Difference |
| w.r.t | With reference to |
| w.e.f | With effect from |

| Beginning words abbreviation | Ignoring vowels |
|---|---|
| • Pol - politics<br>• Gov - government<br>• school Sub – subject<br>• Info – information<br>• Intro - introduction | • Prblm – problem<br>• Schl - school<br>• Bkgd - background |
| | |
| **Beginning words using last letter** | **Ignoring 'ing'** |
| • Govt – government<br>• Gov't – government<br>• Interl – international<br>• Inter's - international | • Ckg – checking<br>• Ckng – checking<br>• Ck'g - checking |

**Step 3:**Typed papers should be filed properly



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**Result :**

abbreviations and symbols were typed successfully.

## EXPERIMENT : 21

### PRACTICE OF MAKING BUSINESS LETTERS.

**Object :**

To start typing practice to make "Business Letters".

**Procedure :**

**Step 1:**Insert the papers properly

**Step 2:**Type the following business letter 2 times each

Ref. No. 8/27 20th Nov. 2016.

## Subject :

**Type the following Business letter.**

**XXX FORGINGS INDIA LTD.,**

**( Mfrs. of Quality forgings)**

TelephoneNo.

P.B.No,39

No.29, Amman Road

Chennai – 600 018.

Dear Sir,

We are in receipt of your notice 10th Oct' 2016. Asking us to appear before you on the 20th Nov.2016 necessary slot.

We have forwarded all our a/c books and other relevant documents to our auditor.

Thanking you,

For **XXX Forgings India Ltd.,**

**(K.SAR RAM)**

Fin. Manager.

**Step 3:**Typed papers should be filed properly.



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www.tnschoolbooks.in

**Result :**

Business letters was typed successfully.

## EXPERIMENT : 22

## PRACTICE OF OFFICIAL LETTER.

**Object :**

To start typing practice to make "Official Letter".

**Procedure :**

**Step 1:**Insert the papers properly

**Step 2:**Type the following official letter 2 times each

**Subject :**

**(IV) Official Proceedings : ( Model)**

**PROCEEDING OF THE COLLECTOR,**

**SALEM**

**PRESENT : THIRU. D.YUVARAJ, I.A.S.,**

**Collector**.

S.Dis.235/77 Dated the 14th February 1977

**Sub. :** Committees – Committee on Government Assurances of Legislative Assembly – Meeting held at Salem from 6th to 8th August 1976 - Transport Charges – Expendituresanctioned.

**Ref. :** (i) G.O.Ms. No. 49, Legislative assembly, dated the 3rd August 1976.

(ii) Letter No. B4/843/76, dated the 11th September 1976, from the Tahsildar, Attur.

In pursuance of the order in G.O. Ms. 49, legislative Assembly, dated the 3rd August 1976, sanction is accorded for incurring an expenditure not exceeding Rs. 1500/- (Rupees one thousand and five hundred only) being the charges for fuel supplied by Messrs. Indo American products Caltex distribution company. Attur. To jeep no. 9958 and TN 23 were allotted in connection with the meeting of the Committee on Government Assurance of the Tamil



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Nadu Legislative Assembly held at Salem from 6th to 89th August 1976.

The Tahsildar, Attur is authorized to settle the bills, duty certifying that the said sum has not been settled previously.

**Collector**

To

The Tahsildar, Attur – 636 108.

**Copy to**

The Sub-Treasury Officer, Attur 636108.
The Secretary to Government, Legislative Assembly
Department, Madras – 600 008.

**Step 3:**Typed papers should be filed properly.

**Result :**

"Official Letter" was typed successfully.



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## EXPERIMENTS – 23

## PRACTICE OF TYPING IN RAPID TYPING SOFTWARE

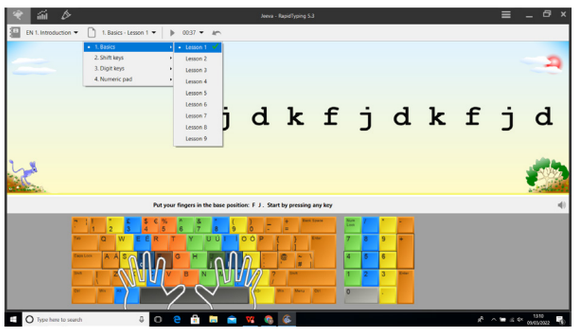
**Objective :**

To start typing practice in rapid typing tutor software.

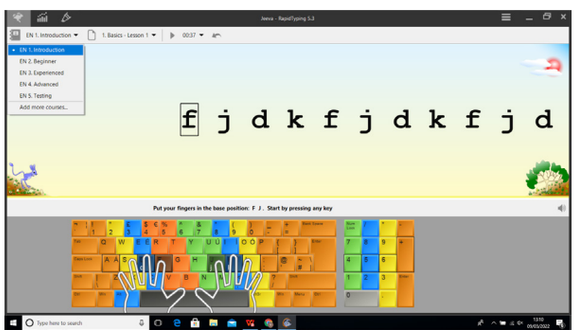
**Procedure :**

**Step 1:**Install the software(Rapid typing tutor 5.3) on the computer.

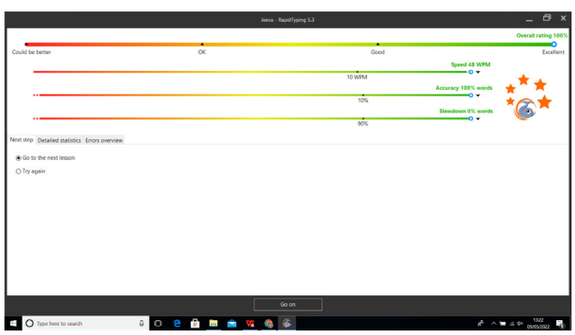
**Step 2:**Open Rapid typing 5 software and click EN.1 introduction and click the 1.Basics lesson 1.




**Step 3:**Practice the Basics lesson 1 to Basics lesson 9.




**Step 4:**Take the screenshots of the result of lesson 1 to lesson 9.




**Result :**

Thus the lesson 1 to lesson 9 in introduction was typed successfully In rapid typing software..



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## COMPUTER APPLICATION EXP 24-38

### Auditing Related Computer Applications

### EXPERIMENT : 24

# ARRANGEMENTS OF VARIOUS GADGETS AND ACCESSORIES OF COMPUTER FOR ITS OPERATIONS: -

## Objective:

To learn the procedure of connecting and disconnecting different external Input and Output devices with the computer.

## Operations/Experiments Covered Under the Project:

- Identification of parts of computer
- Identification of ports in CPU
- Connecting the devices

## Safety Measures:

1. Before placing your computer on a desk or table make sure it is set up near an electrical outlet and network/phone jack.
2. The keyboard should be reachable, the CPU should be well-ventilated, the monitor should be in full view and the mouse should be set up depending on which hand you plan on using.
3. Turn off the power and unplug equipment before performing service.
4. Cover sharp edges inside the computer case with tape.
5. Never open a power supply or a CRT monitor.

## Tools and Equipment Required:

| Activity Title | Sl.No | Name of the apparatus/ components | Range/Value | Quantity |
|---|---|---|---|---|
| Identification of parts of computer | 1 | Central Processing Unit | I5-Dual Core | 1 |
| | 2 | Keyboard | 108 Keys | 1 |
| | 3 | Monitor | 14” LED | 1 |
| | 4 | Mouse | Optical | 1 |
| | 5 | Printer | Laser/Inkjet | 1 |



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| | | | | |
|---|---|---|---|---|
| Identification of the ports in CPU | | Central Processing Unit | 15 Dual core | 1 |
| Connecting the devices | | Central Processing Unit | I5-Dual Core | 1 |
| | | Keyboard | 108 Keys | 1 |
| | | Monitor | 14" LED | 1 |
| | | Mouse | Optical | 1 |
| | | Printer | Laser/Inkjet | 1 |

## Procedure:

### Section 1. Identification of Parts:

**a) CPU:** The Central Processing Unit (CPU), also called as **processor**, is located inside the **computer case** on the motherboard. It is also called the brain of the computer and its job is to carry out commands. Whenever you press a key or click the mouse or start an application you are sending instructions to the CPU.



*FIGURE 24.1 CPU.*

**b) Monitor or Screen:** This is the TV-type screen on which you can see the work you are doing on your computer.



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*FIGURE 24.2 Monitor*

**c) Keyboard:** The **keyboard** is one of the main ways to communicate with a computer. There are many **different** types of keyboards, but most are **very similar** and allow you to accomplish the same basic tasks.



*FIGURE 24.3 Keyboard*

**d) Mouse:** The **mouse** is another important tool for communicating with computers. Commonly known as a **pointing device.** It lets you to **point** the objects on the screen, to **click** on them, and **move**.



*FIGURE 24.4 Mouse*



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## Section 2 . Identification of Ports in CPU :

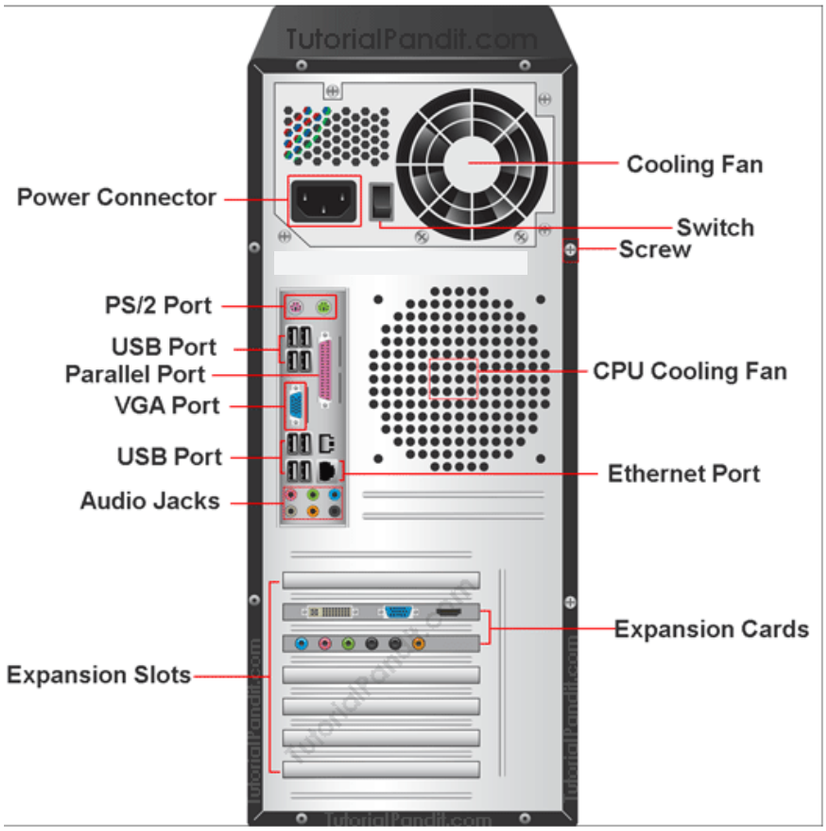



*FIGURE 24.5 Identification of ports in CPU*

Step 1: Identify the power connector, smps cooling fan, CPU cooling fan, switch and screw.

Step 2: Identify the PS/2 port, USB port, Parallel port, VGA port, Ethernet port and Audio jacks in CPU.

Step 3: Identify the expansion slots and expansion cars in the CPU.

## Section 3: Connecting the devices:

### A) Setting up a Desktop computer

Step 1**:** Unpack the monitor and computer case from the box. Remove any plastic cover or protective tape. Place the monitor and computer case on a desk or work area.



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*FIGURE 24.6 Desktop computer*

Be sure to place your computer in an area that is well ventilated and has good airflow. This will help you to prevent the computer from overheating.

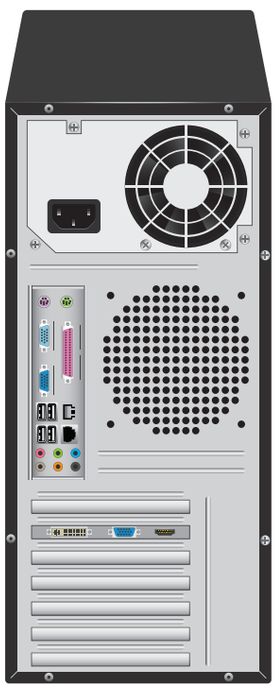


*FIGURE 24.7 Ventilated CPU*

Step 2 : Locate the monitor cable. There are several types of monitor cables. The one for your computer may not look a like the other one shown below.



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*FIGURE 24.8 Monitor cable*

If you are finding trouble with your monitor cable, refer to the instruction manual of your computer.

Step 3 : Connect one end of the monitor cable port on the back of the computer case and the other end to the monitor. If you're using a VGA cable like the one in the picture below, you have to tighten the screws on the monitor cable to secure it.

Many computer cables only fit in a specific way. If the cable doesn't fit, don't force it. It might damage the connectors. Make sure the plug aligns with the port, then connect it.



*FIGURE 24.9 VGA cable*

Step 4: Unpack the keyboard and determine whether it uses a USB (rectangular) connector or a PS/2 (round) connector. If it uses a USB connector, plug it into any of the USB ports on the back of the computer. If it uses a PS/2 connector, plug it into the purple keyboard port on the back of the computer.



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*FIGURE 24.10 USB cable*

Step 5**:** Unplug the mouse and determine whether it uses a USB or PS/2 connector. If it uses a USB connector, plug it into any of the USB ports on the back of the computer. If it uses a PS/2 connector, plug it into the green mouse port on the back of the computer.



*FIGURE 24.11 PS/2 connector*

If your keyboard has a USB port, you can connect your mouse to the keyboard instead of connecting it directly to your computer.

If you have a wireless mouse or keyboard, you may need to connect a Bluetooth dongle (USB adapter) to your computer. However, many computers have built-in Bluetooth, so an adapter may not be necessary.

Step 6: If you have external speakers or headphones, you can connect them to your computer's audio port (either on the front or back of the computer case). Many computers have colour-coded ports. Speakers or headphones connect to the green port, and microphones connect to the pink port. The blue port is the line in, which can be used with other types of devices.



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*FIGURE 24.12 Colour coded ports*

Some speakers, headphones, and microphones have USB connectors instead of the usual audio plug. These can be connected to any USB port. In addition, many computers have speakers or microphones built into the monitor.

Step 7: Locate the two power supply cables that came with your computer. Plug the first power supply cable into the back of the computer case and then into a surge protector. Then, using the other cable, connect the monitor to the surge protector.



*FIGURE 24.13 Power supply cable*

You can also use an uninterruptible power supply (UPS), which acts as a surge protector and provides temporary power if there is a power outage.

Step 8 : Finally, plug the surge protector into a wall outlet. You may also need to turn on the surge protector if it has a power switch.



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*FIGURE 24.14 Surge protector*

If you don't have a surge protector, you can plug the computer directly into the wall. However, this is not recommended because electrical surges can damage your computer.

Step 9: If you have a printer, scanner, webcam or other peripherals, you can connect them at this point. Many peripherals are plug and play, which means they will be recognized by your computer as soon as they are plugged in.




*FIGURE 24.15 Printer*

Other peripherals may include software that needs to be installed before you can begin using them. Use the instructions included with the device to install it if necessary. Generally, peripherals are optional, and you can add new ones at any time; you don't have to add all peripherals during the initial setup of your computer.



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**Result:**

Thus the procedure of connecting and disconnecting different external Input and Output devices with the Computer has been learned successfully.

**Simple Assessment:**

1. Connect the parts as per this block diagram

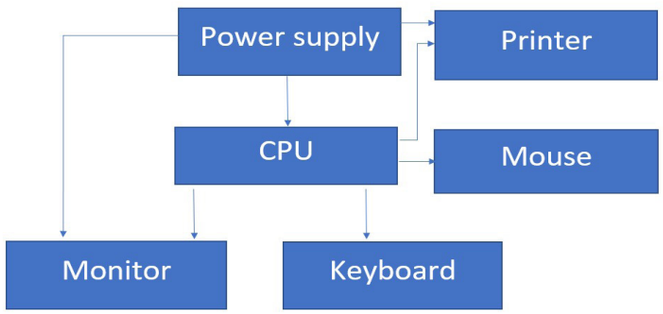



*FIGURE 24.16 Diagram*

2. What are the safety precautions to be taken while assembling the computer?

- Remove your watch and jewellery and secure loose clothing.
- Turn off the power and unplug equipment before performing service.
- Cover sharp edges inside the computer case with tape.
- Never open a power supply or a CRT monitor.
- Do not touch areas in printers that are hot or that use high voltage
- Bend your knees when lifting heavy objects to avoid injuring your back

**Table showing Video suggestions:**

*Table 2*

| S.No | Title/purpose | Link | QR Code | |
|---|---|---|---|---|
| 1 | Setting up a desk-top computer | https://youtu.be/KdQeU5QTfYE | | GCFLeanaFree.org |



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| | | | | |
|---|---|---|---|---|
| 2 | How to Setup a Desktop Computer at Home | https://youtu.be/avaOf-kdb7w | | Palmetto technology group |
| 3 | Computer Fundamentals - Setting Up a Computer - How to Set a Desktop Computers and How to Plug In PC | https://youtu.be/SM0qsvQBEPg | | Professor Adam Morgan |

*Table 3*

| | |
|---|---|
| **Student project** | Students are asked to set up three computers. |
| **Guest lecture suggestions** | Invite a computer field technician for a guest lecture.<br>Invite an IT engineer for a guest lecture. |
| **Industrial/ Field visit suggestions** | A Visit to a Computer centre for field visit.<br>A Visit to a software company for industrial visit. |

## 1. Word Processing :

Word Processing refers to the act of using a computer to create, edit, save and print documents.

In order to perform word processing, specialized software (known as a word processor) is needed.

Ex: MS Word, Open Office Writer and Google Drive Document.

## 2. Introduction

Microsoft Word (MS Word) is a popular commercial word processor created by Microsoft. It is also one of the widely used programs in the suite.

It is available for both windows and Apple Operating Systems (OS)

Microsoft Word is in the Microsoft office productivity package and is also available as a standalone application.

Microsoft Word was first released in 1983 and has seen various revisions since then. It's compatible with both Windows and Mac computers.

Although many other applications give it a competition, nothing has defeated it to date.



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### 3. Features of MS WORD:

i. It helps to make professional write-ups, editing and formatting the existing documents.

ii. It also helps in creating graphical documents comprising images and more.

iii. Millions of Office Workers, students and home users create, read and edit documents using this software program.

iv. MS-Word not only supports Word Processing textures but also DTP textures.

### 4. Application – MS – Office:

MS Office is a powerful service and it helps the worldwide business community to improve their efficiency and productivity.MS Office can be used in different operating systems namely Window OS, Mac OS, Android ios etc.,

MS Office provides tools enabling businesses to be productive and communicate effectively regardless of location.

## EXPERIMENT : 25

## CREATE A MS WORD DOCUMENTS AND ITS VARIOUS OPTIONS

### Objectives:

To create a MS word documents and use its various options.

### Operations / Experiments Covered Under the Project:

1. Creating a document
2. Parts of writer window
3. Cursor and mouse pointer
4. Text editing
5. Undo and redo
6. Moving and copying text
7. Copy and paste
8. Selecting text
9. Selecting a vertical block of text



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10. Find and replace

11. Using synonyms & the thesaurus

12. Save and reopen the file

## Tools and Equipment Required:

| S.no | Name of the tools/ equipment | Range/Value | Quantity |
|---|---|---|---|
| 1 | Computer or Laptop | I5 processor/4GB RAM | 1 |
| 2 | Microsoft office | MS office 2019 | 1 |

## Shortcut Keys:

### Table 1

### Table showing shortcut keys

| Sl.no | To do this | Press |
|---|---|---|
| 1 | Open a document. | **Ctrl+O** |
| 2 | Create a new document. | **Ctrl+N** |
| 3 | Save the document. | **Ctrl+S** |
| 4 | Close the document. | **Ctrl+W** |
| 5 | Cut the selected content to the Clipboard. | **Ctrl+X** |
| 6 | Copy the selected content to the Clipboard. | **Ctrl+C** |
| 7 | Paste the contents of the Clipboard. | **Ctrl+V** |
| 8 | Select all document content. | **Ctrl+A** |
| 9 | Apply bold formatting to text. | **Ctrl+B** |
| 10 | Apply italic formatting to text. | **Ctrl+I** |
| 11 | Apply underline formatting to text. | **Ctrl+U** |
| 12 | Decrease the font size by 1 point. | **Ctrl+Left bracket** ([) |
| 13 | Increase the font size by 1 point. | **Ctrl+Right bracket** (]) |
| 14 | Center the text. | **Ctrl+E** |
| 15 | Align the text to the left. | **Ctrl+L** |



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| | | |
|---|---|---|
| 16 | Align the text to the right. | **Ctrl+R** |
| 17 | Cancel a command. | **Esc** |
| 18 | Undo the previous action. | **Ctrl+Z** |
| 19 | Redo the previous action, if possible. | **Ctrl+Y** |
| 20 | Adjust the zoom magnification. | **Alt+W, Q, then use the Tab key in the Zoom dialog box to go to the value you want.** |
| 21 | Split the document window. | **Ctrl+Alt+S** |
| 22 | Remove the document window split. | **Alt+Shift+C or Ctrl+Alt+S** |

## Procedure:

### Section 1. Creating a document:

Step 1: Create a new text document by using File → New → Blank Document.

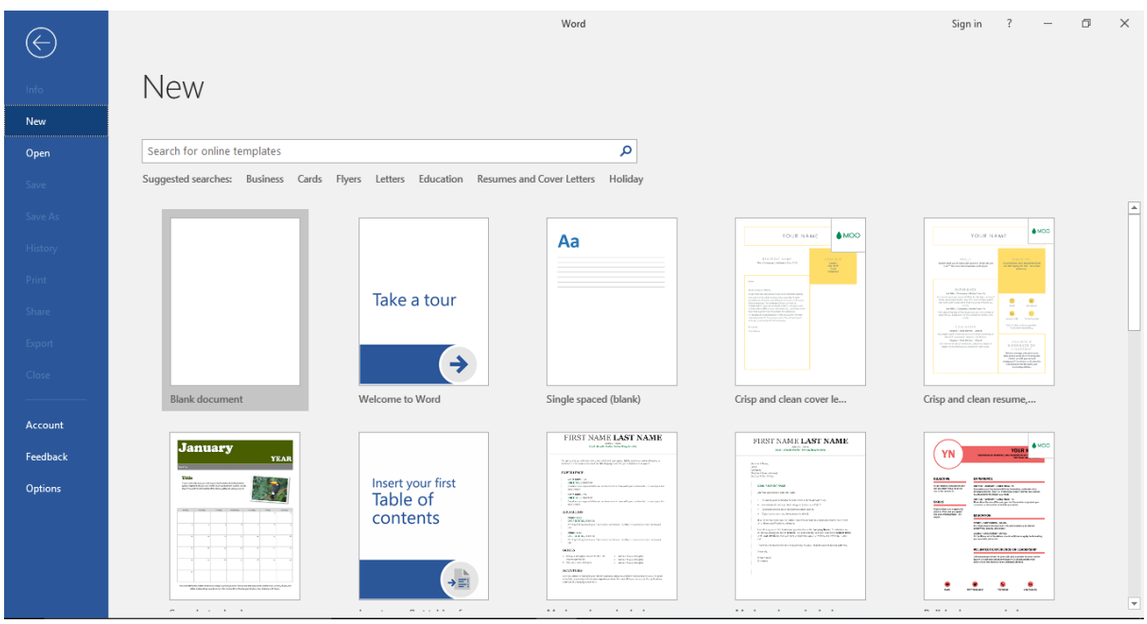



*FIGURE 25.1 Create a new document.*



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Step 2: Now save the file by clicking on the File → Save. Give the name of the file (for example:report). By default, the file is saved in .docx format. Different file formats are under Save as->Save as type->Choose the different format.

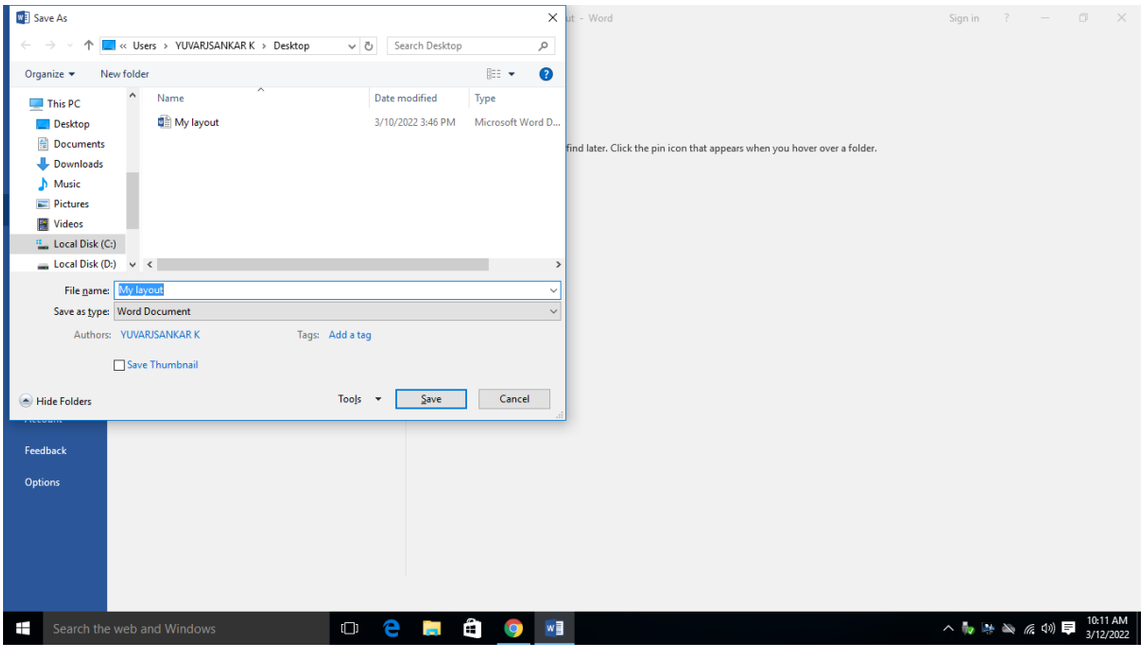



*FIGURE 25.2 Type file name*

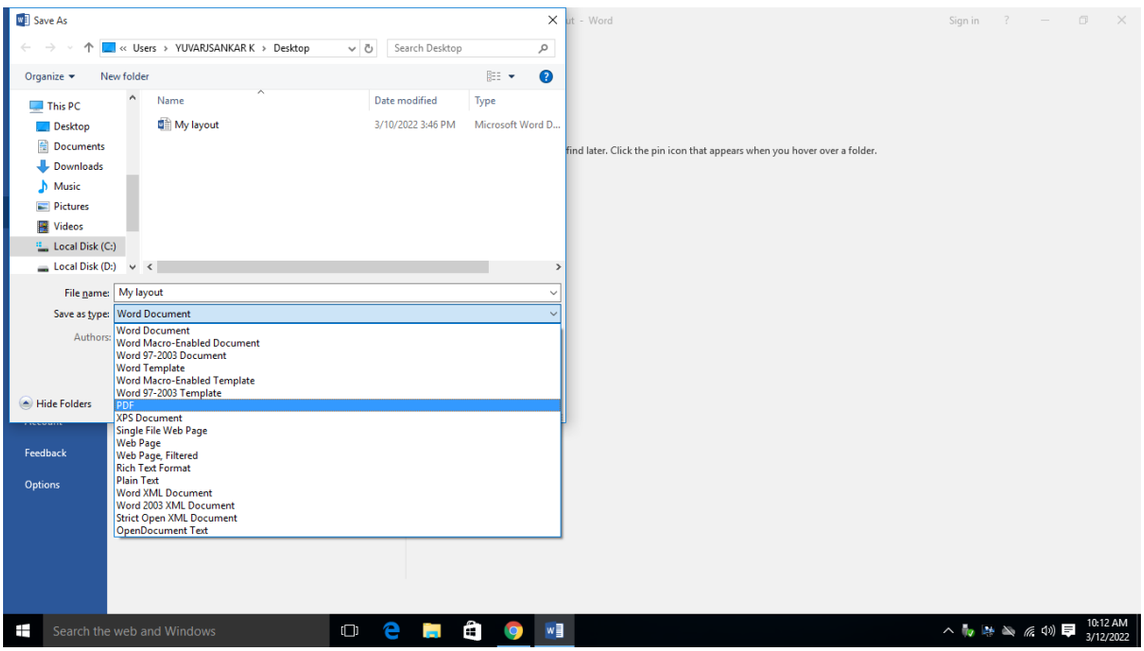



*FIGURE 25.3 Save as type*

Step 3: Saving the file by another name

It is possible to make another copy of the file by saving it with another name using the Save As option. Once the user saves the document by giving a name, it is called a 'File'.



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The user can save the file with another name in another location with another format using the Save As option. The user will get two files: the previous one and the one with the new name.

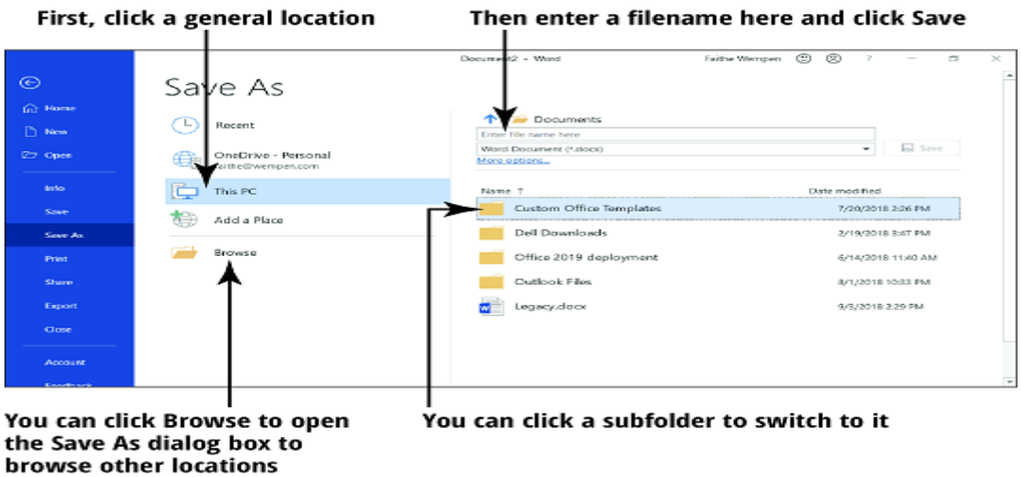



*FIGURE 25.4 Save the file*

Step 4: Closing the document

After finishing the work, close the file, as too many opened files will cause a disturbance in working. To close the file, select File → Close

Step 5: Opening the document

It may further require opening a file for editing. Select File → Open (Ctrl+O) and the document will be open for editing.

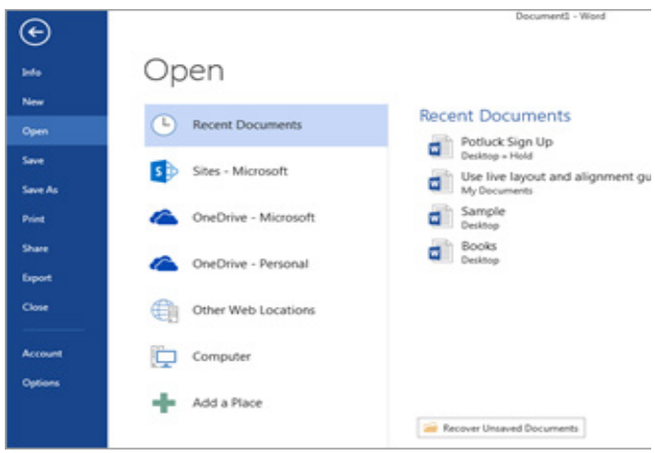



*FIGURE 25.5 Open the document.*

## Section 2. Parts of a Writer Window:

**Title bar:** Title bar is located on the top of the Writer window. It shows the title of the currently opened document. The name of the document means the file name of the document saved on



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the disk. For a new document, it shows the title of the document as Untitled X, where 'X' is the document number Untitled 1, Untitled 2, Untitled 3... etc., as we go on opening the new document

**Menu bar:** It appears below the Title Bar. It shows the menu items File, Edit, View, Insert, Format, Tables, Tools, Window and Help. On selecting a menu item, its submenu will open below the menu item. We can select any item in the submenu as per the requirement. Selecting the File menu. The submenu item which shows three dots '...' just after the submenu name, means, clicking on it will open the dialog box. The submenu item which shows right hand side arrows '➨' just after the submenu name, means, clicking on it will open another submenu.

**Toolbars:** The tool bar appears below the Menu Bar. By default, the Standard Tool Bar and Formatting ToolBar will appear. The other toolbars can be activated by clicking on the 'View' menu, and selecting the 'Toolbars' of the submenu. The user can choose the required toolbars by clicking on it. Standard toolbar: It contains commands in the form of icons.

**Formatting toolbar:** It contains the various options for formatting a document. A graphical representation of commands is shown in the form of icons.

**Status bar:** This is positioned at the left bottom of the Writer window and displays the number of pages, words, the language used, zooming, etc. It is located at the bottom of the workspace.

**Scroll button and Scroll bar:** It is used to scroll the document.

**Zoom:** It allows you to change the scale of the text and pictures in the document only for view. It does not affect the physical document. It is used to check the finishing quality of the document. To know the meaning of other tools, position the mouse pointer on the tool and see the Tool Tip.

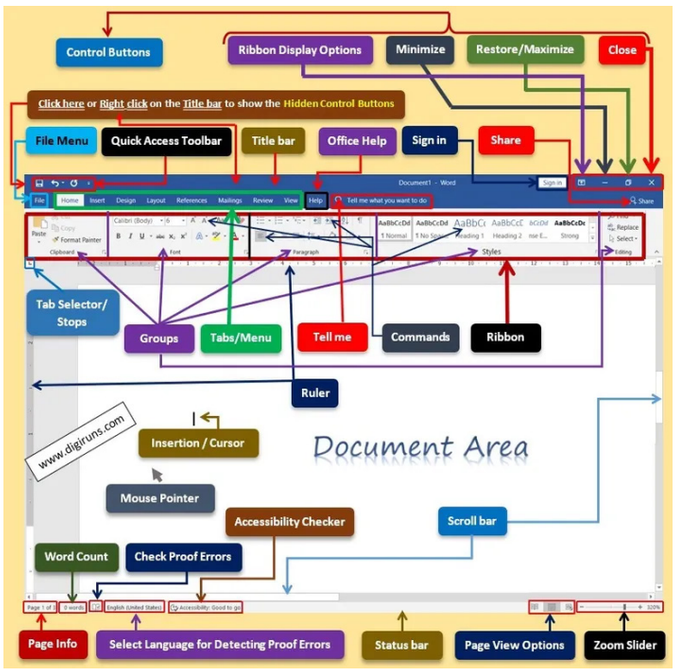



*FIGURE 25.6 Part of writer windows.*



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## Section 3. Cursor and Mouse Pointer:

**Text Cursor:** The Text Cursor is a flashing vertical line in the body of the text. The 4 arrow keys (←↑→↓) on the keyboard are called as cursor control keys

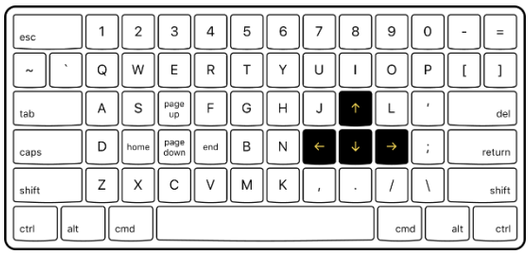



*FIGURE 25.7 Text cursor.*

## Mouse Pointer:

This is the mouse pointer. It takes the pointer shape while moving it around the screen. The mouse pointer changes to I shape, when moved over the text in a document. Moving the 'I' shaped mouse pointer over the text and clicking on the desired text, helps to get the text cursor while editing the document. Thus, the mouse is used to control the Text Cursor location.

## Section 4. Text Editing:

Step 1: Click Home Button

Step 2: Select the text that you want to edit.

Step 3: Using the tools in the edit toolbar, change the required formatting including font style, paragraph alignment, list formatting, and indentation options.

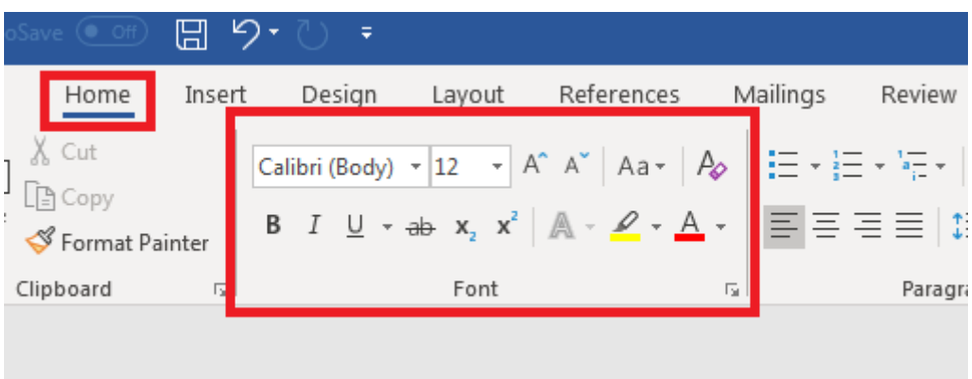



*FIGURE 25.8 Text editing.*



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## Section 5. Undo and Redo:

Open the existing file (For example, report.docx) and then start editing in it. If, by mistake, you have made some changes and now you want to erase the last change done, then use the Undo option. After undo command, again if you want to go back then use the Redo option.

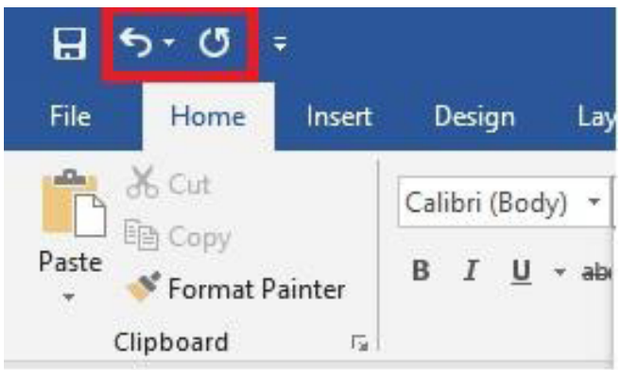



*FIGURE 25.9 Undo and Redo.*

## Section 6. Moving and Copying Text from One place to Another:

Step 1: Select the text and click on Select the text →

Step 2: Right click the mouse and select Cut option or press CTRL+X.

Step 3: Place the cursor where the text has to be moved.

Step 4: Right click the mouse and select Paste options or press CTRL+V.

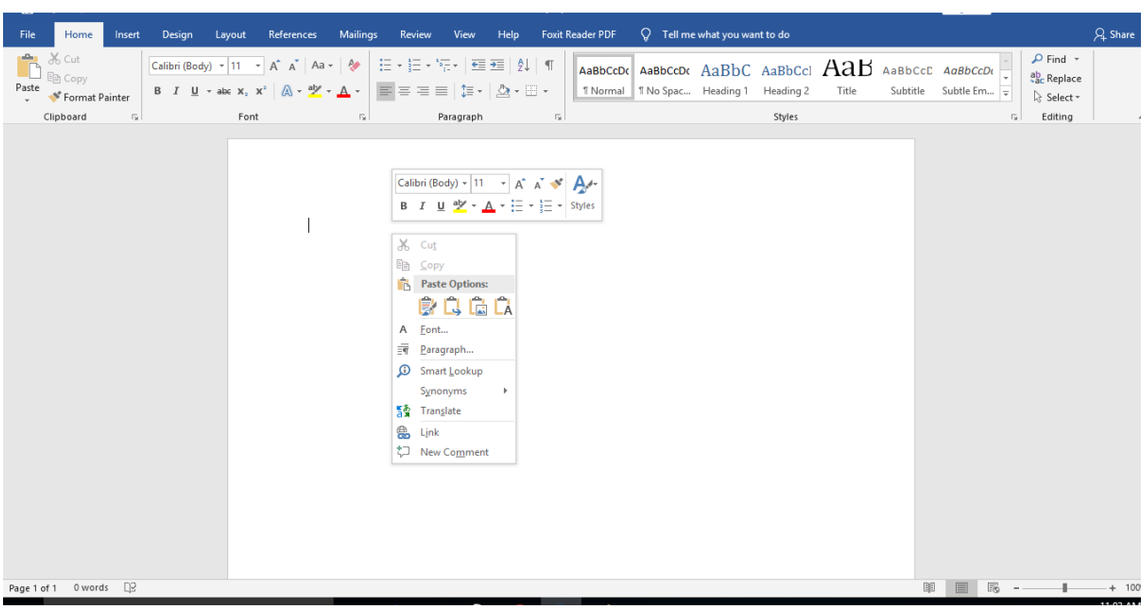



*FIGURE 25.10 Copying, pasting the text.*



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## Section 7. Copy and Paste:

Step 1: Select the text.

Step 2: right click and select **COPY** option or press **CTRL+C**

Step 3: Place the cursor where the text has to be duplicated.

Step 4: Right Click and select **Paste** option or press **CTRL+V**

## Section 8. Selecting Text:

Step 1: The editing can be done by left long click and drag the mouse require select text.

Step 2: It is necessary to select the text to perform copy and paste operation. The selected text will be highlighted. For editing the text, you must first select the required text;

Step 3: For selecting all select press Ctrl+A.

Step 4: Press ESC to turn off the selection mode.

## Section 9: Selecting a Vertical Block of Text:

Step 1: Press **CTRL+A** for selecting all text.

Step 2: A vertical block of text Press CTRL+SHIFT+F8, and then use the arrow keys or Use Alt key and select the required text for the vertical block of text.

Step 3: Press ESC to turn off the selection mode.

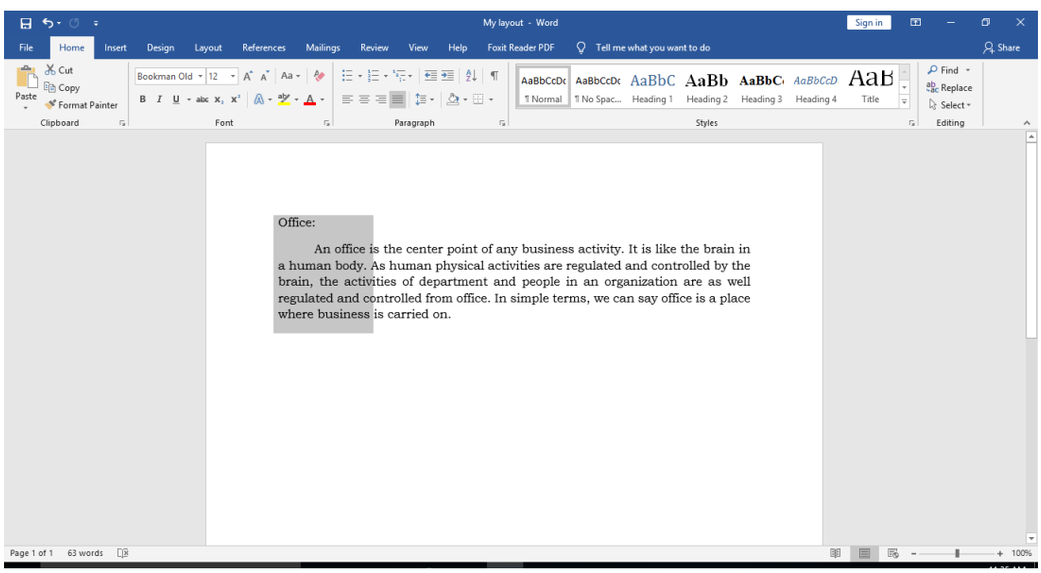



*FIGURE 25.11 Selecting a vertical block of text*



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## Section 10: Find and Replace:

Step 1: Click on Find & Replace option in Home toolbar.

Step 2: Write text under Search for option and click on Find button to locate the entered word. This will select the word which you want to search for text in your document.

Step 3: Write the text under Replace with option.

Now click on Replace if you want to change only the first occurrence of it and use Replace All to replace all the matching occurrences.

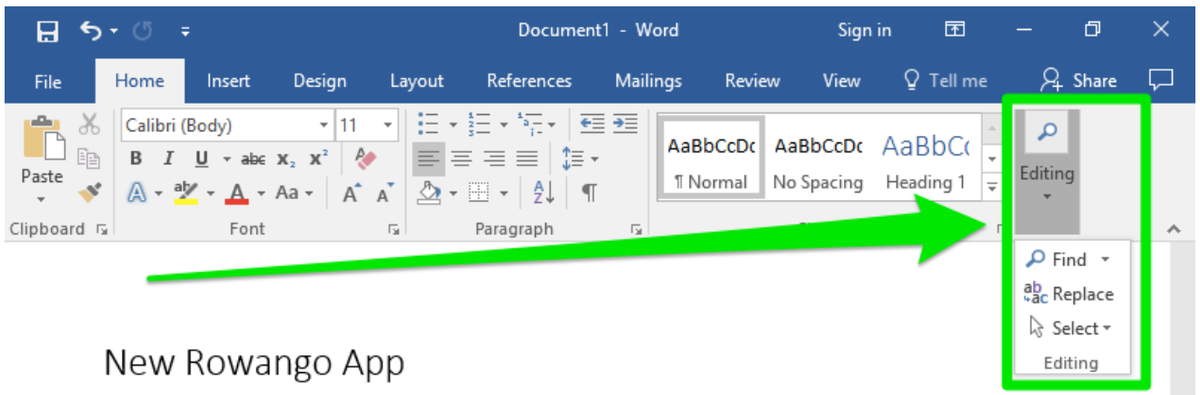



*FIGURE 25.12 Find and replace*

## Section 11: Using Synonyms & Thesaurus:

Sometimes you may search for a word having a similar meaning to the word. A word processor helps to look up synonyms (different words with the same meaning) and antonyms (words with the opposite meaning) in the thesaurus. The list of synonyms can be accessed from a context menu Right-click on a word and point to Synonyms on the context menu. A submenu of alternative words and phrases are displayed. Click on a word or phrase in the submenu to replace it with the highlighted word or phrase in the document. Synonyms are different from a dictionary. A dictionary contains definitions and pronunciations, whereas thesaurus will have words with similar meanings or opposite meanings.

## Section 12: Save and Ropen the File:

Step 1: Select File → Save

Step 2: Select the location on disk to save the file

Step 3: Type a suitable name for the document

Step 4: Click on Save button.



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Step 5: Reopen the file by clicking the File option and Click the open option.

Step 6: Enter the name and location of the document and open the document.

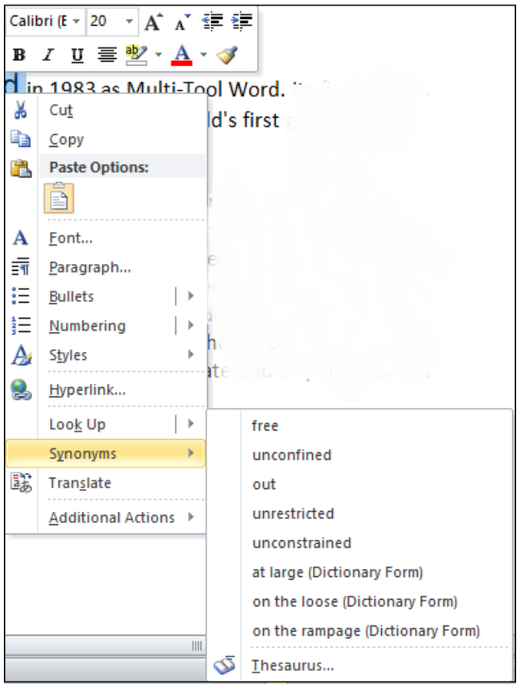



*FIGURE 25.13 Synonyms & Thesaurus.*

## Result:

Thus the MS word document has been created and its various options are used successfully.

## Video Suggestions:

| S.No | Title/Purpose | Link |
|---|---|---|
| 1 | Create a new document | https://youtu.be/4M5sjPGLZks |
| 2 | Parts of window in MS word | https://youtu.be/COzqY5TBXD8 |
| 3 | Text editing in MS word | https://youtu.be/nHNTK8QQiUE |
| 4 | Undo and redo in MS word | https://youtu.be/pnMrQ6U_vtA |
| 5 | Moving and copying text in MS word | https://youtu.be/mGbOlT2cdVU |
| 6 | Copy and paste in MS word | https://youtu.be/sOqaakHHSQY |
| 7 | Selecting text in MS word | https://youtu.be/zNXZD0cS0VM |



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| | | |
|---|---|---|
| 8 | Selecting a vertical block of text in MS word | https://youtu.be/vIbxrddLLj8 |
| 9 | Find and replace in MS word | https://youtu.be/8ZSlu4DWJ5k |
| 10 | Using synonyms & the thesaurus, in MS word | https://youtu.be/hXhpd0kehfg |
| 11 | Save and reopen the file in MS word | https://youtu.be/0rnx5HoxO5s |

**Simple Assessments:**

| | |
|---|---|
| Student project | 1. Students should create a voucher for organization.<br>2. Should prepare an advertisement poster for a function. |
| Guest lecture suggestions | 1. Invite a MS office specialist for a guest lecture.<br>2. Invite a computer technician for a guest lecture.<br>3.Invite an office assistant working in MS office platform. |
| Industrial/ Field visit suggestions | 1.A field Visit to an office nearby the school.<br>2. Visit nearby banks for field visits.<br>3.A field Visit to the nearby auditing office. |

## EXPERIMENT : 26

## INSTRUCTIONS TO FORMAT THE MS WORD DOCUMENT

**Objectives:**

To practice to use formatting instructions in MS word document.

**Operations / Experiments Covered Under the Project:**

1. Formatting the document
2. Formatting text, removing manual formatting
3. Formatting paragraph and using bullets and numbering
4. Assigning color, border and background to paragraph
5. Formatting the page



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## Tools and Equipment Required:

| s.no | Name of the tools/ equipment | Range/Value | Quantity |
|---|---|---|---|
| 1 | Computer or Laptop | I5 processor/4gb ram | 1 |
| 2 | Microsoft office | MS office 2019 | 1 |

## 1. Format the Document:

Step 1: Open Word and type Ctrl+N to open word's default blank document

Step 2: Type Ctrl+S to save this blank document

Step 3: Save the document as 'My layout.docx' to a chosen location (e.g. Favorites) on your computer.

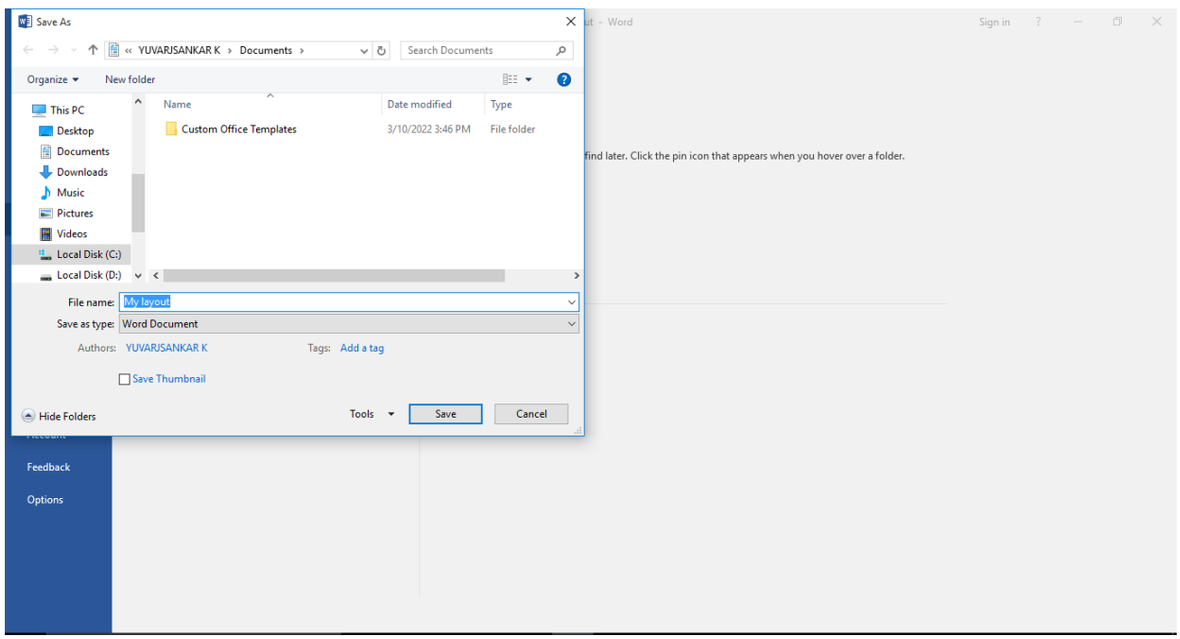



*FIGURE 26.1 Format the document.*

You now have created a new document in which to save your preferred layout. To set the page margins, select the Layout ribbon.

Step 4: In the layout menu, click on the small icon in the right bottom corner of the Page Setup section of the ribbon to bring up the Page Setup dialog box.

Step 5: Click the Margins tab



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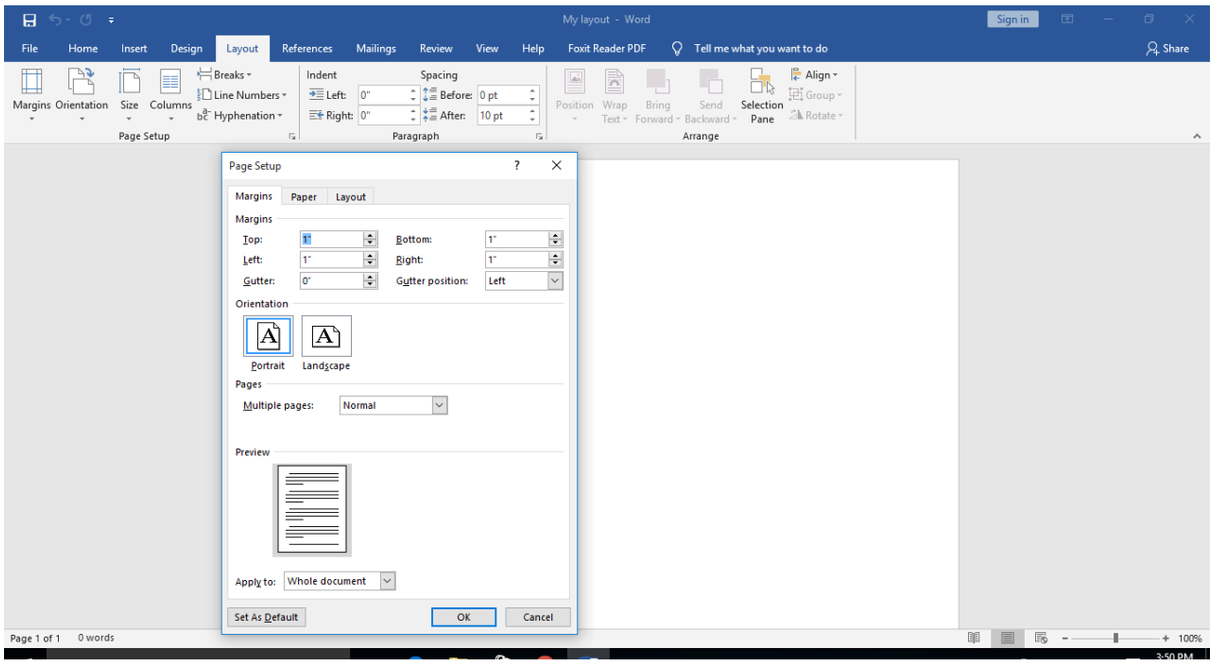



*FIGURE 26.2 Margin tab.*

Step 6: Set the Left margin width to 3 cm

Step 7: choose Portrait page under orientation

Step 8: check that the Apply to is set to whole document in the drop-down box and click OK.

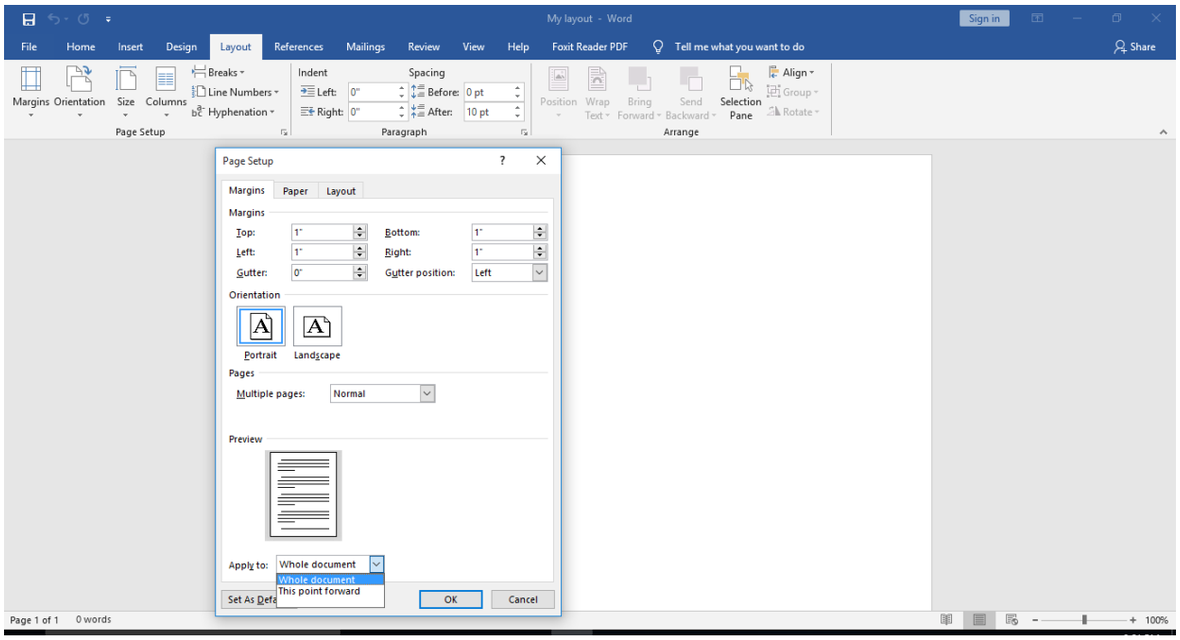



*FIGURE 26.3 Orientation tab.*



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The page margin and orientation settings will now be applied to your whole document.

## Specify the page layout:

To set page margins and numbering for printing double-sided documents, select the Layout tab in the same Page Setup window as used in step 4.

Step 9: Click the different odd and even option in the headers and footers section

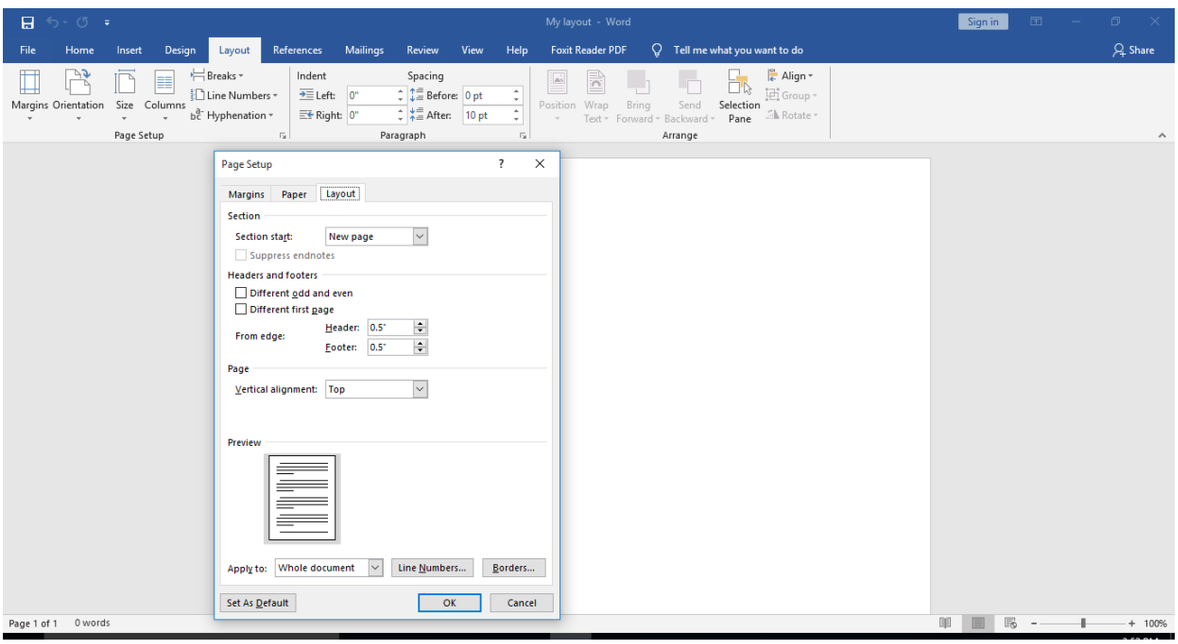



*FIGURE 26.4 Header and Footer section*

Step 10: Click the Different first page option

Step 11. Make sure to check that the Apply to is set to Whole document in the drop-down box.

These page layout settings will now be applied throughout your whole document. They ensure that page numbering can be adjusted for odd and even pages and that the inside margin will be wide enough to bind your printed document

## Session 2: Formatting text, Removing Manual Formatting:

Step 1: Select the text you want to format.

Step 2: To select a single word, double-click it. To select a line of text, click to the right of it.

Step 3: Select an option to change the font, font size, font color, or make the text bold, italic, or underline.



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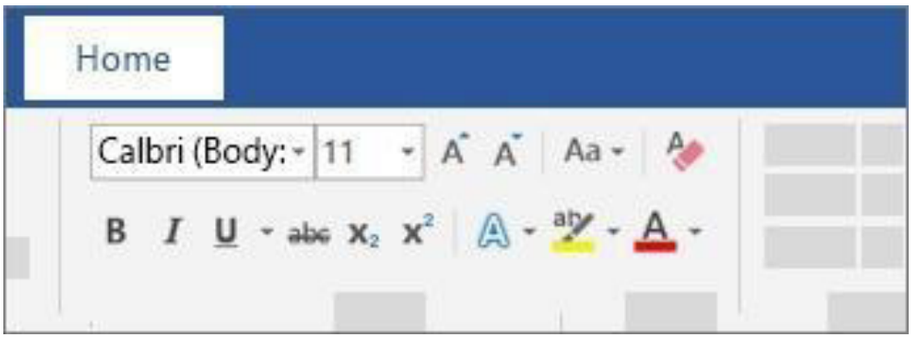



*FIGURE 26.5 Font alignment.*

Step 4: Select the text with the formatting you want to copy.

Step 5: Click Format Painter  , and then select the text you want to copy the formatting to.

## Removing Manual formatting

Step 1: Select the text from which you want to remove formatting in Word. Use your mouse to highlight only part of the text or select all the text in the document by selecting anywhere inside the document and pressing **Ctrl**+**A** to highlight all the text.

Step 2: Select the **drop-down arrow** in the lower-right corner of the Styles box to expand the Styles menu.

Step 3: Select **Clear Formatting**. Any formatting applied to the selected text will be removed.

## Common text Formatting:

## To change the text case:

Step 1: Select the text you want to modify.

Step 2: Click the **Change Case** command in the **Font** group on the Home tab.

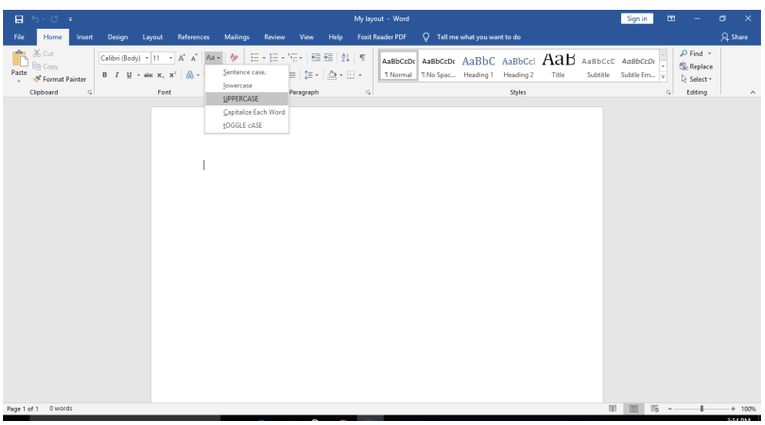



*FIGURE 26.6 Change Case*



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Step 3: Select one of the case options from the list.

**To use the Bold, Italic, and Underline commands:**

Step 1: Select the text you want to modify.

Step 2: Click the Bold, Italic, or Underline command in the **Font group** on the Home tab.

**To format font size:**

Select the text you want to modify.

Step 1: Left-click the **drop-down arrow** next to the **font size box** on the Home tab. The font size drop-down menu appears.

Step 2: Move your cursor over the various font sizes. A **live preview** of the font size will appear in the document

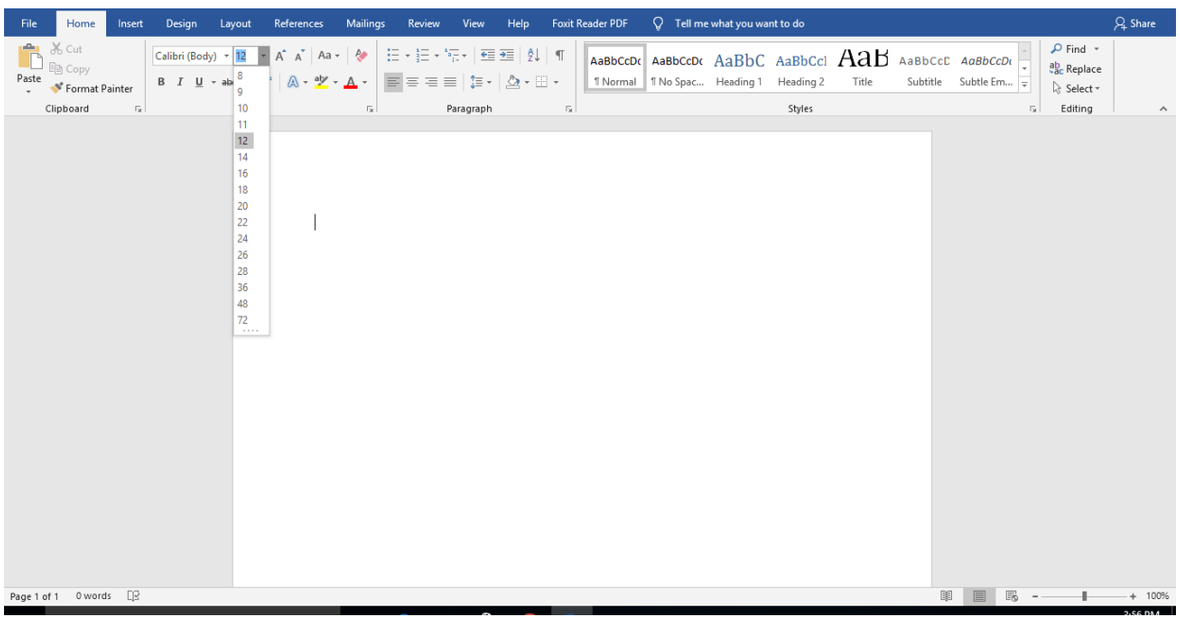



*FIGURE 26.7 Font size box*

## To format font color:

Step 1: Select the text you want to modify.

Step 2: Left-click the drop-down arrow next to the **font color box** on the Home tab. The font color menu appears.



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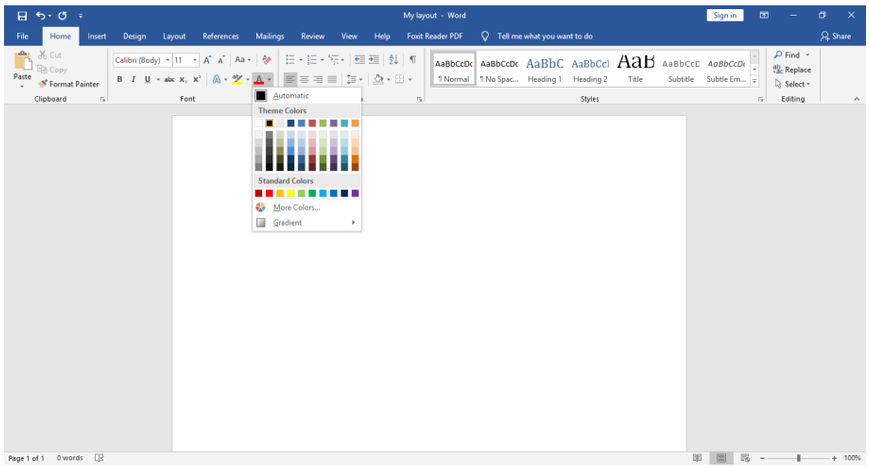



*FIGURE 26.8 Font color box*

Step 3: Move your cursor over the various font colors. A live preview of the color will appear in the document

## To format font style:

Step 1: Select the text you want to modify.

Step 2: Left-click the **drop-down arrow** next to the **font style box** on the Home tab. The font style drop-down menu appears.

Step 3: Move your cursor over the various font styles. A **live preview** of the font will appear in the document

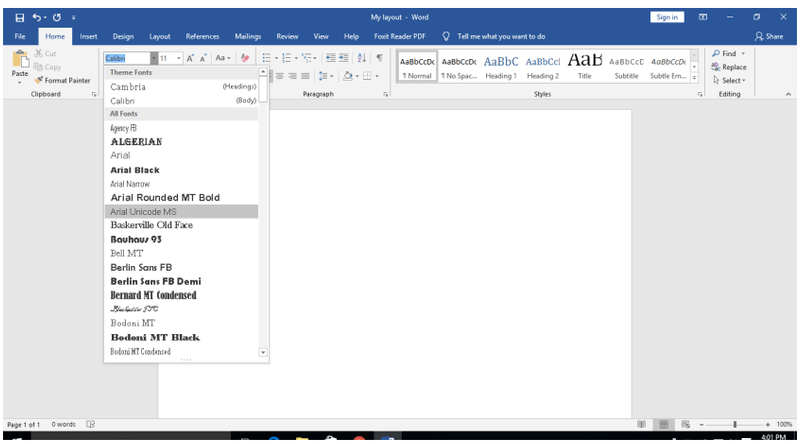



*FIGURE 26.9 Font style box*

## Apply superscript or subscript formatting to text:

Step 1: Select the text you want to format as either a superscript or subscript

Step 2: In the ribbon, click the Home tab and then click either the Superscript or



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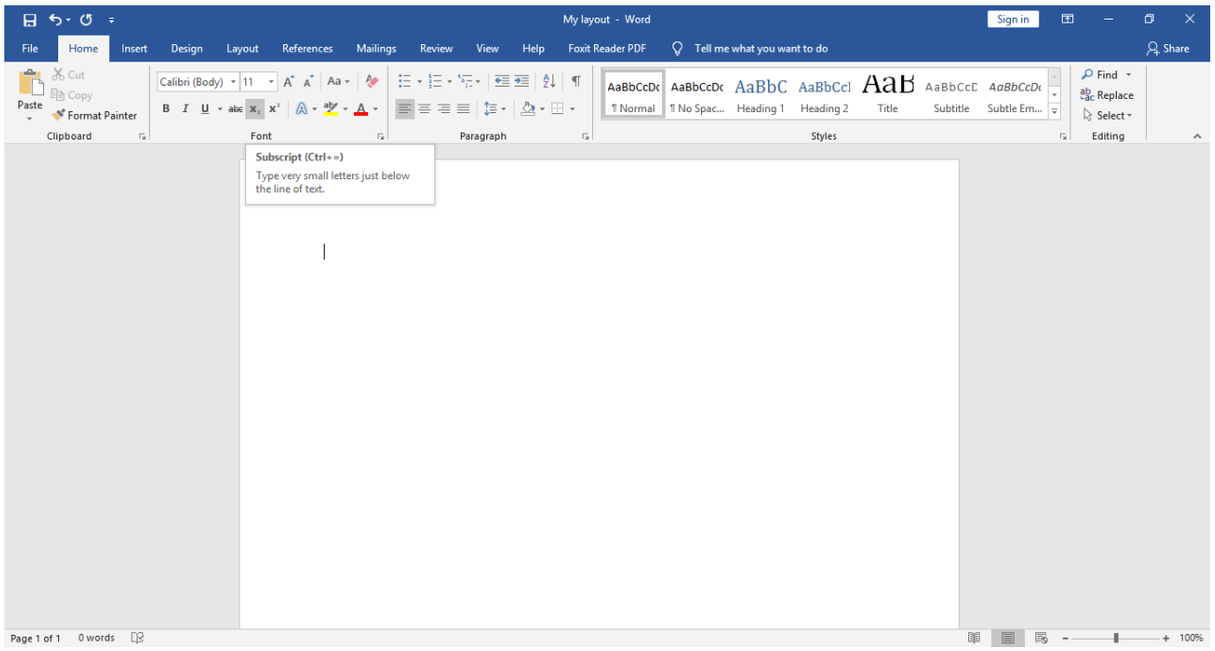



*FIGURE 26.10 Superscript or subscript formatting to text*

**Subscript button, found in the lower row of the Font section.**

## Session 3: Formatting paragraph and using bullets and numbering:

### Paragraph style:

Styles can include character formatting (such as font, size, and color), paragraph formatting (such as line spacing and outline level), or a combination of both. Styles are stored in the template that is attached to a document.

Step 1: Home tab

Step 2; Styles gallery

Step 3: You can add styles to the gallery or remove those that you don't often use.



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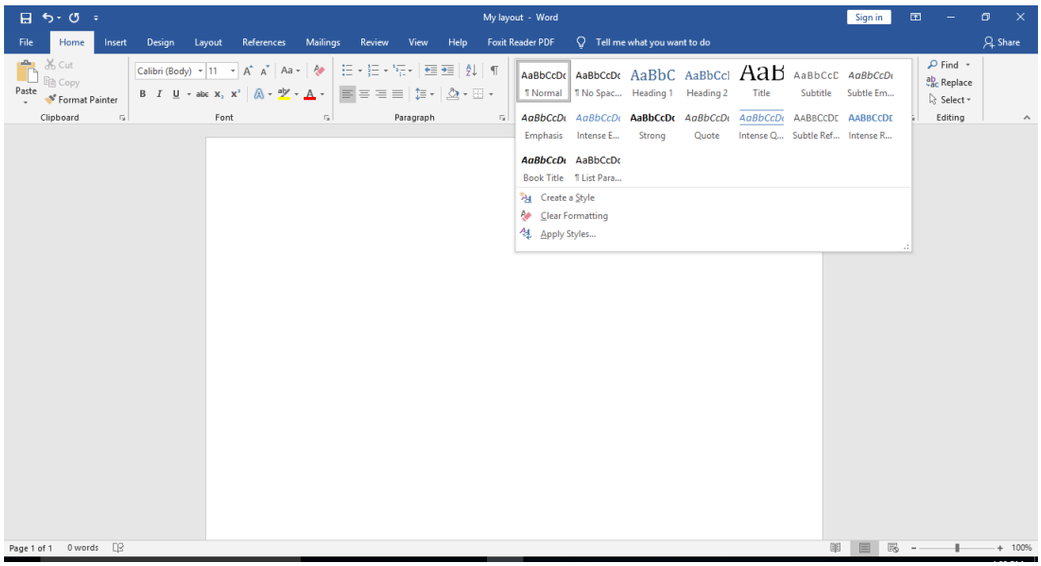



*FIGURE 26.11 Style sets*

Step 1: Click the design tab

Step 2: Document Formatting gallery

## To open the Styles pane:

Step 1: click the Home tab,

Step 2: Select the Styles dialog box launcher

Step 3: Select the text you want to style

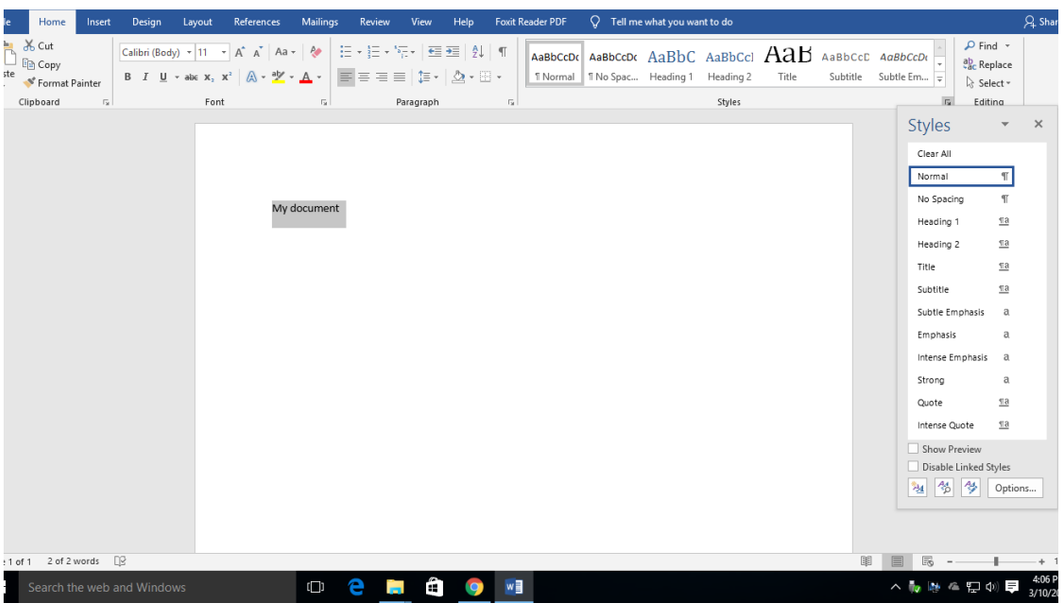



*FIGURE 26.12 Formatting gallery*



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To format a paragraph, you can use different commands such as different text alignments, bullets, numbering, multi-level list, paragraph indents, sorting text, line spacing, shading, and different borders. To format a paragraph, follow the steps below the picture

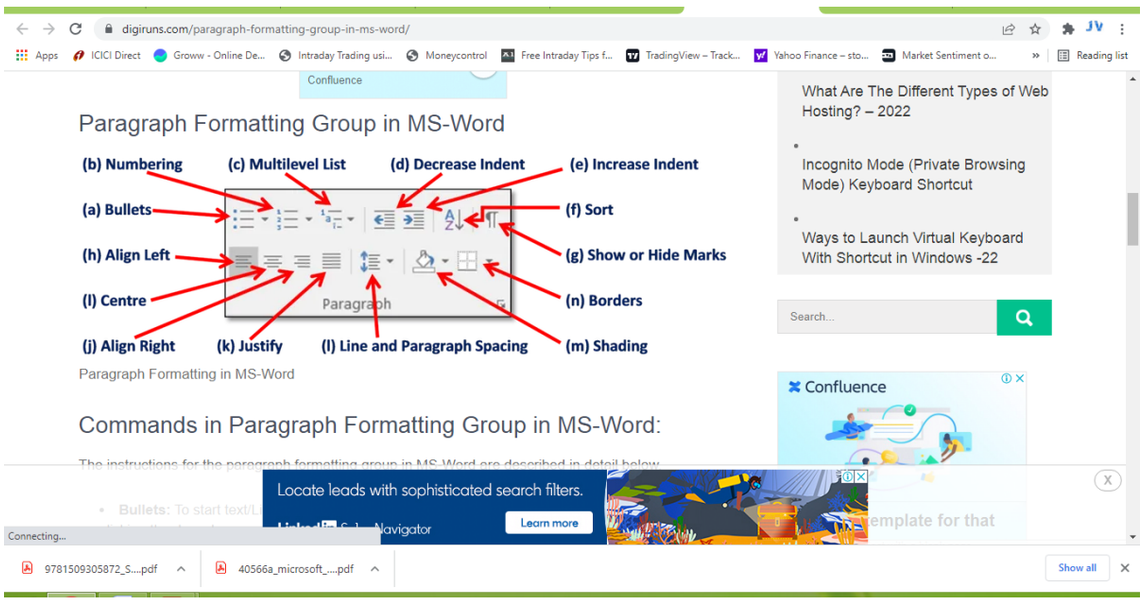



*FIGURE 26.13 Indenting paragraphs*

Step 1: Select the text you want to indent

Step 2: The entire paragraph can be indented in one step.

Step 3: Place the Text Cursor anywhere in the paragraph, select and click on the 'Increase Indent' tool. Each time when you click on the Increase Indent tool, the current paragraph's indent will increase. There is also a Decrease Indent tool that removes the indent.

## Aligning paragraphs:

Step 1: Select the text and set the paragraph alignment before you start typing into your document.

Step 2: Then click the "Home" tab in the Ribbon.

Step 3: Then click either the "Align Left (Ctrl+L) ," "Center (Ctrl+E)," "Align Right (Ctrl+R)," or "Justify" (Ctrl+J) button in the "Paragraph" button group to set the desired paragraph alignment.



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## Creating a Bulleted List:

Step 1: Go to the Home tab

Step 2: Click on the drop-down arrow of the Bullets, which is the first option in the Paragraph group.

Step 3: Under the command "Bullet", Select one of the options that you want to start the bulleted list

Step 4: Now the Bullet is being inserted into your word document to start its list

Step 5: After you insert the bullet, start typing the word/sentence that you want

Step 6: Then press the enter key to start the next bullet point. Do this in the same way to create the Bulleted List.

Step 7: To start the new section with a word, sentence or paragraph without a Bulleted list, strike the Enter key 2 times

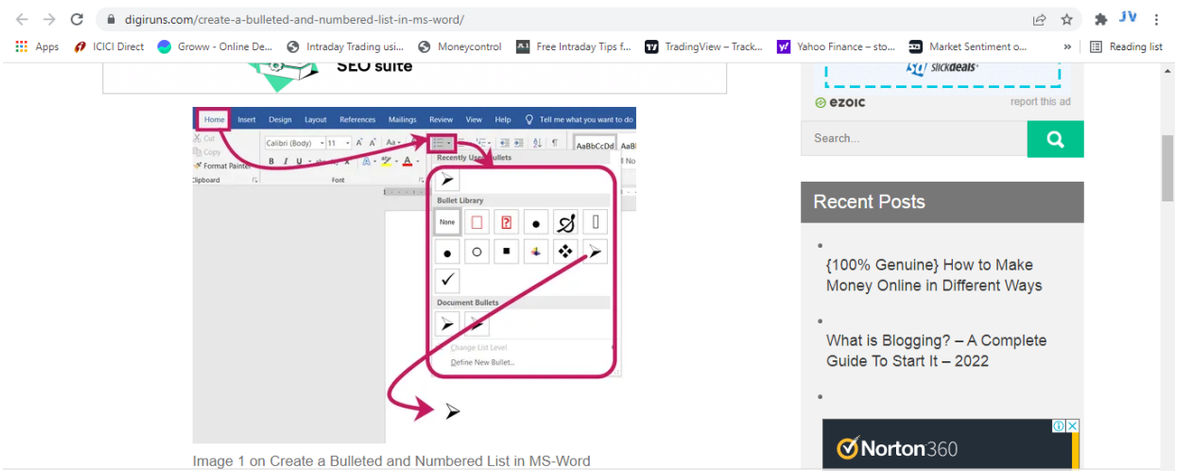



*FIGURE 26.14 Bulletin library.*

## Creating a Numbered List:

Step 1: Go to the Home tab

Step 2: Click on the drop-down arrow of the Numbering, which is the second option in the Paragraph group.

Step 3: Under the command "**Numbering**", Select one of the options that you want to start the numbered list



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Step 4: Now the **Number** is being inserted into your word document to start its list.

Step 5: After you insert the **number**, start typing the word/sentence that you want,

Step 6: Then press the **enter** key to start the next serial number. Do this in the same way to create the **Number List**.

Step 7: To start the new section with a word, sentence or paragraph without a Numbered list, strike the Enter key 2 times.

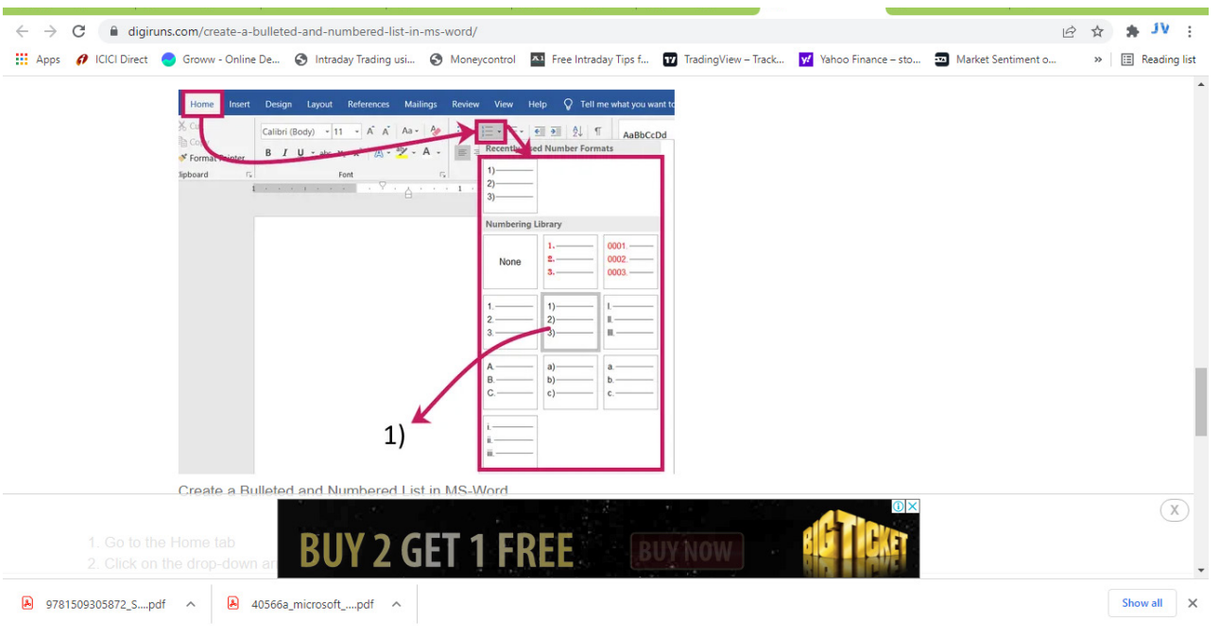



*FIGURE 26.15 Numbering list.*

## Session 4: Assigning color, border and background:

### Assign Page Color:

You can also add a background color to your document. This color will only appear in digital copies of the document—Word will not print the page color.

Step 1: On the Design tab, click the Page Color button.

Step 2 : Select a color.



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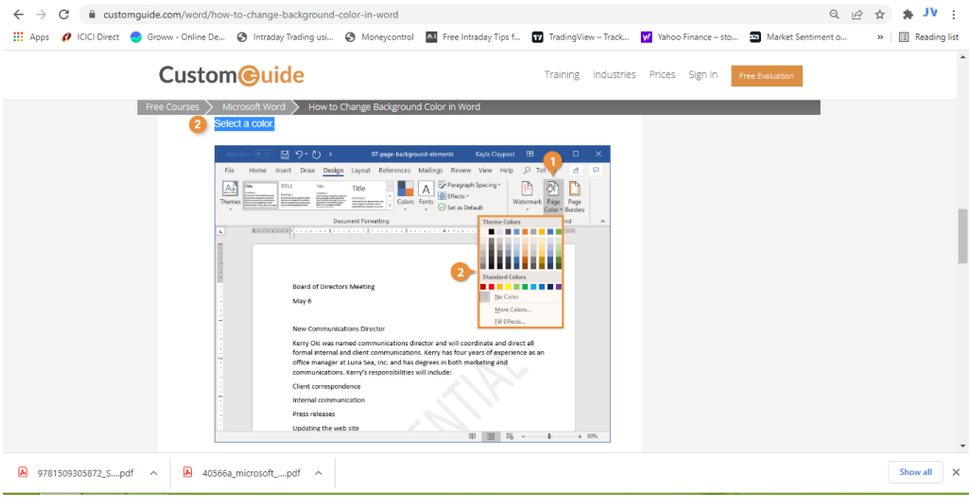



*FIGURE 26.16 Assign the color.*

## Add Page Borders:

You can also add page borders along the margins to give it a finished look.

Step 1: On the Design tab, click the **Page Borders** button.

Using the Borders and Shading dialog box, customize how you want the border to look.

Step 2: Select a border style from the Style list.

You can choose from a variety of solid lines, dotted and dashed lines, and patterns.

Step 3: Select a border color.

Step 4: Select a border width.

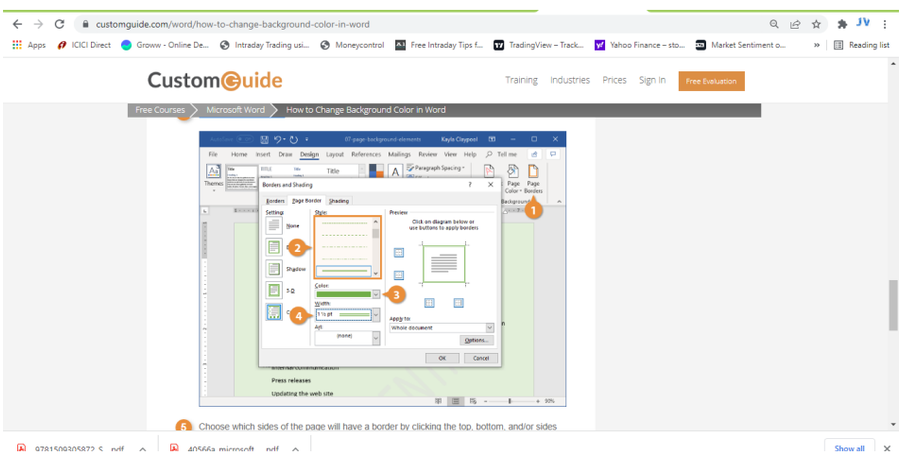



*FIGURE 26.17 Add page borders*



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Step 5: Choose which sides of the page will have a border by clicking the top, bottom, and/or sides of the preview.

Step 6: Choose which sections of the document will have the border.

Step 7: You can choose the whole document, just this section, just the first page in this section, or every page in the section but the first page.

Step 8: Click OK.

The border is added to the selected pages.

## Section 5: Page formatting:

**To change page orientation:**

Step 1: Select the **Layout** tab.

Step 2: Click the **Orientation** command in the Page Setup group

Step 3: A drop-down menu will appear. Click

either **Portrait** or **Landscape** to change the page orientation.

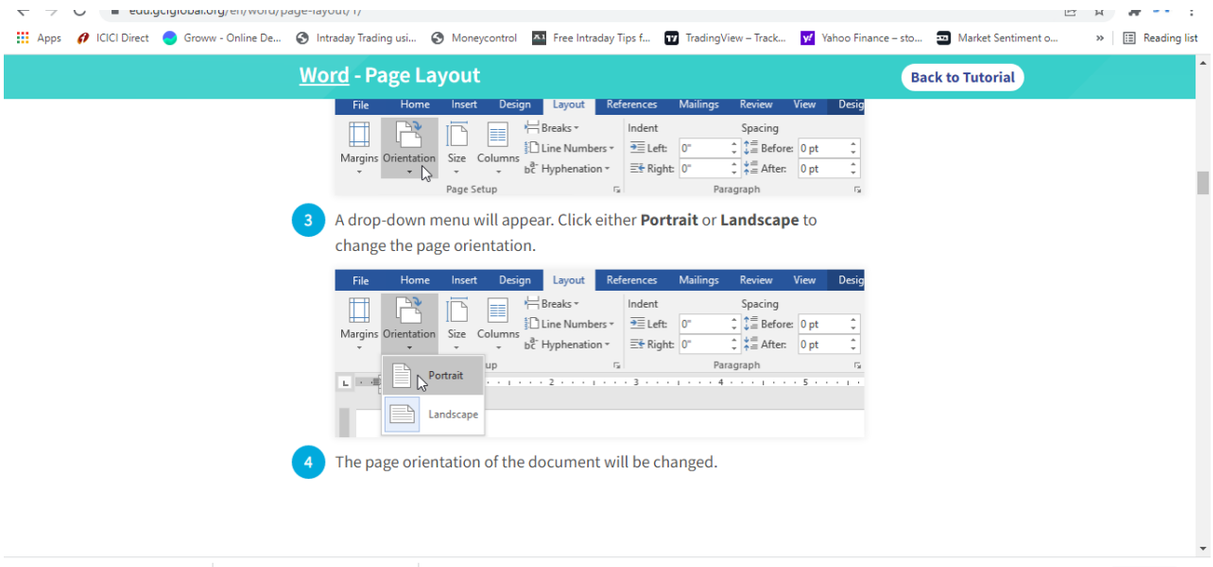



*FIGURE 26.18 Page orientation.*

The page orientation of the document will be changed.



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## Page size:

By default, the **page size** of a new document is 8.5 inches by 11 inches. Depending on your project, you may need to adjust your document›s page size. It's important to note that before modifying the default page size, you should check to see which page sizes your printer can accommodate.

Step 1 : Select the **Layout** tab, then click the **Size** command

Step 2: A drop-down menu will appear. The current page size is highlighted. Click the desired predefined page size

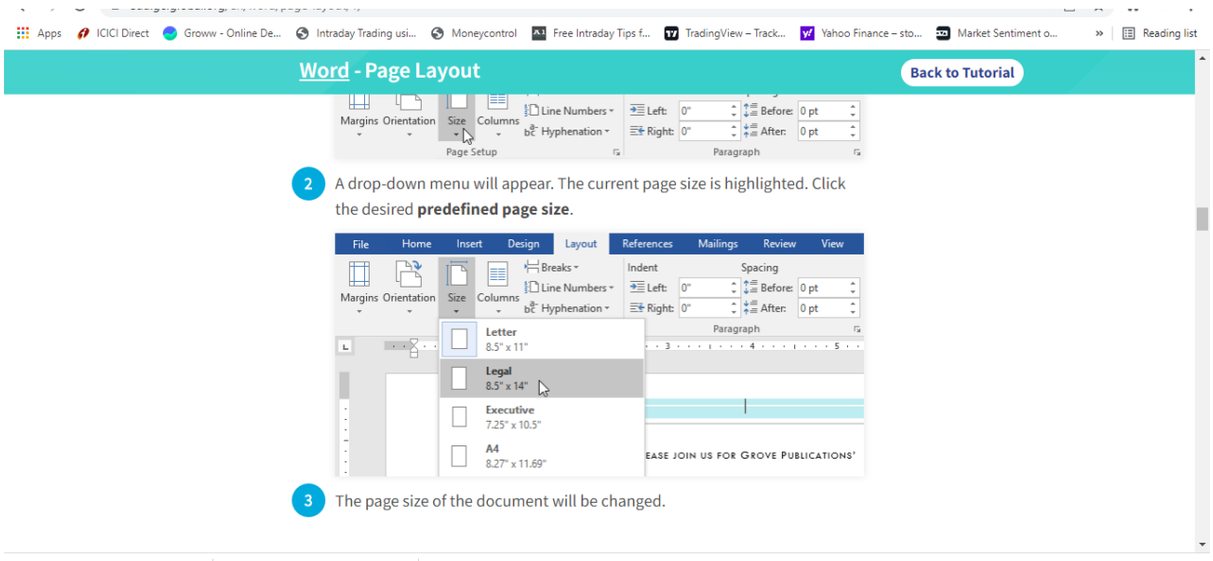



*FIGURE 26.19 Page size*

The page size of the document will be changed

## To use a custom page size:

Step 1 : Click the **Page Setup** dialog box.

Step 2: Click **page Layout>Size>More Paper Sizes** from the drop-down menu.

Step 3 : The **Page Setup** dialog box will appear.

Step 4 : Adjust the values for **Width** and **Height**, then click **OK**.



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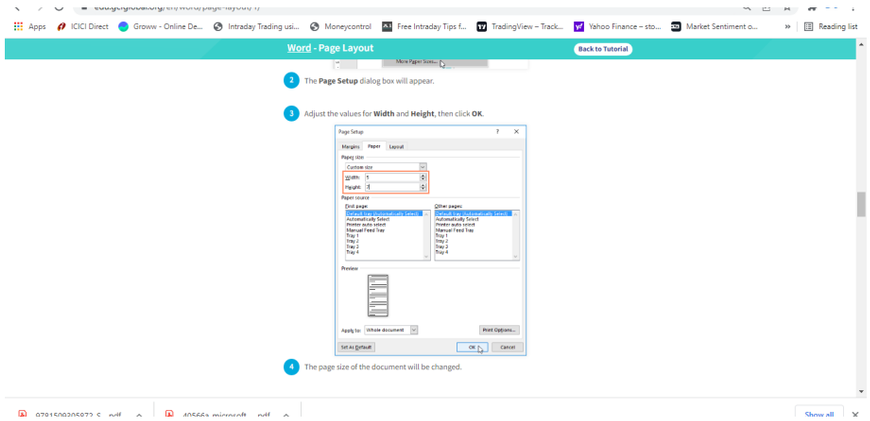



*FIGURE 26.20 Page Setup dialog box*

Step 5: The page size of the document will be changed.

## Page margins:

A **margin** is the **space** between the text and the edge of your document. By default, a new document's margins are set to **Normal**, which means it has a one-inch space between the text and each edge. Depending on your needs, word allows you to change your document's margin size.

Step 1: Select the **Layout** tab, then click the **Margins** command.

Step 2: A drop-down menu will appear. Click the **predefined margin size** you want

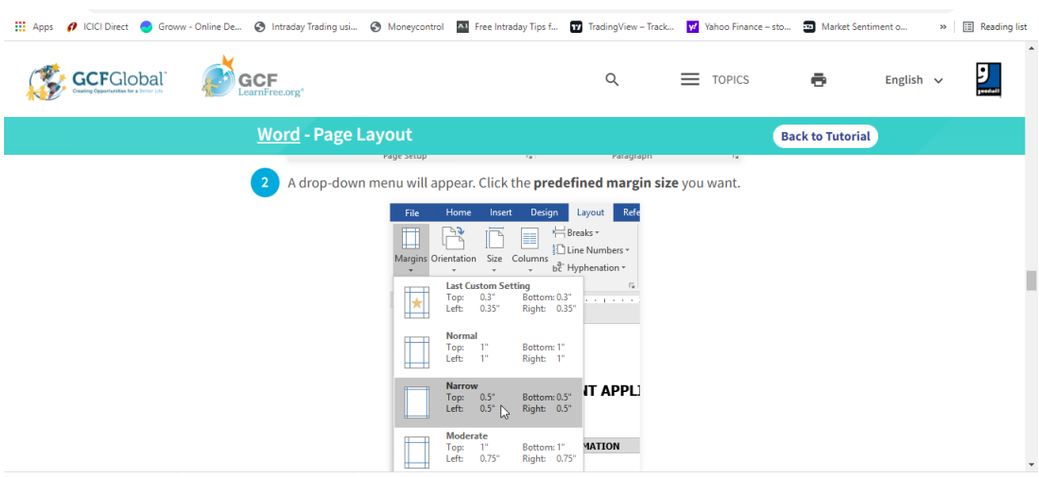



*FIGURE 26.21 Page margins*



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Step 3: The margins of the document will be changed.

**Insert a page break in Word:**

Word automatically adds a break at the end of each page. You can also insert a manual page break anytime you want to start a new page in your document.

Step 1: Put your cursor where you want one page to end and the next to begin.

Step 2: Go to Insert > Page Break.

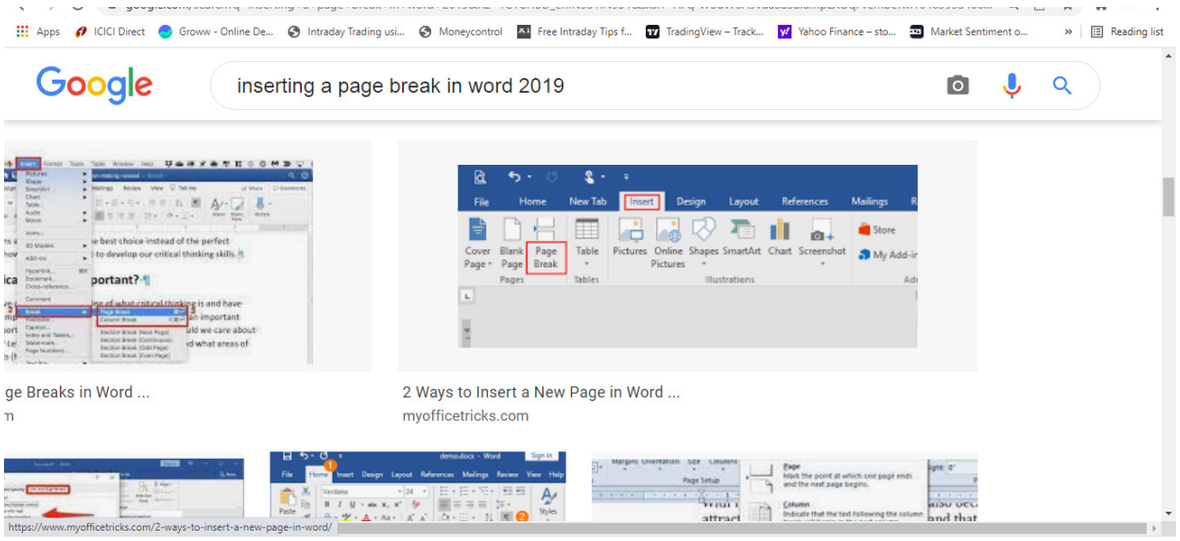



*FIGURE 26.22 Page break.*

## Add page numbers to a header or footer:

Step 1: Click or tap in the header or footer where you want the page numbers.

Step 2: Go to Insert > Page Numbering.

Step 3: Select Page number

Step 4: Choose a style.

## Add a border to a page:

Step 1: Go to **Design** > **Page Border**

Step 2: Make selections for how you want the border to look.



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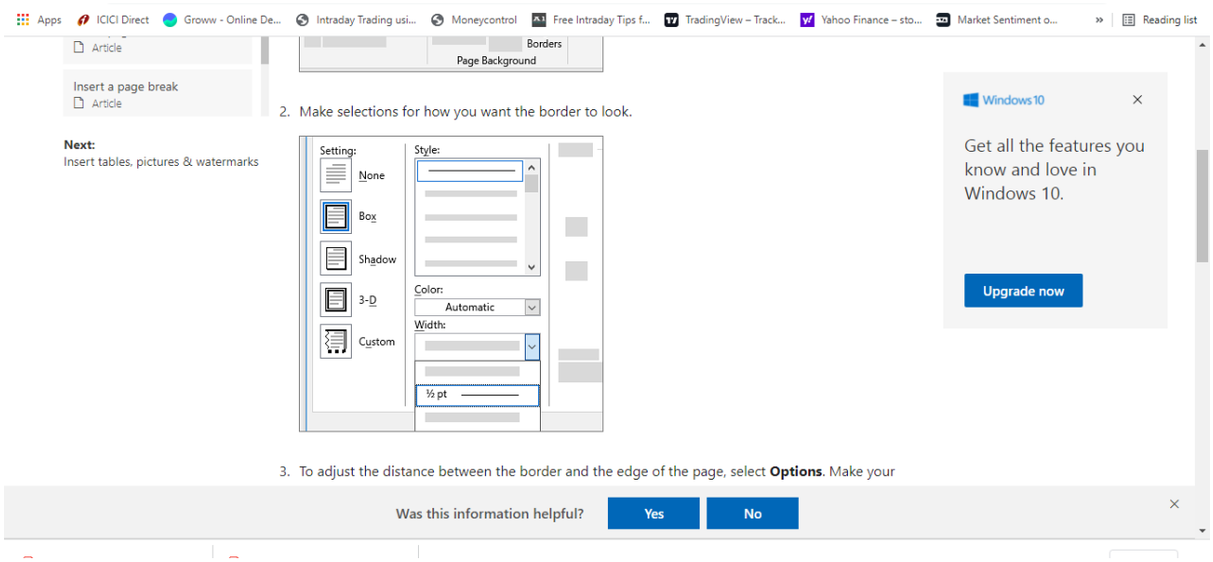



*FIGURE 26.23 Page break.*

Page border

Step 3: To adjust the distance between the border and the edge of the page, select **Options**. Make your changes and select **OK**.

Step 4: ok

## Inserting symbols, images, shapes and special characters in a document:

You can easily insert a special character, fraction, or other symbol in your Word documents.

Step 1: Place your cursor in the file at the spot where you want to insert the symbol.

Step 2: Go to Insert > Symbol.

Step 3: Pick a symbol, or choose More Symbols.

Step 4: Scroll up or down to find the symbol you want to insert. When you find the symbol you want, double-click it. The symbol will be inserted in your file.

Step 5. Select Close.



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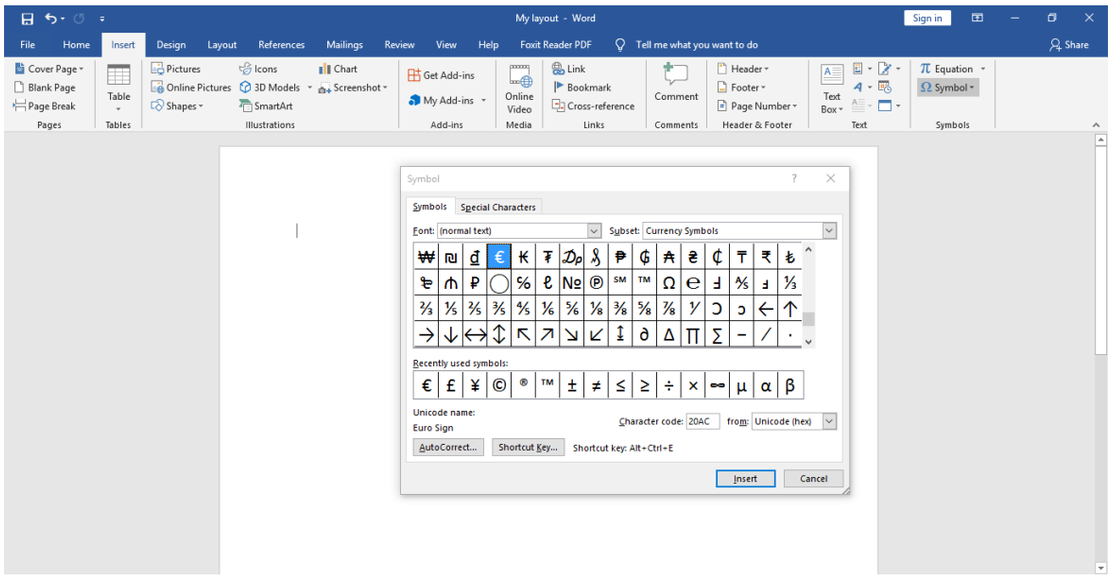



*FIGURE 26.24 Inserting equation and symbol.*

## Result:

Thus the formatting instructions in the MS word document has been practiced successfully.

## Video suggestions:

| s.no | Title/purpose | Link |
|---|---|---|
| 1 | Formatting the document | https://www.youtube.com/watch?v=F6Vhzl4XxvU |
| 2 | Formatting text, removing manual formatting. | https://www.youtube.com/watch?v=SiVjclEjw9E |
| 3 | Formatting paragraphs and using bullets, numbering. | https://www.youtube.com/watch?v=yV4i29Xo0iM |
| 4 | Assigning color, border and background to paragraphs. | https://www.youtube.com/watch?v=ZJyvWpZOTKY |
| 5 | Formatting the page. | https://www.youtube.com/watch?v=Ci1P40GsDy8 |

## Simple Assessments:

| | |
|---|---|
| Student project | 1. Students should create a voucher for organization.<br>2. Should prepare an advertisement poster for an event in school . |



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| | |
|---|---|
| Guest lecture suggestions | 1. Invite a MS office technician for a guest lecture.<br>2. Invite a computer technician for a guest lecture.<br>3. Invite an office assistant working in MS office platform. |
| Industrial/ Field visit suggestions | 1. A field Visit to an office nearby the school.<br>2. Visit nearby banks for field visit.<br>3.A field Visit to the nearby auditing office. |

## EXPERIMENT : 27

# INSTRUCTIONS TO CREATE TABLES AND ITS VARIOUS APPLICATIONS IN MS WORD DOCUMENT

### Objective:

To practice to create tables and learn the various applications in MS word.

### Operations / Experiments Covered Under the Project:

Create and use table

1. Inserting and Deleting the rows & columns in a table.
2. Splitting and Merging a table
3. Deleting, Copying & Moving a table

### Tools and Equipment Required:

| S.no | Name of the tools/equipment | Range/Value | Quantity |
|---|---|---|---|
| 1 | Computer or Laptop | I5 processor/4gb ram | 1 |
| 2 | Microsoft office | MS office 2019 | 1 |

### Procedure:

### Section 1 : Create and use Table:

Step 1: Place the insertion point where you want the table to appear.

Step 2: Navigate to the Insert tab, then click the Table command.

Step 3: This will open a drop-down menu that contains a grid. Hover over the grid to select the number of columns and rows you want.



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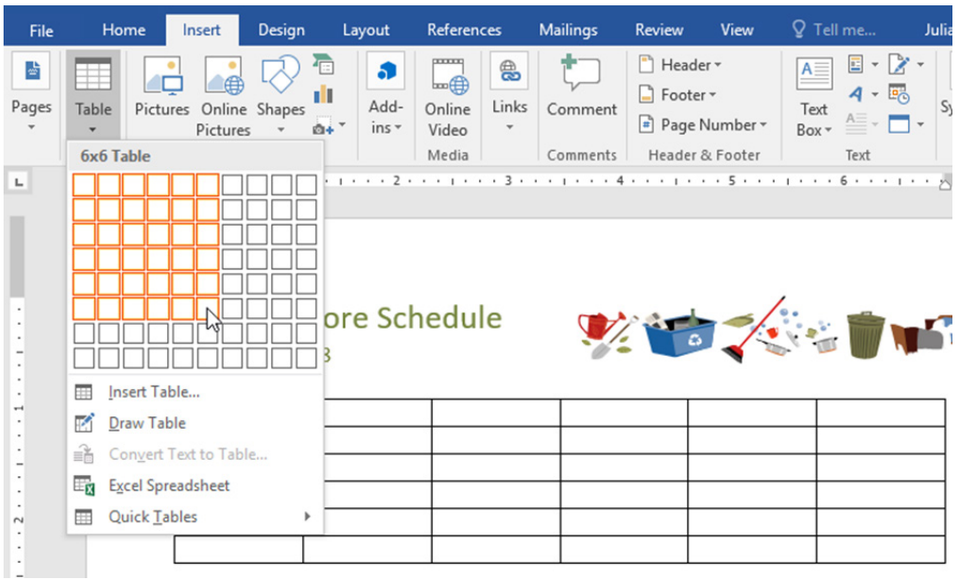



*FIGURE 27.1 Insert the table.*

Step 4: Click the grid to confirm your selection, and a table will appear.

Step 5**:** To enter text, place the insertion point in any cell, then begin typing.

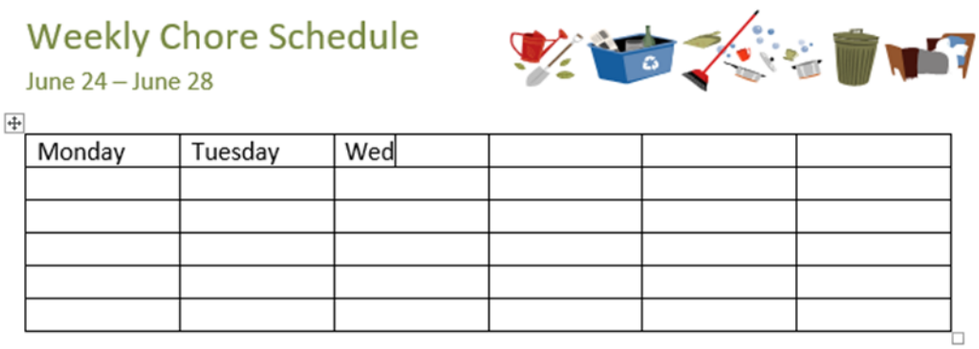



*FIGURE 27.2 Enter the text in table.*

**Note :** To navigate between cells, use the Tab key or arrow keys on your keyboard. If the insertion point is in the last cell, pressing the Tab key will automatically create a new row.

## Section 2: Inserting and deleting the rows/columns in a table :

### To add a row or column:

Step 1: Hover outside the table where you want to add a row or column. Click the plus sign that appears.

Step 2: A new row or column will be added to the table



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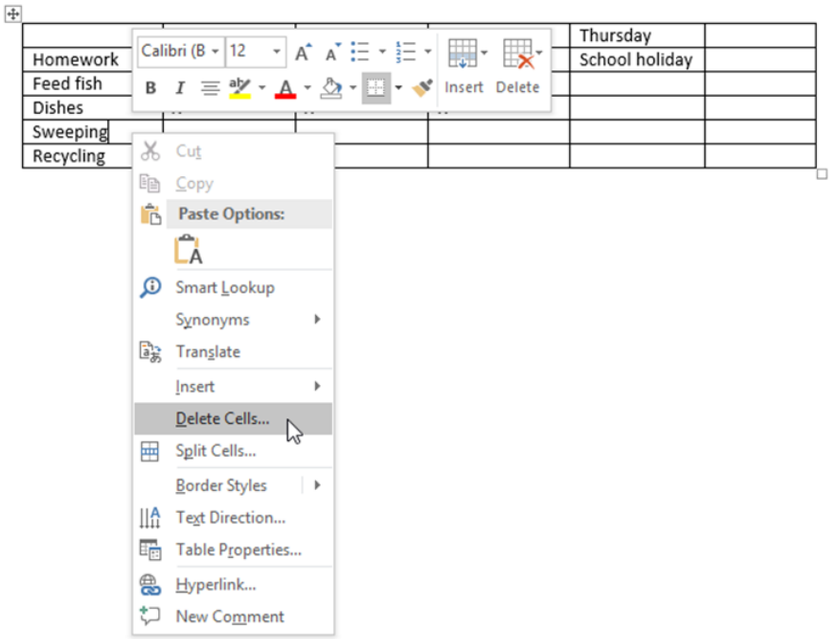



*FIGURE 27.3 To add a new column and row to the table.*

**Note:** You can also right-click the table, then hover over Insert to see various row and column options.

### To delete a row or column:

Step 1: Place the insertion point in the row or column you want to delete.

Step 2: Right-click, then select Delete Cells from the menu.

Step 3: A dialog box will appear. Choose Delete entire row or Delete entire column, then click OK.

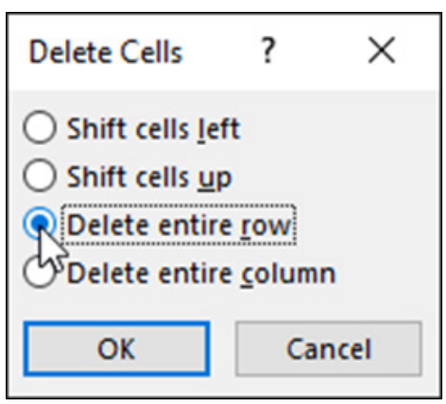



*FIGURE 27.4 Delete a row or column to the table.*

Step 4: The row or column will be deleted.



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## Section 3: Splitting a table:

Step 1: Click in a cell, or select multiple cells that you want to split.

Step 2: Under Table Tools, on the Layout tab, in the Merge group, click Split Cells.

Step 3: Enter the number of columns or rows that you want to split the selected cells into

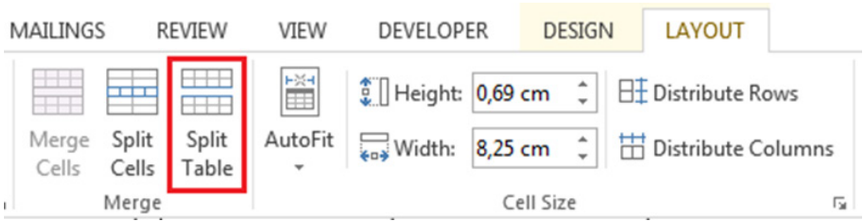



*FIGURE 27.5 Split table.*

## Merging a table:

Step 1: Select the cells that you want to merge.

Step 2: Under Table Tools, on the Layout tab, in the Merge group, click Merge Cells.

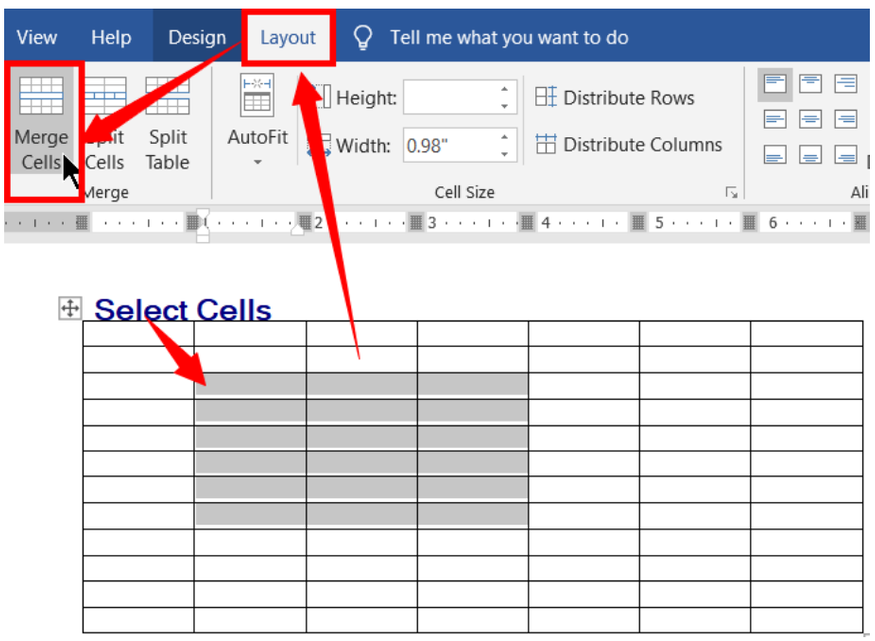



*FIGURE 27.6 Merge table.*

## Section 4: Deleting, copying, & moving tables:

## Deleting a table:

Step 1: Right-click in a table cell, row, or column you want to delete.



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Step 2: On the Mini toolbar, click Delete.

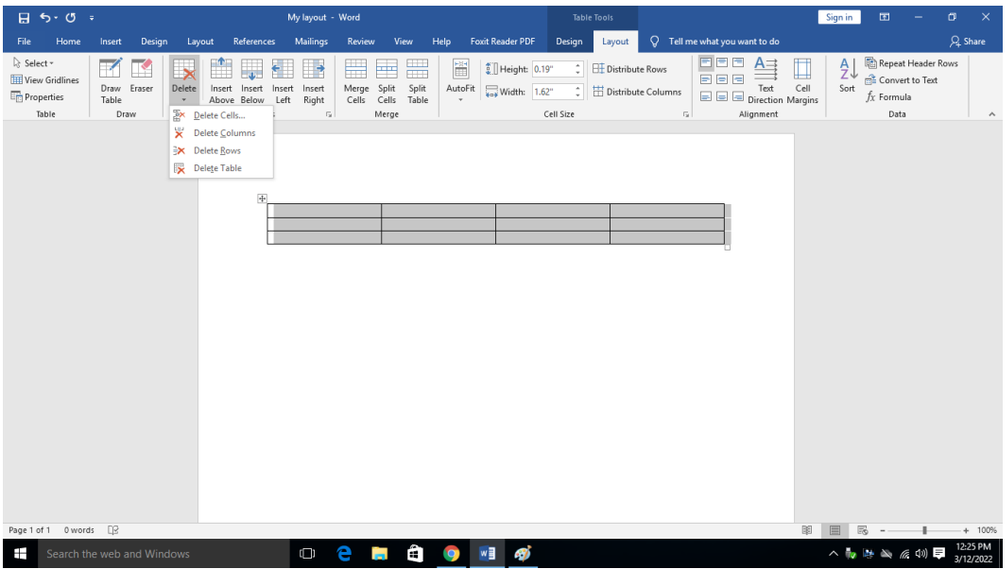



*FIGURE 27.7 Deleting the table.*

Step 3: Choose Delete Cells, Delete Columns, or Delete Rows as required.

## Coping Table:

Step 1**:** In the Print Layout view, rest the pointer on the table until the table move handle appears.

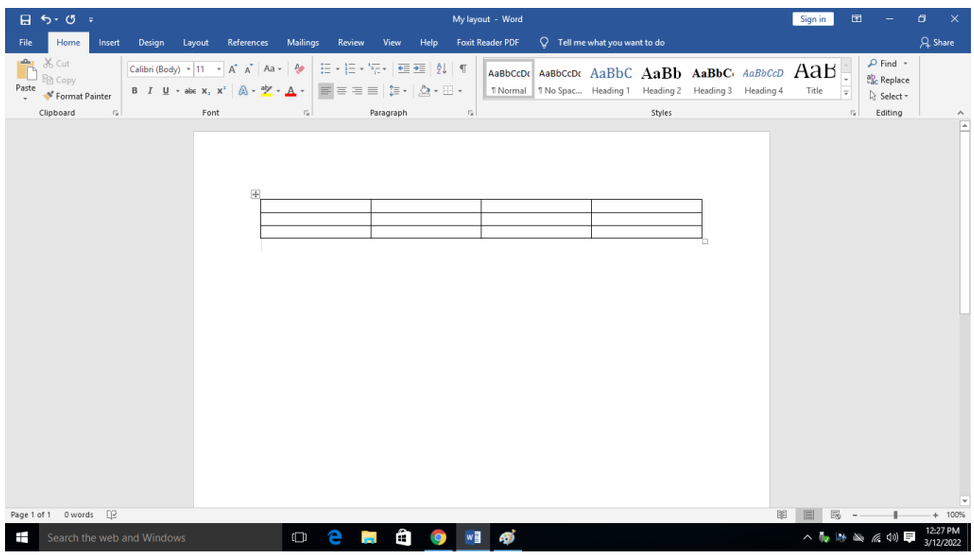



*FIGURE 27.8 Copying table.*

Step 2**:** Click the table move handle to select the table.



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Step 3: Do one of the following:

1. To copy the table, press CTRL+C.
2. To cut the table, press CTRL+X.

Step 4: Place the cursor where you want the new table.

Step 5: Press CTRL+V to paste the table in the new location.

**Moving a table:**

Step 1: In the Print Layout view, rest the pointer on the table until the table move handle appears.

Step 2: Keep the pointer over the table move handle until the pointer becomes a four-headed arrow, and then click the table move handle.

Step 3: Drag the table to a new location.

**Result:**

Thus the tables have been created successfully.

Thus the various applications in MS document has been practiced successfully.

**Video suggestions:**

| s.no | Title/purpose | Link |
|---|---|---|
| 1 | Create and use Table | https://www.youtube.com/watch?v=XNBrCEgzddw |
| 2 | Inserting and deleting the rows and columns in a table | https://www.youtube.com/watch?v=Ctey7JNeoGg<br>https://www.youtube.com/watch?v=LS7WtlXsM5Q |
| 3 | Splitting and Merging a table | https://www.youtube.com/watch?v=mWY03aAZ4vM |

**Simple Assessments:**

| | |
|---|---|
| **Student project** | students should make a class time table and a month calendar.<br>students should prepare table content for the chapter<br>students should prepare a table for daily expenditure. |
| **Guest lecture suggestions** | 1. Invite a MS office technician for a guest lecture.<br>2. Invite a computer technician for a guest lecture.<br>3.Invite an office assistant working in MS office platform. |



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| | |
|---|---|
| **Industrial/ Field visit suggestions** | 1.A field Visit to an office nearby the school.<br>2. Visit nearby banks for field visits.<br>3.A field Visit to the nearby auditing office. |

## EXPERIMENT : 28

# INSTRUCTIONS TO TAKE PRINTOUT AFTER COMPLETION OF DOCUMENT

### Objective:

To practice to take printout after completion of document in MS word.

### Operations/Exercises Covered Under the Project:

1. Viewing print preview of the document
2. Editing print and controlling option in MS word
3. Printing the document in MS word
4. Printing the letters and documents using mail merge in MS word

### Safety Measures:

i. Put your printer on a flat, stable surface such as a desk that is free of vibration and shocks.
2. Use the printer in a well-ventilated room.
3. DO NOT put the printer where the ventilation hole of the printer is blocked.

### Tools and Equipment Required:

| S.No | Name of the tools/equipment | Range/Value | Quantity |
|---|---|---|---|
| 1 | Computer or Laptop | I5 processor/4gb ram | 1 |
| 2 | Microsoft office | MS office 2019 | 1 |

### Procedure:

### Section 1: Viewing print preview of the document:

Step 1: Open the MS word document to be printed.

Step 2: Click **File** in the left top corner of the word file or press **CTRL + P**



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Step 3: Select **print** in the menu bar (Now we can see the print preview of the document on the right side. (We can see all pages by scrolling the mouse up and down)

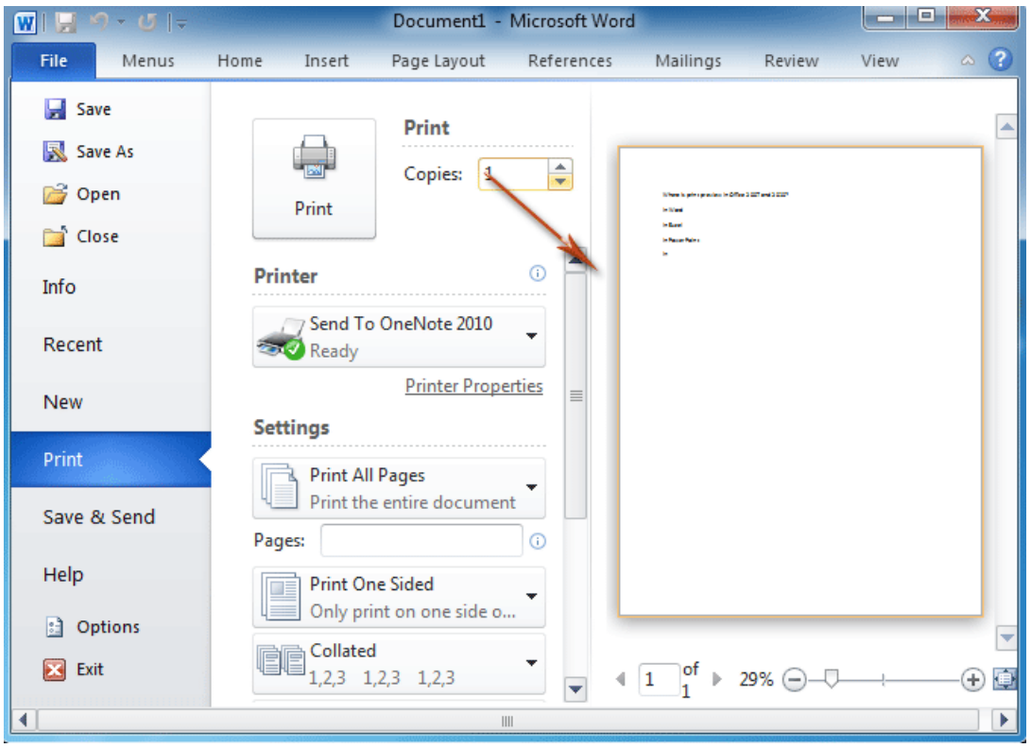



*FIGURE 28.1 Print preview of the document*

## Section 2: Editing print and controlling option in MS word:

Step 1: Open MS word Document to be printed

Step 2: Click **File** in the left top corner of the word file or Click **CTRL + P**

Step 3: Click the printer option to select the printer Which is currently connected with your PC or laptop.

Step 4: Click the up and down arrow of copies dialogue box to change the number of copies of the printing.

Step 5: Click Print all pages option to choose print all pages, print current page only or custom print option

Step 6: Click portrait option. we can choose portrait or landscape printing option

Step 7: Click letters to select size of the paper to be printed

Step 8: Click normal margin to select margin of the printing area of the paper

Step 9: Click 1 page per sheet to choose number of pages per sheet to be printed



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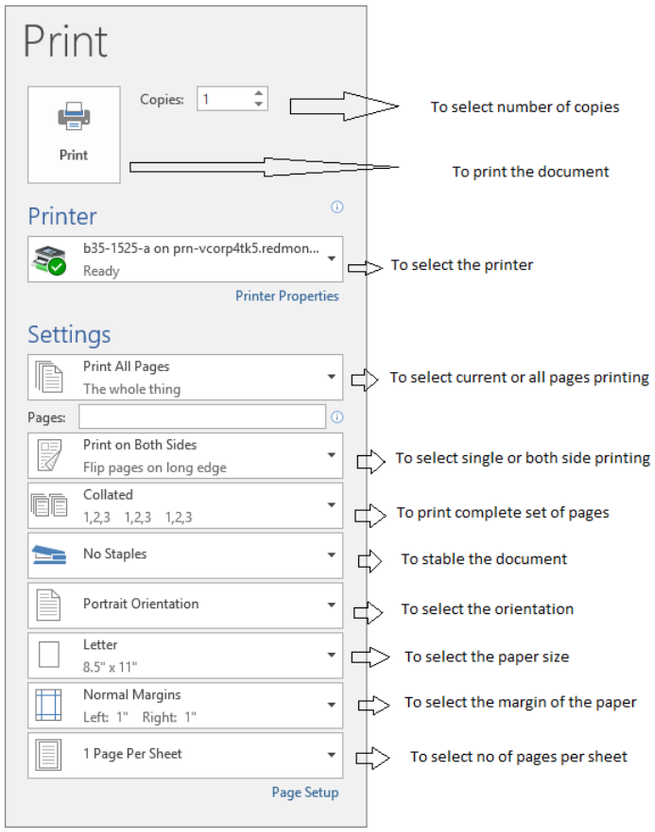



*FIGURE 28.2 Edit the printing option*

## Section 3: Printing the document in MS word:

Step 1: Open the MS word document to be printed

Step 2: Click **File** in the left top corner of the word file or Click **CTRL + P**

Step 3: Click the print icon to print the document

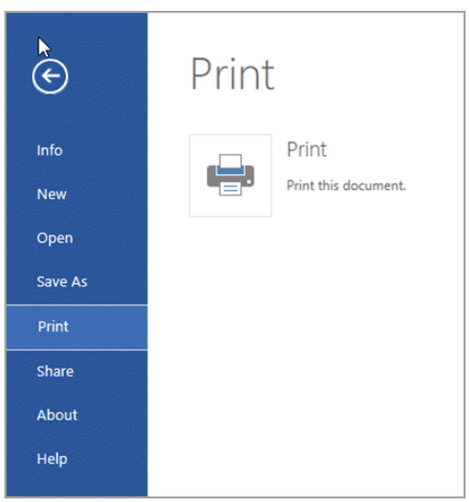



*FIGURE 28.3 Printing the document*



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**Section 4: Printing the letters and documents using mail merge in MS word:**

Open the blank MS word document or existing document which is to be printed

Step 1: Click Mailing tab

Step 2: Click Start mail merge button

Step 3: Click step by step mail merge

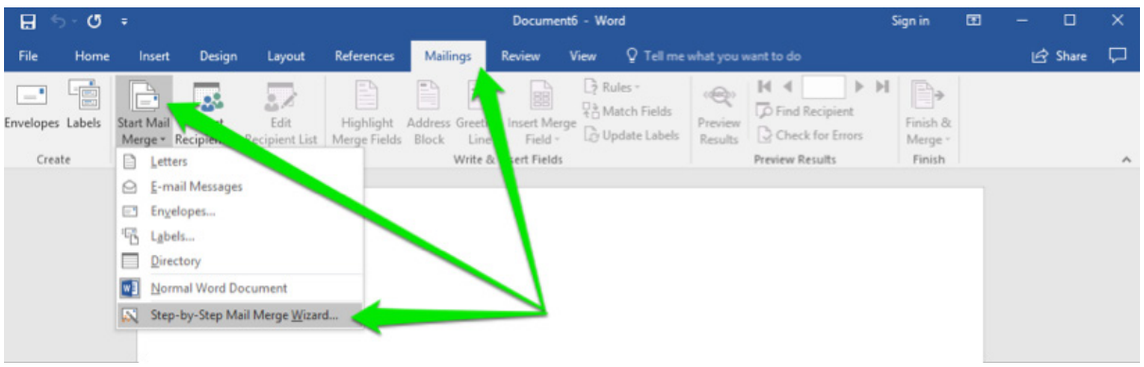



*FIGURE 28.4 Opening of the mail merge*

Step 4: Select document type

Step 5: Click Next Starting document

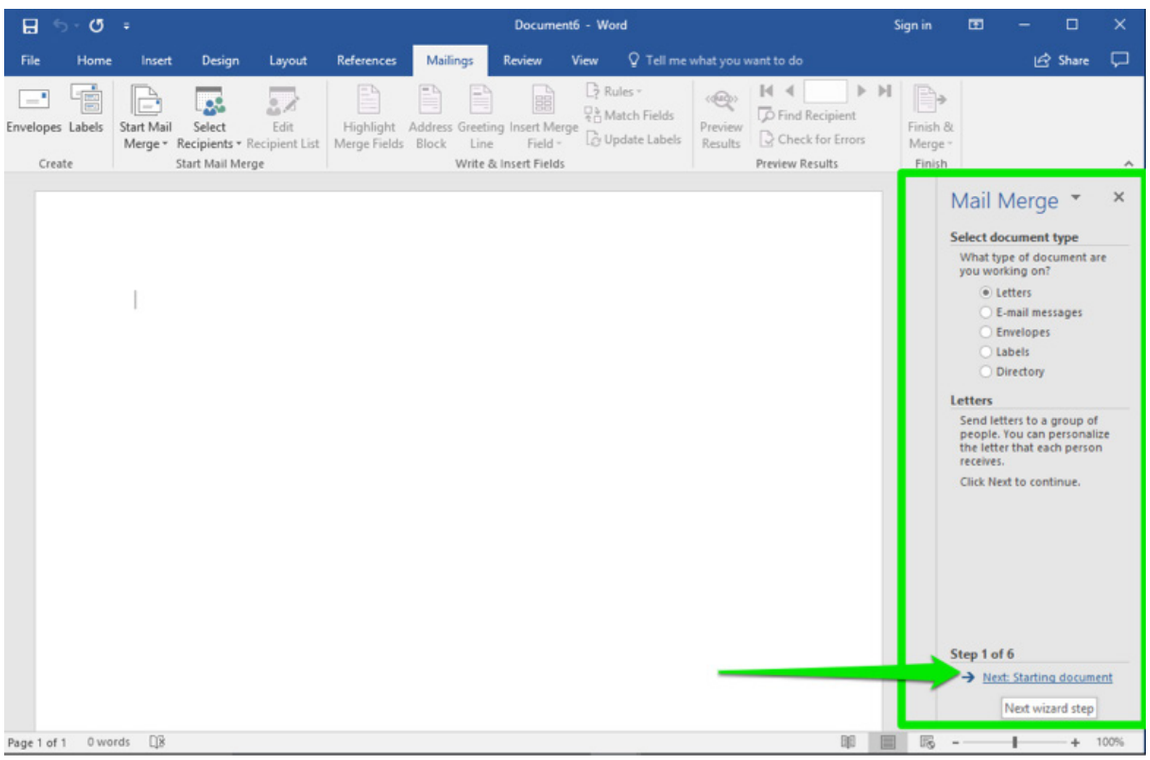



*FIGURE 28.5 Starting the document*



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Step 6: Select use the current document or start from existing document (For demo we select use current document option)

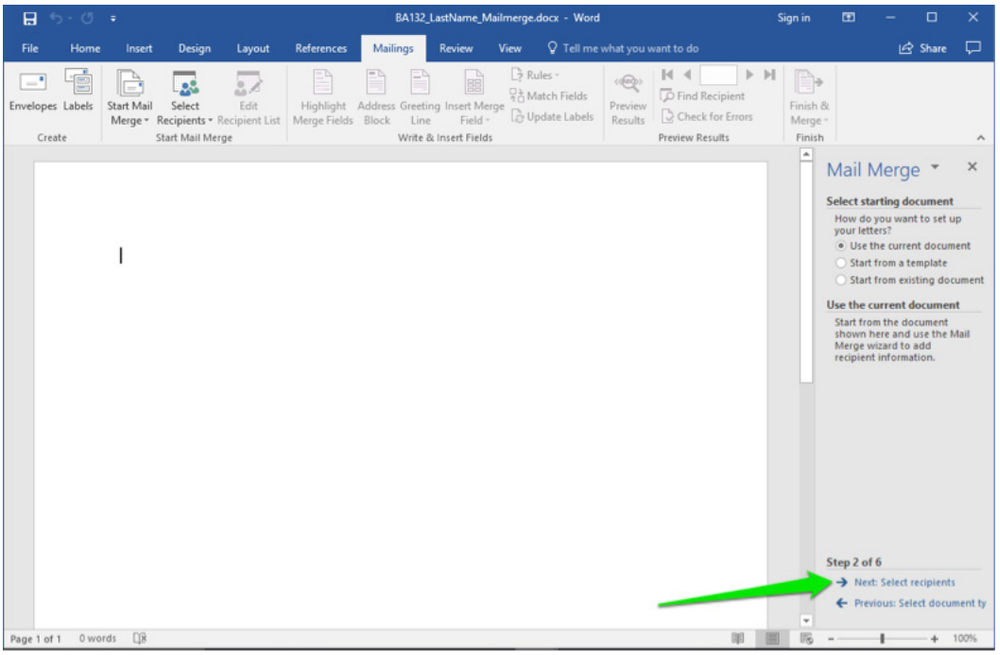



*FIGURE 28.6 Select recipient*

Step 7: Click Next: select recipients and select type a new list or existing list( for demo we select type a existing list)

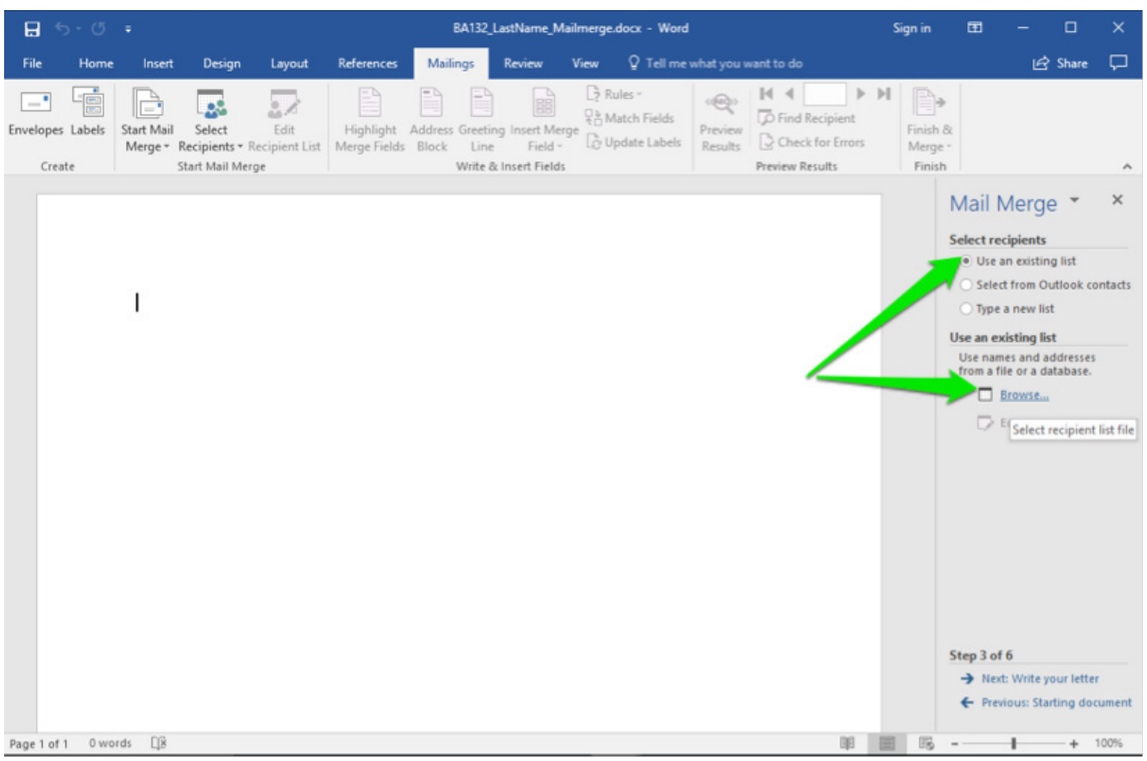



*FIGURE 28.7 Existing file selection*



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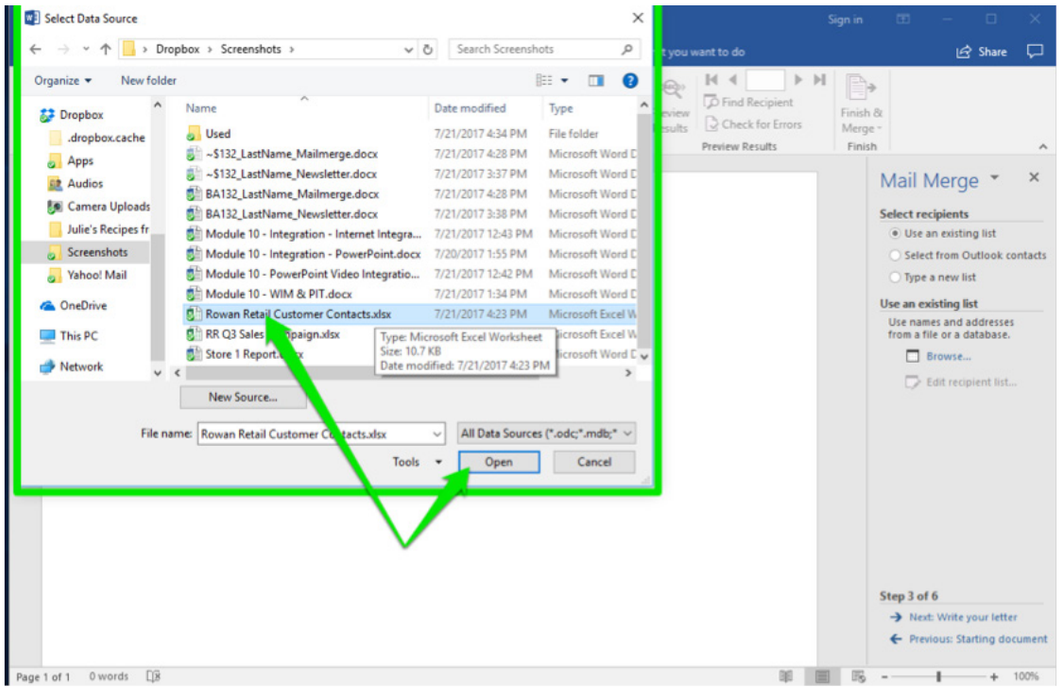



*FIGURE 28.8 Select existing list from browse*

Step 8: Click the browse button and select the existing file. If you don't have an existing address list, you can click the **Type a new list** button and click **Create**. You can then type your address list.

Step 9: Click Next: Write your letter which one you want to be printed. Select Address block, Greeting line, Electronic postage, or More items from the task pane to add recipient information to your letter.

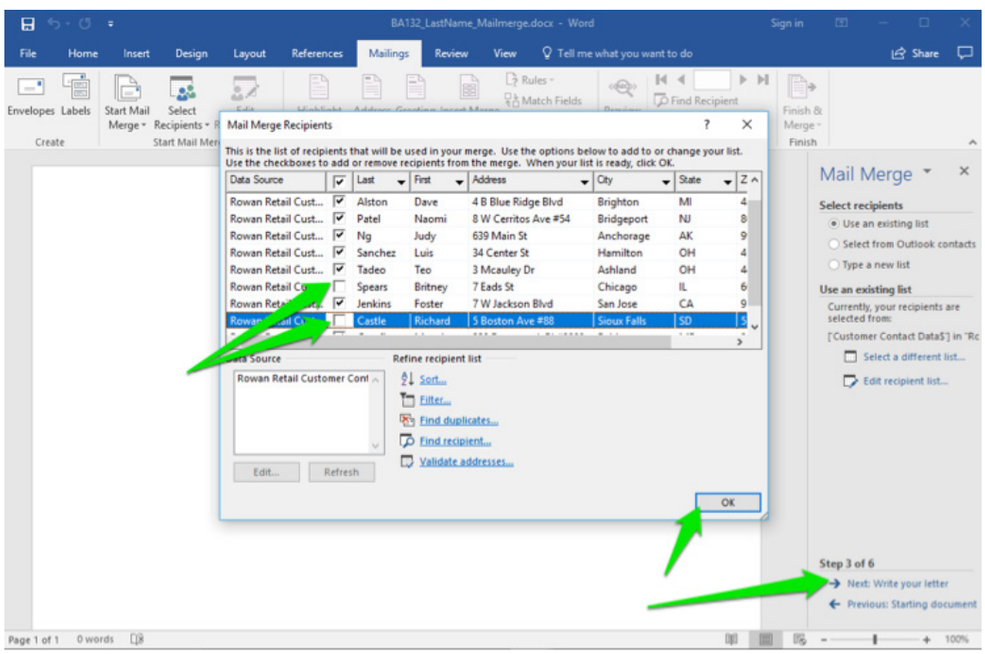



*FIGURE 28.9 Writing your letter*



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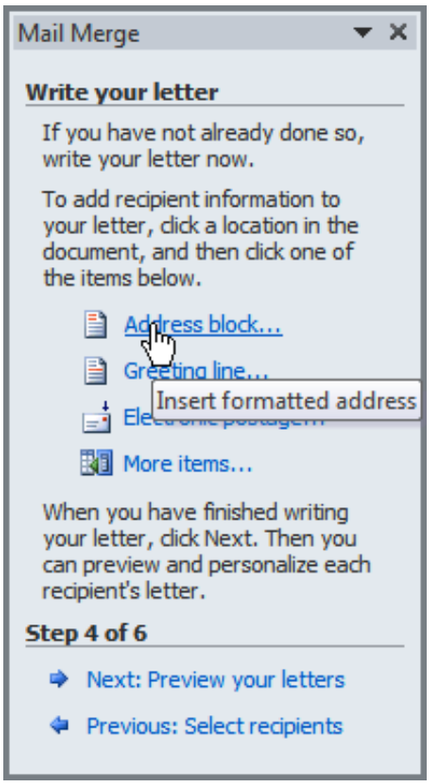



*FIGURE 28.10 Add recipient information*

Step 10: Click Next: Preview your letter to view letters of the all recipients

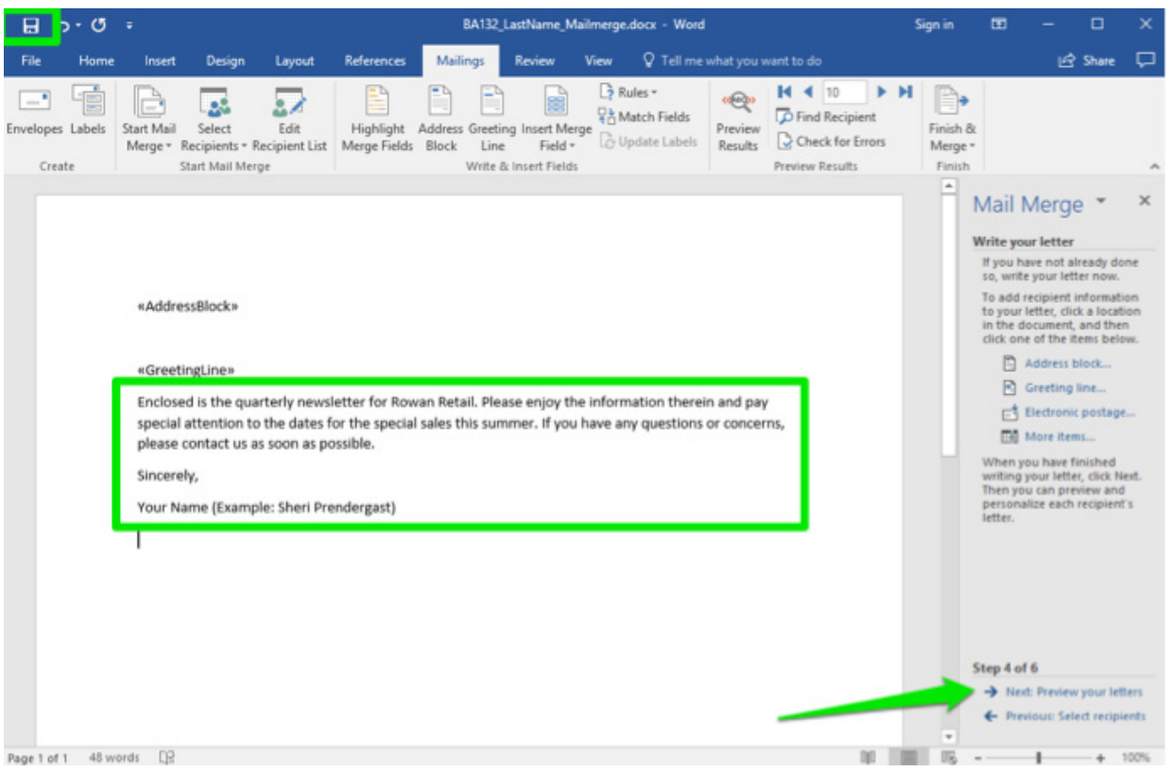



*FIGURE 28.11 Print preview of the letter*



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Step 11: Click Next: Complete the merge

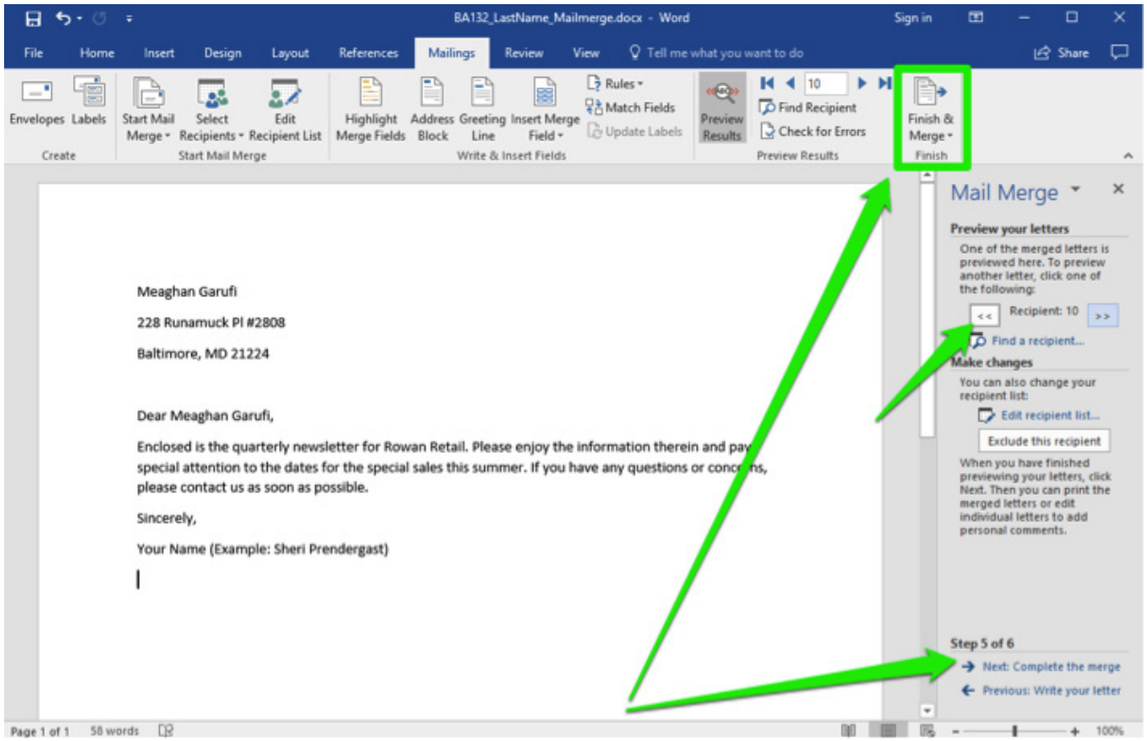



*FIGURE 28.12 Complete the merge*

Step 12: Click print and select **All** option and click ok button.

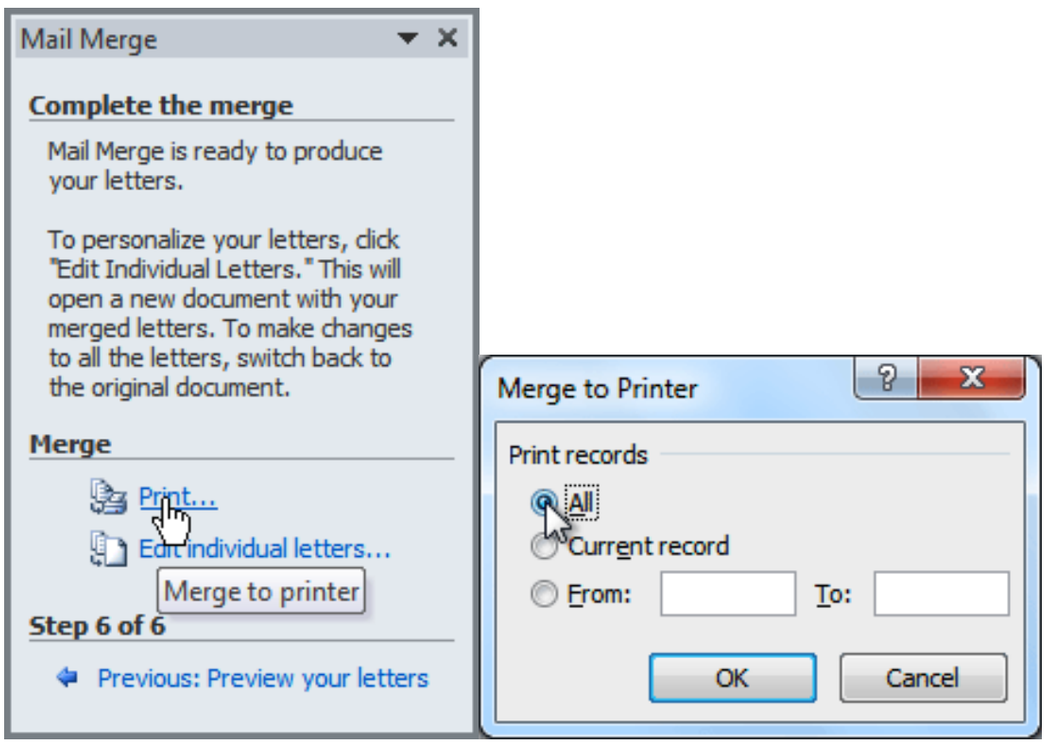



*FIGURE 28.13 Merge to printer dialog box*



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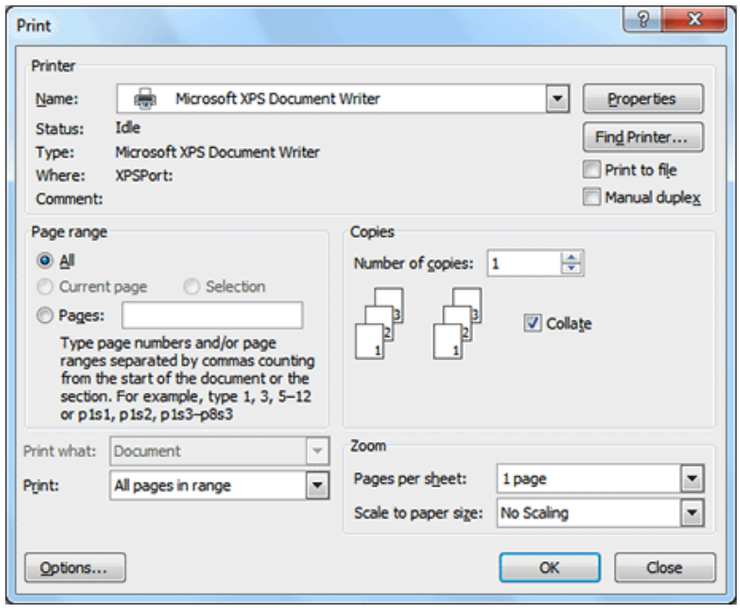



*FIGURE 28.14 Printing the document*

## Result:

1. Thus the students are able to view print preview of the document
2. Thus the students are able to know different printing and control option while printing the document
3. Thus the students are able to print the letter and document using mail merge in MS word.

## Video suggestions:

| s.no | Title/purpose | Link |
|---|---|---|
| 1 | Print preview of the document in MS word | https://youtu.be/OxudZfGR7lk |
| 2 | Printing and controlling option while printing the document in MS word` | https://youtu.be/8PvKeny-_Fo |
| 3 | Print the letter and document using mail merge in MS word | https://youtu.be/27-Vj4-71xw |

## Simple Assessments:

| | |
|---|---|
| **Student project** | 1. Student have to prepare quotations of different features of various printers with their price list.<br>2. Students have to prepare printer working principles in a chart.<br>3. Students should take samples of print out while working on file. |



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| | |
|---|---|
| **Guest lecture suggestions** | 1. Invite a MS office technician for a guest lecture.<br>2. Invite a computer technician for a guest lecture.<br>3. Invite an office assistant working in MS office platform. |
| **Industrial/ Field visit suggestions** | 1. A field Visit to an office nearby the school.<br>2. Visit nearby banks for field visits.<br>3. A field Visit to the nearby auditing office. |

## EXPERIMENT : 29

# UTILITY OPTIONS IN SELECTING A SUITABLE TEMPLATE AND IMAGE IN MS WORD DOCUMENT.

### Objective:

To learn about utility options in selecting a suitable template and image in MS excel document.

### Operations/Exercises Covered Under the Project:

1. Apply styles in a document
2. Insert and use images in the document
3. Create and use templates in document
4. Create table of contents for a document

### Tools and Equipment Required:

| S.no | Name of the tools/equipment | Range/value | Quantity |
|---|---|---|---|
| 1 | Computer or Laptop | I5 processor/4gb ram | 1 |
| 2 | Microsoft office | MS office 2019 | 1 |

### Safety Measures:

1. Make sure to save your document at regular intervals.
1. Remember that before closing your word document should save the document and its file location.



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## Procedure:

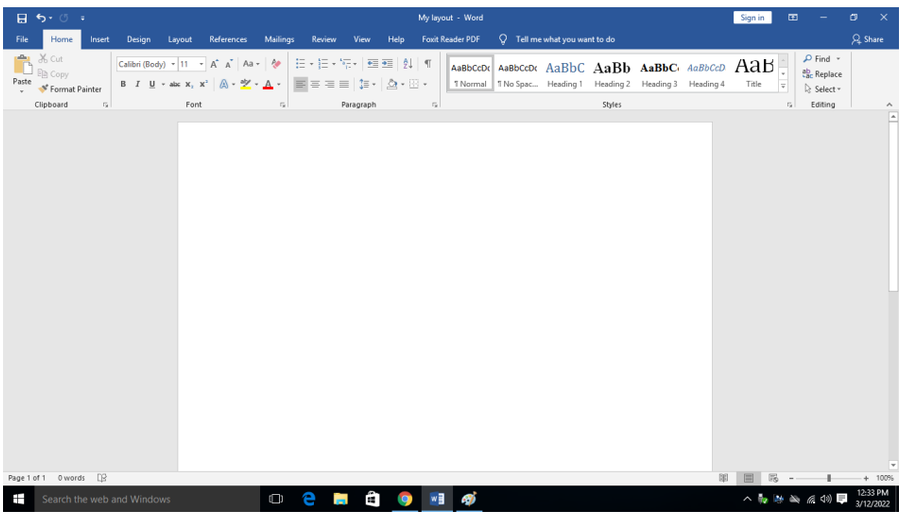
### Section 1: Create and apply styles in the Document:

Step 1: Open a MS office word document.

Step 2: Click **Home>Font** for fonts modifying options.

Step 3: Click **Home>Paragraph** for paragraph formatting.

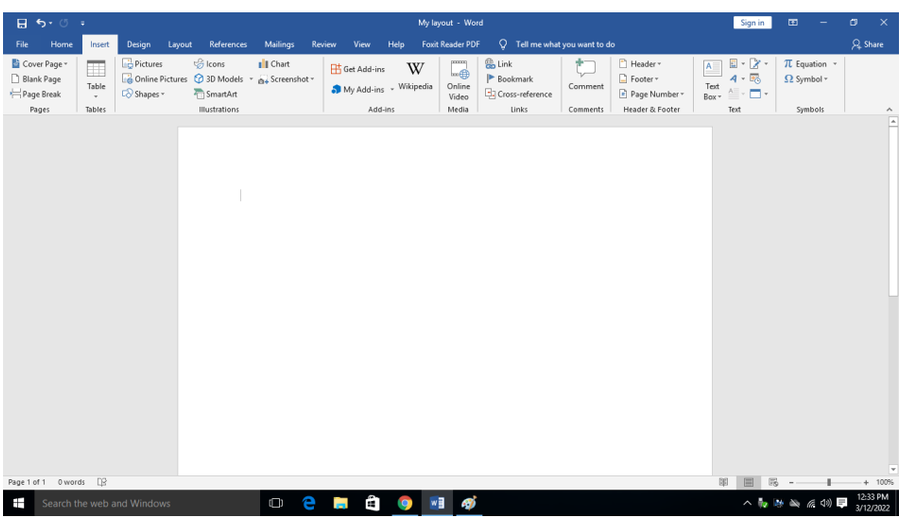
Step 4: Click **Home>Styles** for heading styles.




*29.1 Create and apply styles in the document.*

### Section 2: Insert and use images in document:

Step 1: Click **Insert>Pictures** and select images from the source.

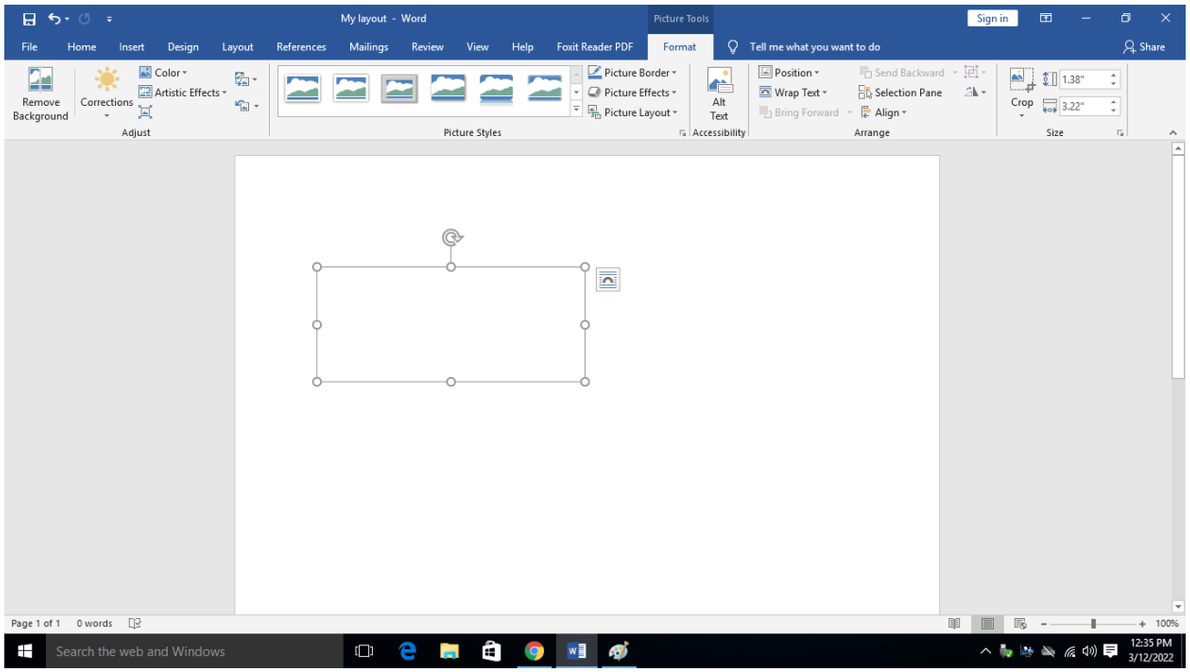



*29.2 Insert and use images in document.*



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Step 2: Select or Click picture and choose **Format** in the top right corner, Select the mode which has to be selected.




*29.3 Formatting and resize the images in the document.*

Step 3: Enter the size of images in the place and press **Enter.**

## Section 3: Create and use Template:

Step 1: Prepare a template file in a word document.

Step 2: Click **Home>Save as** and enter the file name, Select the file type as Word Template(.dotx) and press **Enter or** Click **Save.**

Step 3: Close or Open a new Document file.

Step 4: Click **File>Open>Personal** and select your template file.

## Section 4: Create table of contents:

Step 1: Open a word document.

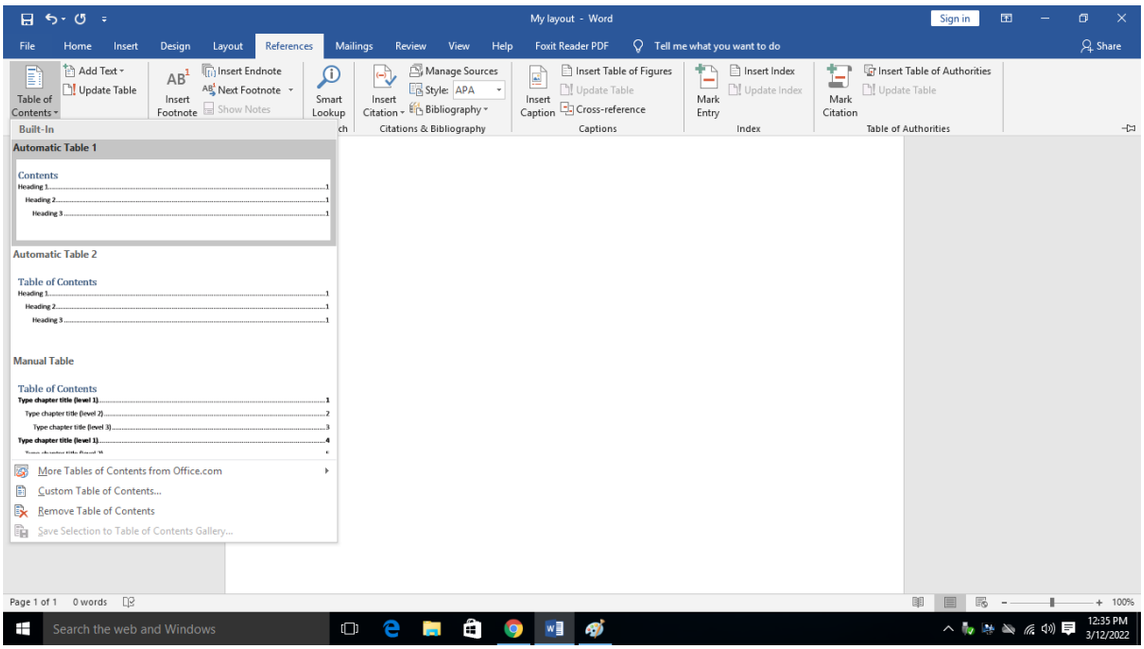
Step 2: Select a topic which you want to make in table of content.

Step 3: Enter the numbering and select styles.

Step 4: Follow step 2 & 3 to the entire document. Click on **References>Table of contents,** Select the type of contents in automatic mode.



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*29.4 Create the table content.*

## Result:

Thus the utility options in selecting a suitable template and image in MS word document has been learned successfully.

## Simple Assessments :

1. Which command is used to save a document?
2. How will you create or modify a template?
3. How to resize a picture in a document?

## Video suggestions:

| s.no | Title/purpose | Link |
|---|---|---|
| 1 | Create and update new styles in a document. | https://youtu.be/Gk5M32aqsjUhttps://youtu.be/Gk5M32aqsjU |
| 2 | Insert and modify pictures in the document.` | https://youtu.be/Lgd2QR0ltic |
| 3 | Create and use templates in document. | https://youtu.be/qs2HzP9Q9eg |
| 4 | Create and make a table of contents for a document. | https://youtu.be/0cN-JX6HP7c |



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| | |
|---|---|
| **Student project** | 1. Create a template for a student's identity card.<br>2. Create a title of content for any paragraph with page number.<br>3. Create a new style and update in your computer. |
| **Guest lecture suggestions** | 1. Invite a MS office technician for a guest lecture.<br>2. Invite a computer subject expert for a guest lecture.<br>3. Invite an office assistant working in MS office platform. |
| **Industrial/ Field visit suggestions** | 1. A field Visit to an office nearby the school.<br>2. Visit to nearby e-seva center for field visit.<br>3. A field Visit to the nearby computer center. |

## EXPERIMENT : 30

## CREATING A PURCHASE ORDER FOR ITEMS NEEDED FOR THE CLASSROOM USING MS WORD

### Objective:

To create a purchase order for items needed for the classroom using MS word document.

### Operations/Exercises Covered Under the Project:

1. Create a word document
2. Insert tables and enter the data of the purchase order
3. Print the document

### Tools and Equipment Required:

| s.no | Name of the tools/ equipment | Range/Value | Quantity |
|---|---|---|---|
| 1 | Computer or Laptop | I5 processor/4gb ram | 1 |
| 2 | Microsoft office | MS office 2019 | 1 |
| 3 | Printer | Epson L3250 | 1 |



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## Procedure:

### Section 1: Create a word document:

Step 1: Create a new document using File.

Step 2: Click the New option and save as document format.

Step 3: Rename the document.

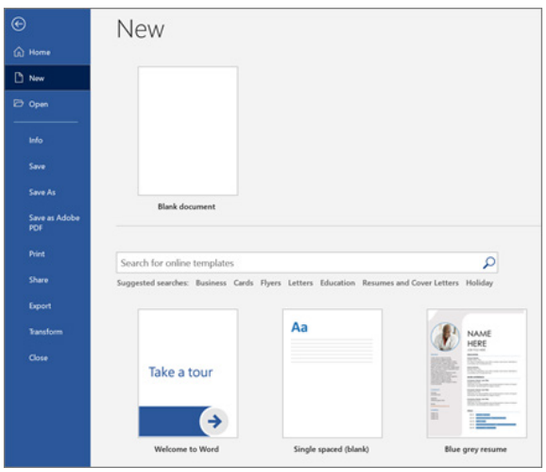



*FIGURE 30.1 Create the new word document.*

### Section 2: Insert tables and enter the data of the purchase order:

Step 1: Select the insert tab.

Step 2: Insert the tables using the table option.

Step 3: Enter the data in purchase order for your classroom.

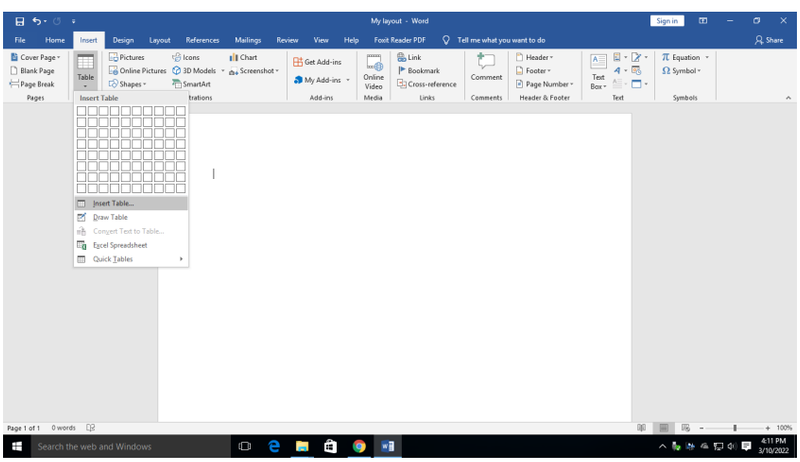



*FIGURE 30.2* **Insert** *tables and enter the data of the purchase order*



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## Section 3: Print the document:

Step 1: Open the MS word document to be printed

Step 2: Click **File** > **Print** or Click **CTRL + P**

Step 3: Click the print icon to print the document

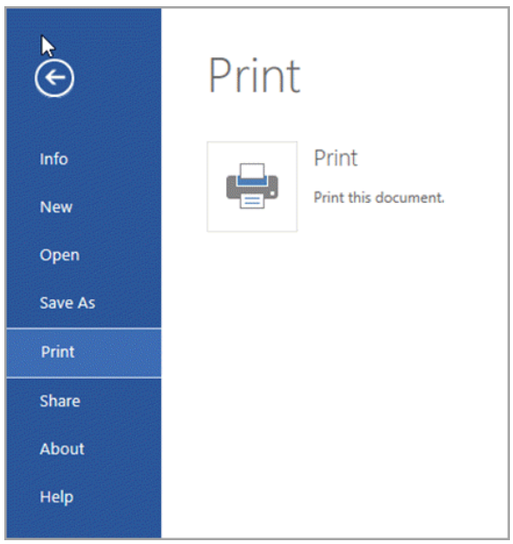



*FIGURE 30.3 Print the document*

GHSS,Chennai. **PURCHASE ORDER**

1,College road,Chennai
Pin Code :- 600002
Ph.No. :- XXXXXXXXX
GSTIN :- YYYYYYYYYY

DATE 04-03-2022
PO # 101

**VENDOR**
Name :-ABC Stationaries
Address :- 33,College road,Chennai.
Pin Code:- 600002.
Ph.No. :- ZZZZZZ

**DELIVERY TO**
Name- GHSS,Chennai
Address :- 1,College road,Chennai-600002.

| S. No. | Item Name & Description | QTY | Unit Price | Total |
|---|---|---|---|---|
| 1 | Chalk piece | 2 Nos. | 100 /- | 200.00/- |
| 2 | Marker | 1 Nos. | 50 /- | 50.00/- |
| 3 | Duster | 1 Nos. | 100 /- | 100.00/- |
| 4 | Dust bin | 1 Nos. | 120 /- | 120.00/- |
| 5 | Chart | 10 Nos. | 5 /- | 50.00/- |
| 6 | A4 sheet | 1 Nos. | 200 /- | 200.00/- |

| | |
|---|---|
| SUBTOTAL | 720.00/- |
| TAX(CGST+SGST)18% | 129.60/- |
| ROUND OFF | -0.60/- |
| DELIVERY | |
| Total | 849.00/- |

**Comments or Special Instructions**

1. **Terms of payment , 100% payment on delivery Via Cash,or online mode.**

**Proprietor**

*FIGURE 30.4 Purchase order-sample*

## Result:

Thus the purchase order for items needed for the classroom using MS word document has been created successfully.

## Video suggestions:

| s.no | Title/purpose | Link |
|---|---|---|
| 1 | Creating a purchase order for items needed for the classroom using MS word | https://youtu.be/lyx8Anp9d-4 |
| 2 | Insert tables and enter the data of the purchase order | https://youtu.be/zKkWZgIaRrQ |
| 3 | Print the document | https://youtu.be/cweN_MQlTQE |

## Simple Assessments:

| | |
|---|---|
| **Student project** | 1. Students have to prepare the checklist for classroom items.<br>2. Students have to prepare the list of students in class. |



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| | |
|---|---|
| **Guest lecture suggestions** | 1. Invite a MS office technician for a guest lecture.<br>2. Invite a computer technician for a guest lecture.<br>3. Invite an office assistant working in MS office platform. |
| **Industrial/ Field visit suggestions** | 1. A field Visit to an office nearby the school.<br>2. Visit nearby stores for field visits. |

## Section 4: Excel Basics:

### 4.1. Introduction:

MS-EXCEL is a part of Microsoft office suite software. It is an electronic spreadsheet with numerous rows and columns, used for organizing data, graphically represent data(s) and performing different calculations.

It consists of 1048576 rows and 16383 columns. A row and a column together make a cell. Each cell has an address defined by column name and row number.

Eg: A1

B2 - Row No.

Column Name.

By default, a workbook consists of 3 spread sheets (sheet 1, sheet 2 & 3)

## Section 5: Features of MS EXCEL:

1. Easy to store and analyze huge amount of data.
2. Easy to recover Data.
3. Application of Mathematical Formulas
4. Neater and Cleaner visibility of information stored at workbook
5. Spreadsheets is excel used to segregate, handle and helps to product using password protection features.



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EXPERIMENT : 31

# CREATE AN EXCEL FILE AND USING OF ITS VARIOUS OPTIONS

## Objective:

To create an excel file and using of its various options MS word document.

## Operations/Exercises Covered Under the Project:

1. Identify the rows number and columns letter, cell address.
2. Identify the row range, column range, row & column range of cells.
3. Demonstrate to enter the text, numeric data in a cell.
4. Construct the formula using mathematical operators
5. Use the basic functions to perform calculations on data

## Tools and Equipment Required:

| Sl.No | Name of the tools/ equipment | Range/Value | Quantity |
|---|---|---|---|
| 1 | Computer or Laptop | I5 processor/4GB ram | 1 |
| 2 | Microsoft office | MS office 2019 | 1 |

## Shortcut keys:

| Sl.no | To do this | Shortcut keys |
|---|---|---|
| 1 | Close a workbook. | **Ctrl+W** |
| 2 | Open a workbook. | **Ctrl+O** |
| 3 | Go to the Home tab. | **Alt+H** |
| 4 | Save a workbook. | **Ctrl+S** |
| 5 | Copy selection. | **Ctrl+C** |
| 6 | Paste selection. | **Ctrl+V** |
| 7 | Undo recent action. | **Ctrl+Z** |
| 8 | Remove cell contents. | **Delete** |



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| | | |
|---|---|---|
| 9 | Choose a fill color. | **Alt+H, H** |
| 10 | Cut selection. | **Ctrl+X** |
| 11 | Go to the Insert tab. | **Alt+N** |
| 12 | Apply bold formatting. | **Ctrl+B** |
| 13 | Center align cell contents. | **Alt+H, A, C** |
| 14 | Go to the Page Layout tab. | **Alt+P** |
| 15 | Go to the Data tab. | **Alt+A** |
| 16 | Go to the View tab. | **Alt+W** |
| 17 | Open the context menu. | **Shift+F10 or Windows Menu key** |
| 18 | Add borders. | **Alt+H, B** |
| 19 | Delete column. | **Alt+H, D, C** |
| 20 | Go to the Formula tab. | **Alt+M** |
| 21 | Hide the selected rows. | **Ctrl+9** |
| 22 | Hide the selected columns. | **Ctrl+0** |

**Procedure:**

**Section 1:**

Identify the rows number and columns number, cell address. MS excel sheet: The MS excel sheet can have many sheets. Each sheet can have many individual cells arranged in rows and columns. The sheet tab shows its default name as Sheet1, Sheet2, Sheet3, ….

**Rows and columns:** The sheet is divided into vertical columns and horizontal rows. Each sheet can have a maximum of 1,048,576 (220) rows and 1024 (210) columns. The rows are numbered as 1,2,3,4,… and columns are numbered as *A, B, C, D, …., Z, AA, AB, AC, …., AZ, BA to BZ, CA,…., AMJ.*

**Cell and cell address:** The intersection of a row and column is called a cell. It is the basic element of a MS excel sheet. It holds data, such as text, numbers, formulas and so on. A cell address is denoted by its column (letter) and row number. For example, D4, E9, Z89 are the valid example of cell address.

**Active cell:** In a MS excel sheet, cell is the place where we enter the data. Before entering any data in the cell, it has to be first selected by placing a cursor on it. When we position the mouse cursor on a cell, it gets selected, and is ready to take data from the user. This selected and activated cell is called an active cell. It is always highlighted, with a thick border. The address of the active cell is displayed in the name box.



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## Section 2: Identify the row range, column range, Cell range:

| Key or Key Combination | Result of Key or Combination |
|---|---|
| Arrow keys (←▶→▶) | Move a single cell in arrow direction |
| Ctrl + Arrow Keys | Moves the cell to the end of the data range in a particular direction |
| Home | Moves to column A along the row where the active cell is there. |
| Ctrl + Home | Moves the cell to A1 position |
| Ctrl + End | Moves to bottom right cell of the data range |
| Page Up | Moves the worksheet one screen up |
| Page Down | Moves the worksheet one screen down |

The *column range* is the number of cells spread across the column. The cell address is represented by single column letter and multiple row number in a sequence. In this example the column letter C is constant with rows varying from 2 to 7. The range of cells starts in C2 and ends in C7. This range of cells consists of the cells, namely C2, C3, C4, C5, C6, and C7. The range of cells starts in C2 and ends in C7 and it is represented by C2:C7. The *row range* is the number of cells spread across the row. The cell address is represented by single row number with columns varying from B to D columns. The range of cells starts in B3 and ends in D3. This range of cells consists of the cells, namely B3, C3, D3, and it is represented by B3:D3 The *row and column range* is the number of cells spread across the row and columns. This range is a matrix with the number of rows and number of columns. In this example, the range starts in cell B2 and ends in cell C7. This range of cells consists of the cells from B2 to B7 and cells from C2 to C7. The range it is represented by B2:C7.

*Note:* The control key is used to select more than one 'range of cells' in a worksheet. The control key is marked as 'Ctrl' on the keyboard.

## Section 3: Demonstrate to enter the text, numer3ic data in a cell:

To enter any data in a worksheet, practically in the cell, it is required to select the cell. Cell can be selected by positioning the pointer in a cell. The data to be entered can be the label, values or formula.

1. Label: Label is any text entered by using a keyboard. It may combine with letters, numbers, and special symbols.



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2. Values: The numerical data consisting of only numbers are called values. By default, values are right aligned. There are various forms of values, such as integer, decimal and so on.

3. Formulae: Any expression that begins with an equals '=' is treated as formula. In the expression, the '=' followed by values, cell address and functions are called as formula. When a formula is entered in a cell in a worksheet the value of the equation is displayed in the cell and the formula is shown in the formula bar.

## Section 4: Construct the for formula using mathematical operators:

MS Excel Software has the most powerful features to calculate numerical data using formulae. As we use a calculator for calculation, excel sheet can add, subtract, divide, multiply and much more. MS-Office uses standard operators for formulae, such as a plus(+), minus(-), multiplication (*), a division (/) for arithmetic operation. *Note:* The order of evaluation can be changed by using brackets. (The expressions within the brackets are evaluated first)

| ***Symbols*** | ***Operations*** |
|---|---|
| + | addition |
| - | subtraction |
| * | multiplication |
| / | division |
| ^ | exponentiation (power) |

| Operator | Formula | Result |
|---|---|---|
| Addition (+) | = 23+ 7 | 30 |
| Subtraction | 0 – 3 | - 3 |
| Multiplication (*) | 9*6 | 54 |
| Division (/) | 77/7 | 11 |

## Section 5: Use the basic functions to perform calculations on data:

Step 1: The main advantage of entering formulas with cell addresses and operators, works just like a variable. When the values of the cells concerned change, the results obtained by the formula also get updated accordingly. Suppose to add the values in two cells A1 and A2 and get the addition in cell A3. If we position the cursor in cell A3 and simply add the values as =5+8, then we will get the correct addition in cell A3. But if we change the values in cell A1 to 6 and A2 to 7, then again we have to get the addition in cell A3 by writing =6+7. But if we



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write the general formula in cell A3 is =A1+A2. Then we need not do the addition in cell A3. We will get the respective addition with the change in values in cell A1 and A2 For calculating the volume of a box with given length, width and height in cells A2, B2 and C2, respectively, see the formula derive the volume entered in cell D2.

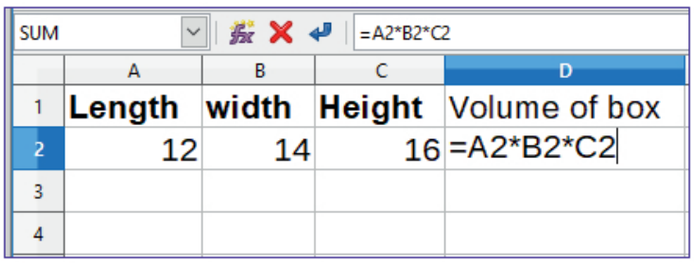



*FIGURE 31.1 Basic functions to perform calculations on data*

Step 2: In the example of the Stationery Bill, to calculate the total cost of all the items to obtain the bill amount, we need to add the amount of each item. We may add each cell by using the formula. Position the cursor on the cell D8, and enter the formula '=D2+D3+D4+D5+D6+D6+D7' and get the total in cell D8. But this may not be practically possible if there are hundreds of items and also there are more chances of error. When there is a large quantity of data it becomes difficult and complex task to write formula using only the cell addresses. In such situations, Ms Office Calc provides built in functions. SUM is the function to get the sum of range of cells. So we can use the function, 'Sum(D2:D7)' in D8 cell to obtain the total cost of all the items. In the function we need to include only the cell range (starting and last cell address).

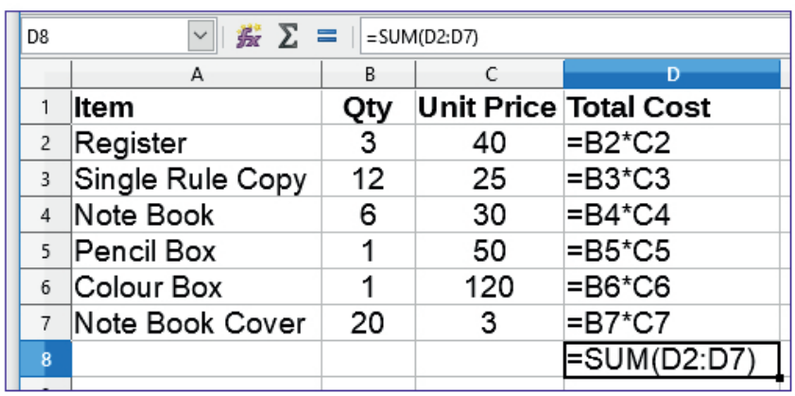



*FIGURE 31.2 Summation of stationery bill in excel sheet.*

Step 3: Think on, which of the following method will be more appropriate to add cell data.

Method 1

= SUM (D2:D7)  Method 2

= D2+D3+D4+D5+D6+D7



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The spreadsheet applications contain different functions to meet the requirements of different fields.

| Function | Syntax | Use |
|---|---|---|
| SUM | =SUM (Number1, Number2,.....) | Adds the values contained in a range of cells. |
| AVERAGE | =AVERAGE (Number1, Number2,....). | Finds out the average of the values contained in a range of cell |
| MAX | =MAX (Number1, Number2,.....) | Finds out the largest value contained in a range of cells. |
| MIN | =MIN(Number1,Number2,.....) | Finds out the smallest value contained in a range of cells. |
| COUNT | =COUNT(Number1,Number2,.....) | Counts the number of cells within a range of cells |

Step 4: Calculate the students mark sheet for 5 students using formula. Use all the above 5 formula in it.

**Result:**

Thus the excel file has been created successfully.

Thus the various options in MS excel has been used successfully.

**Video suggestions:**

| s.no | Title/purpose | Link |
|---|---|---|
| 1 | create a MS excel sheet. | https://youtu.be/NzwQ_BbD2G4 |
| 2 | entering and editing the text in MS excel sheet. | https://youtu.be/bK1YP_y0SWE |
| 3 | Create a Excel file and using of its various options | https://youtu.be/NzwQ_BbD2G4 |

**Simple Assessments:**

| | |
|---|---|
| **Student project** | 1. Students have to prepare shop bills by using formulas for calculation.<br>2. Students have to prepare a budget for the month by expenses. |
| **Guest lecture suggestions** | Create a data of your assessment marks.<br>Create data and average your class result.<br>Create a new style and update it on your computer. |



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| | |
|---|---|
| **Industrial/ Field visit suggestions** | 1. Invite a MS office technician for a guest lecture.<br>2. Invite an accounts auditor for a guest lecture.<br>3. Invite an office assistant working in MS office platform. |

## EXPERIMENT : 32

# INSTRUCTIONS TO FORMAT THE MS EXCEL DOCUMENT

### Objective:

To practice to use formatting instructions in MS excel document.

### Operations/Exercises Covered Under the Project:

1. Formatting toolbar
2. Format range of cells with decimal places
3. Format range of cells to labels
4. Format of a cell range as scientific
5. Format a range of cells to display time
6. Align the cell data range
7. Create number series using fill handle
8. Copy formula by dragging the formula using fill handle

### Tools and Equipment Required:

| S.No | Name of the tools/ equipment | Range/Value | Quantity |
|---|---|---|---|
| 1 | Computer or Laptop | I5 processor/4gb ram | 1 |
| 2 | Microsoft office | MS office 2019 | 1 |

### Procedure:

### Section 1: Formatting toolbar:

Step 1: Change the font by clicking the font option(Times new roman).

Step 2: Change the size of the font by clicking the font size option (12 font size).



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Step 3: Change the font color(Black).

Step 4: Make the text bold, italics, or underline by clicking bold, italics or underline option(if required).Change the alignment by clicking the alignment option(Left, Right, Center and Justify).Change the borders by clicking the borders option. Fill (highlight) the text by clicking the highlight option.

## Section 2: Format range of cells with decimal place:

Step 1: Select the cells to limit the number of decimal places.

Step 2: Right click the selected cells and select the Format Cells from the right-clicking menu on the screen.

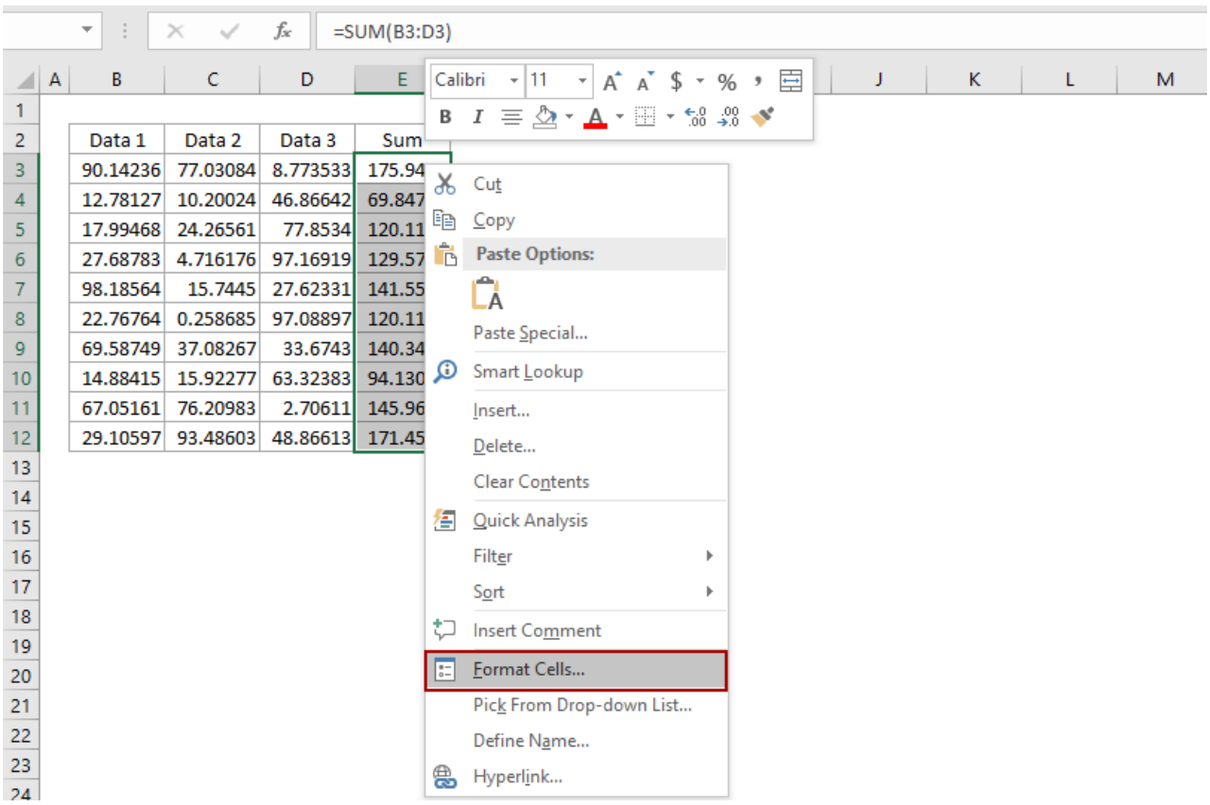



*FIGURE 32.1 Format range of cells with decimal place*

Step 3:I n the Format Cells dialog box, go to the Number tab, click to highlight the Number in the Category box, and then type a number in the Decimal Places box.

For example, if you limit only 2 decimal place for selected cells, just type 2 into the Decimal places box.



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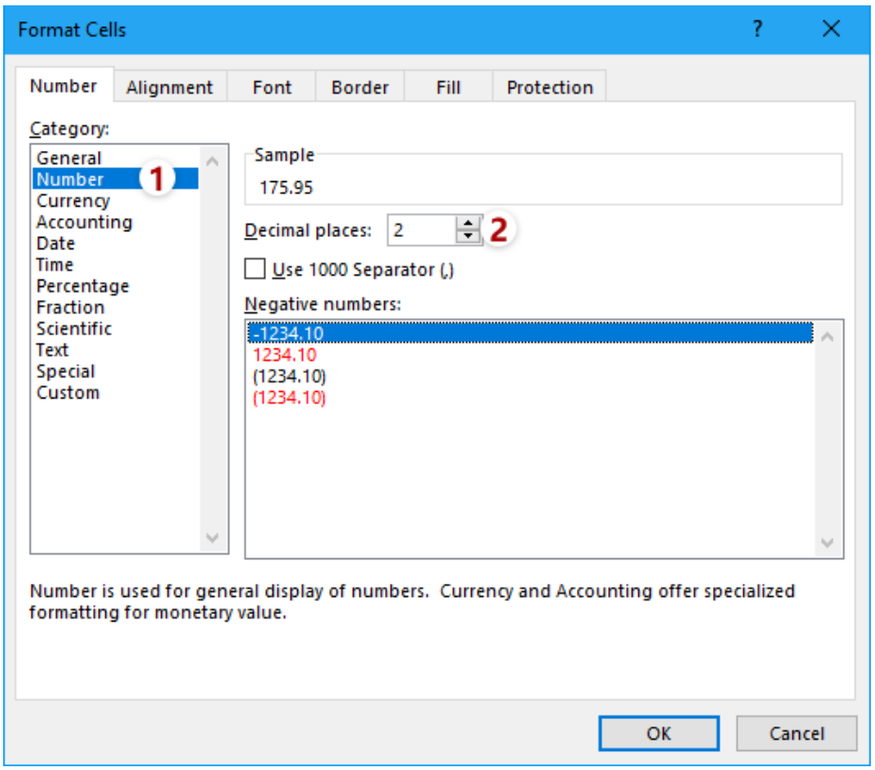



*FIGURE 32.2 Different categories of format cell.*

Step 4: Click the OK in the Format Cells dialog box. Now the selected decimals in cells are changed to two decimal places.

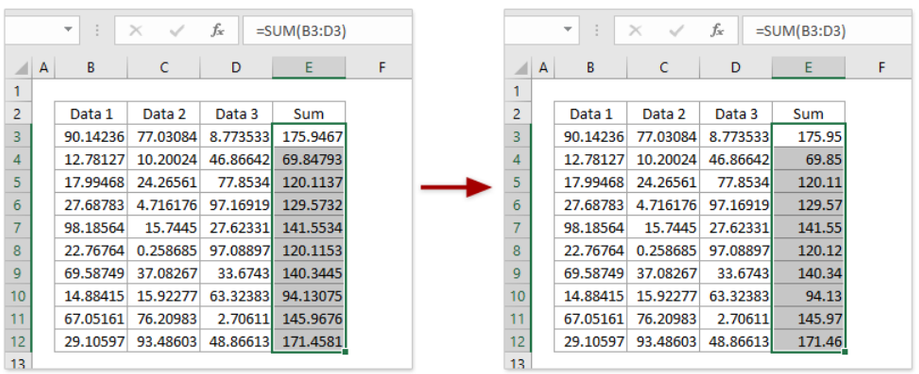



*FIGURE 32.3 Conversion of format cell.*

## Section 3: Format range of cells to labels:

- Open the 'format cells dialog' box
- Click the Number tab



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- Select Text
- Click 'OK'
- Enter numbers

## Section 4: Format of a cell range as scientific:

Step 1: The Scientific format (also referred to as *Standard* or *Standard Index* form ) is a way to display very large or very small numbers.

For example, instead of writing 0.0000000043, you can write 4.3 x 10-9. And if you apply the Excel Scientific notation format to the cell containing 0.0000000043, the number will be displayed as 4.2E-09.

Step 2: Select the cells and right-clicking menu of the mouse.

Step 3: Select the Format Cells from the right-clicking menu in the screen.

Step 4: In the coming Format Cells dialog box, go to the Scientific tab and select the decimal places.

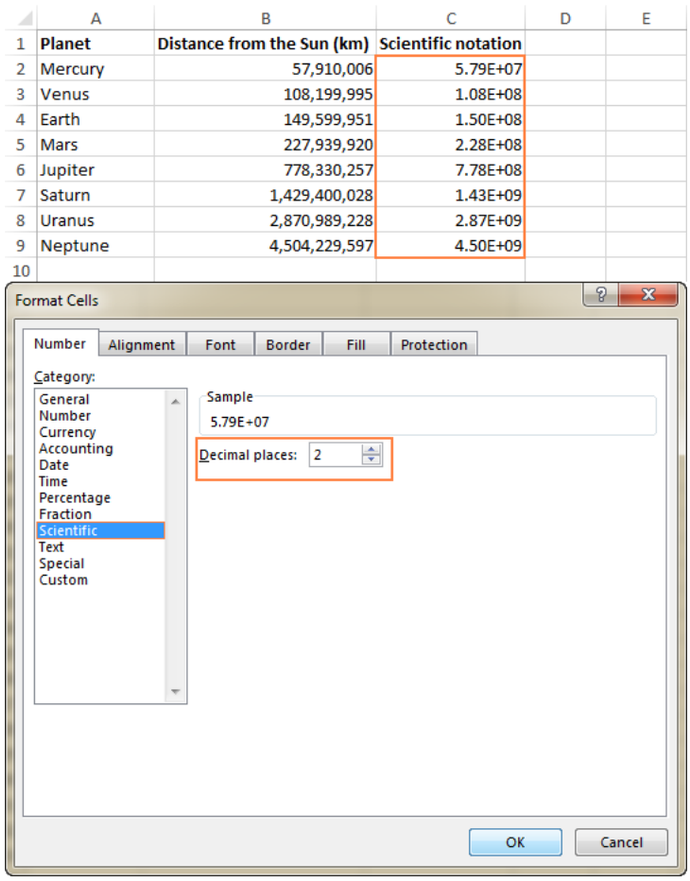



*FIGURE 32.4 Format of a cell range as scientific*



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To quickly apply the default Excel Scientific notation format with 2 decimal places, press Ctrl+Shift+^ on the keyboard

## Section 5: Format a range of cells to display time:

Step 1: To quickly use the default date or time format, click the cell that contains the date or time, and then press CTRL+SHIFT+# or CTRL+SHIFT+@.

Step 2: If a cell displays ##### after you apply date or time formatting to it, the cell probably isn't wide enough to display the data. To expand the column width or double-click the right boundary of the column containing the cells. This automatically resizes the column to fit the number. You can also drag the right boundary until the columns are the size you want.

Step 3: When you try to undo a date or time format by selecting General in the Category list, Excel displays a number code. When you enter a date or time again, Excel displays the default date or time format. To enter a specific date or time format, such as January 2010, you can format it as text by selecting Text in the Category list.

Step 4: To quickly enter the current date in your worksheet, select any empty cell, and then press CTRL+; (semicolon), and then press ENTER, if necessary. To insert a date that will update to the current date each time you reopen a worksheet or recalculate a formula, type =TODAY () in an empty cell, and then press ENTER.

Step 5: On the Home tab, in the Number group, click the Dialog Box Launcher next to Number.

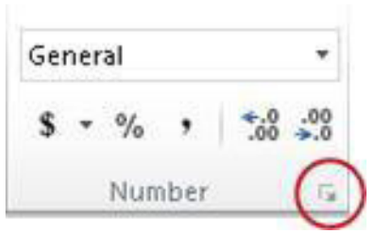



*FIGURE 32.5 Number group*

Step 6: You can also press CTRL+1 to open the Format Cells dialog box.

- In the Category list, click Date or Time.

Step 7: In the Type list, click the date or time format that you want to use. Note: Date and time formats that begin with an asterisk (*) respond to changes in regional date and time settings that are specified in Control Panel. Formats without an asterisk are not affected by Control Panel settings.

Step 8: To display dates and times in the format of other languages, click the language setting that you want in the Locale (location) box.



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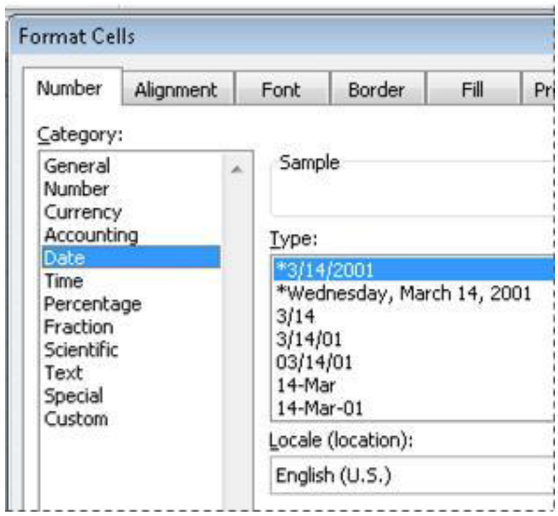



*FIGURE 32.6 Category list, click Date or Time.*

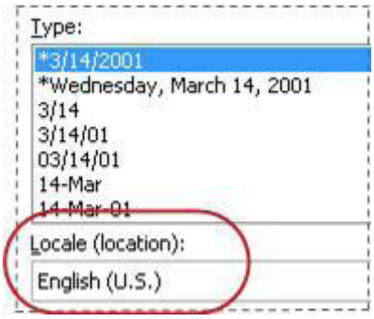



*FIGURE 32.7 Language setting and Locale (location) box.*

Step 9: The number in the active cell of the selection on the worksheet appears in the Sample box so that you can preview the number formatting options that you have selected.

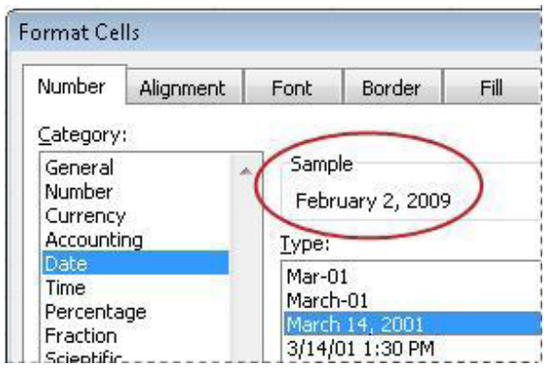



*FIGURE 32.8 Sample box in formatting cell.*

### Create a custom date or time format:

Step 1: On the Home tab, click the Dialog Box Launcher next to Number. You can also press CTRL+1 to open the Format Cells dialog box.



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Step 2: In the Category box, click Date or Time, and then choose the number format that is closest in style to the one you want to create. (When creating custom number formats, it's easier to start from an existing format than it is to start from scratch.)

Step 3: In the Category box, click Custom. In the Type box, you should see the format code matching the date or time format you selected in the step 3. The built-in date or time format can't be changed or deleted, so don't worry about overwriting it.

Step 4: In the Type box, make the necessary changes to the format. You can use any of the codes in the following tables: Days, months, and years

| **To display** | **Use this code** |
|---|---|
| Months as 1–12 | m |
| Months as 01–12 | mm |
| Months as Jan–Dec | mmm |
| Months as January–December | mmmm |
| Months as the first letter of the month | mmmmm |
| Days as 1–31 | d |
| Days as 01–31 | dd |
| day as sun -sat | ddd |
| Day as sunday-saturday | dddd |
| Years as 00–99 | yy |
| Years as 1900–9999 | yyyy |

If you use "m" immediately after the "h" or "hh" code or immediately before the "ss" code, Excel displays minutes instead of the month.

### Hours, minutes, and seconds:

| **To display** | **Use this code** |
|---|---|
| Hours as 0–23 | h |
| Hours as 00–23 | hh |
| Minutes as 0–59 | m |
| Minutes as 00–59 | mm |
| Seconds as 0–59 | s |
| Seconds as 00–59 | ss |
| Hours as 4 AM | h AM/PM |
| Time as 4:36 PM | h:mm AM/PM |



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| | |
|---|---|
| Time as 4:36:03 P | h:mm:ss A/P |
| Elapsed time in hours; for example, 25.02 | [h]:mm |
| Elapsed time in minutes; for example, 63:46 | [mm]:ss |
| Elapsed time in seconds | [ss] |
| Fractions of a second | h:mm:ss.00 |

AM and PM: If the format contains an AM or PM, the hour is based on the 12-hour clock, where "AM" or "A" indicates times from midnight until noon and "PM" or "P" indicates times from noon until midnight. Otherwise, the hour is based on the 24-hour clock. The "m" or "mm" code must appear immediately after the "h" or "hh" code or immediately before the "ss" code; otherwise, Excel displays the month instead of minutes.

Creating custom number formats can be tricky if you haven't done it before. For more information about how to create custom number formats, see Create or delete a custom number format.

## Section 6:Align the cell data range:

### Change the orientation of text in a cell:

Step 1: Select a cell, row, column, or a range.

Step 2: Select Home > Orientation , and then select an option.You can rotate your text up, down, clockwise, or counterclockwise, or align text vertically.

| | A | B | C | D |
|---|---|---|---|---|
| 1 | March | April | Totals | Promotions |
| 2 | 2 | 2 | 4 | Yes |
| 3 | 56 | 23 | 79 | ~~Yes~~ |
| 4 | 12 | 34 | 46 | Yes |

*FIGURE 32.9 Align the cell data range*

### Rotate text to a precise angle:

Step 1: Select a cell, row, column, or a range.

Step 2: Select Home > Orientation > Format Cell Alignment.

Step 3: Under Orientation on the right side, in the Degrees box, use the up or down arrow to set the exact number of degrees that you want to rotate the selected cell text. Positive numbers rotate the text upward. Negative numbers rotate the text downward.

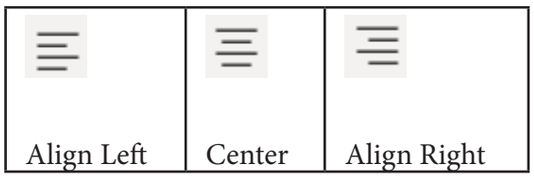


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### Align a column or row

Step 1: Select the cells you want to align.

Step 2: On the Home tab, in the Alignment group, select a horizontal alignment option:




On the Home tab, in the Alignment group, select a vertical alignment option:

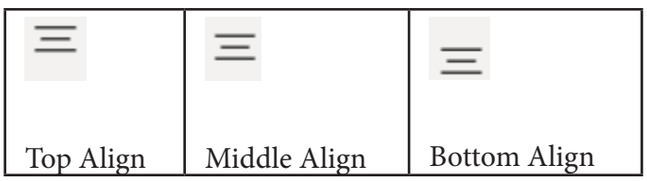



*FIGURE 32.10 Alignment group.*

### Section 7: Create number series using fill handle:

Step 1: Select the first cell in the range that to fill.

Step 2: Type the starting value for the series.

Step 3: Type a value in the next cell to establish a pattern.

Tip: For example, if you want the series 1, 2, 3, 4, 5..., type 1 and 2 in the first two cells. If you want the series 2, 4, 6, 8..., type 2 and 4.

Step 4: Select the cells that contain the starting values.

Step 5: Drag the fill handle  across the range that you want to fill.

Note: As you drag the fill handle across each cell, Excel displays a preview of the value. If you want a different pattern, drag the fill handle by holding down the right-click button, and then choose a pattern.

To fill in increasing order, drag down or to the right. To fill in decreasing order, drag up or to the left.

### Section 8: Copy formula by dragging the formula using fill handle

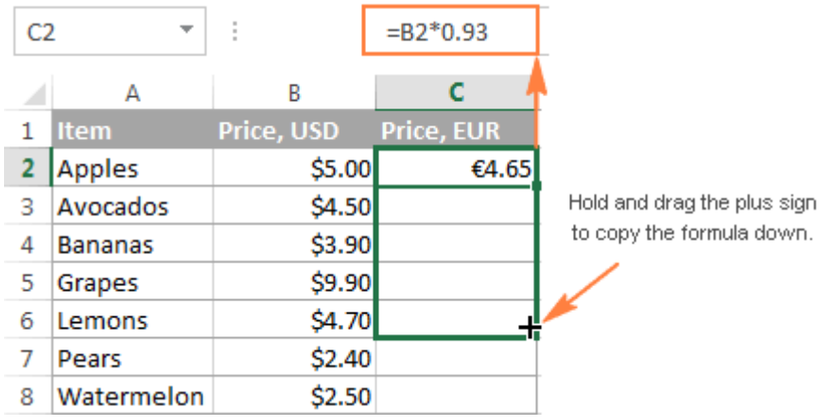
Step 1: Enter a formula in the top cell.

Step 2: Select the cell with the formula, and hover the mouse cursor over a small square at the lower right-hand corner of the cell, which is called the Fill handle. As you do this, the cursor will change to a thick black cross.



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Step 3: Hold and drag the fill handle down the column over the cells where you want to copy the formula.



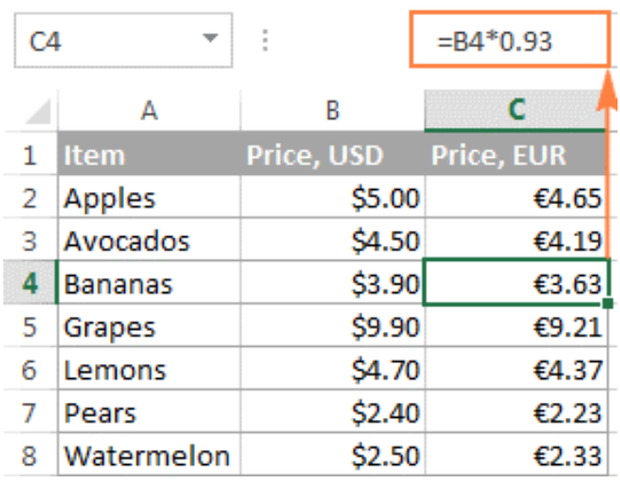

| | A | B | C |
|---|---|---|---|
| 1 | Item | Price, USD | Price, EUR |
| 2 | Apples | $5.00 | €4.65 |
| 3 | Avocados | $4.50 | |
| 4 | Bananas | $3.90 | |
| 5 | Grapes | $9.90 | |
| 6 | Lemons | $4.70 | |
| 7 | Pears | $2.40 | |
| 8 | Watermelon | $2.50 | |

*FIGURE 32.11 Copy formula by dragging the formula using the fill handle.*

In a similar manner, you can drag formula into adjacent cells to the right, to the left or upwards.

If the formula includes relative cell references (without the $ sign), they will automatically change based on a relative position of rows and columns. So, after copying the formula, verify that the cell references have got adjusted properly and produce the result. If necessary, switch between absolute, relative and mixed references by using the F4 key.

In the above example, to make sure the formula was copied correctly, let's select some cell in column C, say C4, and view the cell reference in the formula bar. As you can see in the screenshot below, the formula is all right - relative to row 4, exactly as it should be:




| | A | B | C |
|---|---|---|---|
| 1 | Item | Price, USD | Price, EUR |
| 2 | Apples | $5.00 | €4.65 |
| 3 | Avocados | $4.50 | €4.19 |
| 4 | Bananas | $3.90 | €3.63 |
| 5 | Grapes | $9.90 | €9.21 |
| 6 | Lemons | $4.70 | €4.37 |
| 7 | Pears | $2.40 | €2.23 |
| 8 | Watermelon | $2.50 | €2.33 |

*FIGURE 32.12 Using references.*

**Result:**

Thus the formatting instructions in the MS excel document has been practiced successfully.



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### Video suggestions:

| s.no | Title/purpose | Link |
|---|---|---|
| 1 | MS Excel - Editing & Formatting Data in Tamil | https://youtu.be/y7GZnwbf4EE |
| 2 | Complete Excel learning | https://youtu.be/YGG1aXJws4A |
| 3 | Excel basics and fundamentals for Beginners in Tamil | https://youtu.be/3qNOa9JjBZk |
| 4 | How to add an zero in front of numbers | https://youtu.be/mijhtkFLKCY |

### Simple Assessments:

| | |
|---|---|
| **Student project** | 1.Students have to prepare a mark list by using formulas for calculation.<br>2. Students have to prepare a scorecard of cricket match. |
| **Guest lecture suggestions** | Create a data of your assessment marks.<br>Create data and average your class result.<br>Create a new style and update it on your computer. |
| **Industrial/ Field visit suggestions** | 1. Invite a MS office technician for a guest lecture.<br>2. Invite an accounts auditor for a guest lecture.<br>3. Invite an office assistant working in MS office platform. |

## EXPERIMENT : 33

## USE OF REFERENCING

### Objective:

To practice to use of referencing in MS excel document.

### Operations/Exercises covered under the project:

1. Referencing
2. Concept of Referencing
3. Types of cell Reference
4. Relative Referencing
5. Mixed Referencing - Column letter is Absolute
6. Absolute Referencing - No change



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## Tools and Equipment Required:

| s.no | Name of the tools/ equipment | Range/Value | Quantity |
|---|---|---|---|
| 1 | Computer or Laptop | I5 processor/4gb ram | 1 |
| 2 | Microsoft office | MS office 2019 | 1 |

## Procedure:

### Section 1: How to do Referencing in a spreadsheet:

Step 1: Click the cell in which you want to enter the formula.

Step 2: Type the equal sign (=).

Step 3: Type the reference directly in the cell or in the formula bar, or Click the cell you want to refer to.

Step 4: Type the rest of the formula and press the Enter key to complete it.

Step 5: To add up the values of cells A1 and A2, you type the equal sign, click A1, type the plus sign, click A2 and press Enter:




*FIGURE 33.1 Referencing in a spreadsheet.*

### Section 2: Relative cell reference in Excel:

Step 1: A relative reference is the one without the $ sign in the row and column coordinates, like A1 or A1:B10. By default, all cell addresses in Excel are relative.

Step 2: To multiply numbers in column A by 5, you enter this formula in B2: =A2*5

Step 3: When copied from row 2 to row 3, the formula will change to: =A3*5

| | A | B | C |
|---|---|---|---|
| 1 | **Data** | **Result** | **Formula** |
| 2 | 1 | 5 | =A2*5 |
| 3 | 2 | 10 | =A3*5 |
| 4 | 3 | 15 | =A4*5 |

*FIGURE 33.2 Relative cell reference in Excel.*



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## Section 3: Absolute cell reference in Excel:

Step 1: An absolute reference is the one with the dollar sign ($) in the row or column coordinates, like $A$1 or $A$1:$B$10.

Step 2: To multiply the numbers in column A by the number in B2, you input the following formula in row 2, and then copy the formula down the column by dragging the fill handle: **=A2*$B$2**

| | A | B | C | D |
|---|---|---|---|---|
| 1 | **Number** | **Multiply by** | **Result** | **Formula** |
| 2 | 10 | 10 | 100 | =A2*$B$2 |
| 3 | 20 | | 200 | =A3*$B$2 |
| 4 | 30 | | 300 | =A3*$B$2 |

*FIGURE 33.3 Absolute cell reference in Excel.*

## Section 4: Mixed cell reference:

Step 1: A mixed reference contains one relative and one absolute coordinate, like $A1 or A$1.

Step 2: To multiply a column of numbers (column A) by 3 different numbers (B2, C2 and D2), you put the following formula in B3, and then copy it down and to the right:**=$A3*B$2**

Step 3: As the result, all the calculations are performed with a single formula, which changes properly for each row and column where it is copied:

B3 : =$A3*B$2 =$A3*C$2 =$A3*D$2

| | A | B | C | D |
|---|---|---|---|---|
| 1 | **Number** | **Multiply by** | | |
| 2 | | **5** | **10** | **15** |
| 3 | 10 | 50 | 100 | 150 |
| 4 | 20 | 100 | 200 | 300 |
| 5 | 30 | 150 | 300 | 450 |

*FIGURE 33.4 Mixed cell reference.*

## Result:

Thus all types of referencing in the MS excel document has been practiced successfully.



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### Video suggestions:

| S.no | Title/purpose | Link |
|---|---|---|
| 1 | How to Make Referencing in a spreadsheet. | https://www.youtube.com/watch?v=pHEz6MrdYfo |
| 2 | Relative cell reference in Excel | https://www.youtube.com/watch?v=s3EiyUSR59c |
| 3 | Absolute cell reference in Excel | https://www.youtube.com/watch?v=pJYCll3Uh30 |
| 4 | Mixed cell reference | https://www.youtube.com/watch?v=SfV_MT2wWjs |

### Simple Assessments:

| | |
|---|---|
| **Student project** | 1.Students have to prepare a reference material and price.<br>(use reference)<br>2.students have to prepare relative,absolute, mixed with person ,salary,with allowance. |
| **Guest lecture suggestions** | 1. Invite a MS office technician for a guest lecture.<br>2. Invite a computer subject expert for a guest lecture.<br>3.Invite an office assistant working in MS office platform. |
| **Industrial/ Field visit suggestions** | 1.A field Visit to an office nearby the school.<br>2. Visit to nearby banks for field visit.<br>3.A field Visit to the nearby auditing office. |

## EXPERIMENT : 34

## PREPARE A CHART IN MS EXCEL

### Objective:

To prepare a chart in MS excel.

### Operations/Exercises Covered Under the Project:

1. Column chart
2. Line chart



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3. Pie chart
4. Bar chart

## Tools and Equipment Required:

| S.No | Name of the tools/ equipment | Range/Value | Quantity |
|---|---|---|---|
| 1 | Computer or Laptop | I5 processor/4gb ram | 1 |
| 2 | Microsoft office | MS office 2019 | 1 |

## Procedure:

### Section 1: Column chart:

Step 1: Create a new excel sheet and save the document.

Step 2: Enter the sales and expenses of the month.

Step 3: Click insert option in toolbar.

Step 4: Select the typed cells and click the clustered column chart option.

Step 5: It shows the sales and expenses of the month in column chart.

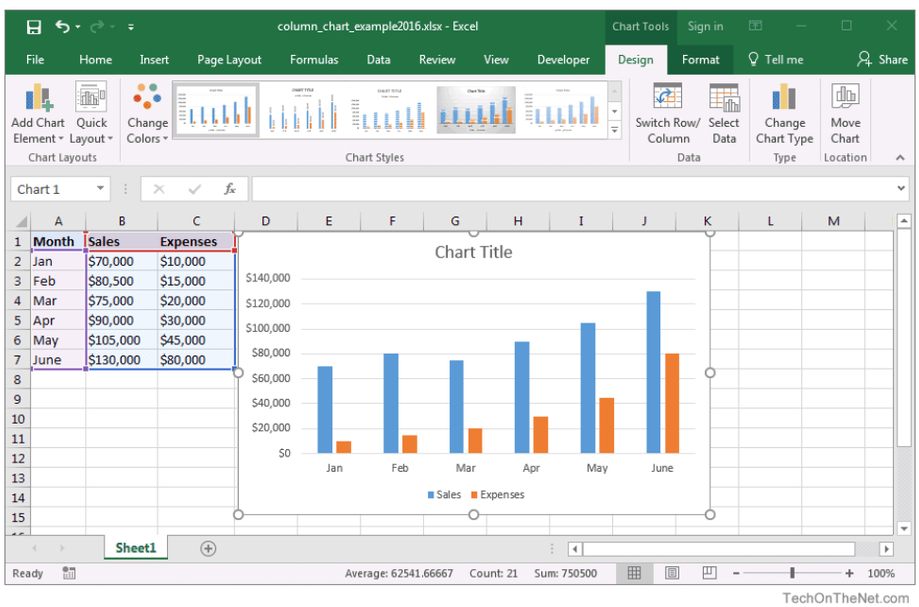



*FIGURE 34.1 Column chart.*



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## Section 2: Line chart:

Step 1: Create a new excel sheet and save the document

Step 2: Enter the product trends by the month

Step 3: Click insert option in tool bar.

Step 4: Select the typed cells and click the line chart option.

Step 5: It shows the product trends by the month in line chart

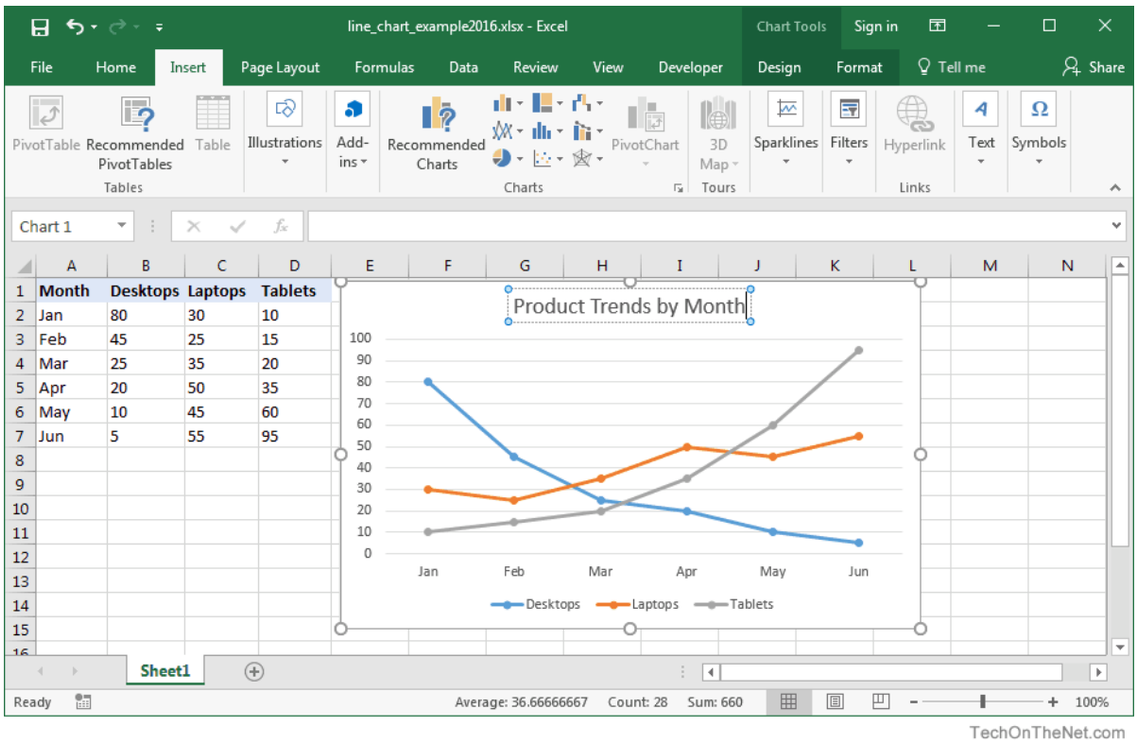



*FIGURE 34.2 Line chart.*

## Section 3: PIE chart:

Step 1: Create a new excel sheet and save as the document

Step 2: Enter the profit of the months.

Step 3: Click insert option in tool bar.

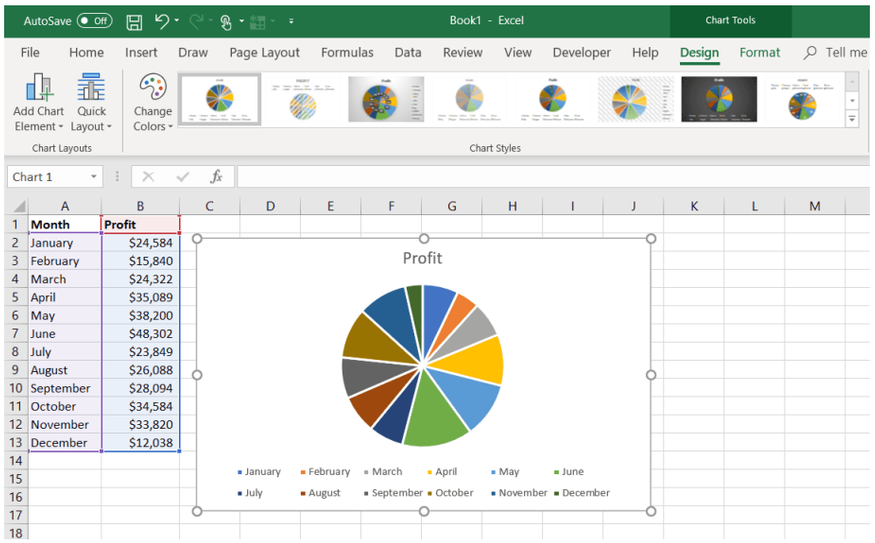
Step 4: Select the typed cells and click the pie chart option.

Step 5: It shows the profit of the different month in pie chart.

Step 6: Click the layout option in tool bar and click the data labels -->center for view the data's in center of pie chart.



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| | Month | Profit |
|---|---|---|
| 2 | January | $24,584 |
| 3 | February | $15,840 |
| 4 | March | $24,322 |
| 5 | April | $35,089 |
| 6 | May | $38,200 |
| 7 | June | $48,302 |
| 8 | July | $23,849 |
| 9 | August | $26,088 |
| 10 | September | $28,094 |
| 11 | October | $34,584 |
| 12 | November | $33,820 |
| 13 | December | $12,038 |

*FIGURE 34.3 pie chart.*

## Section 4: Bar chart:

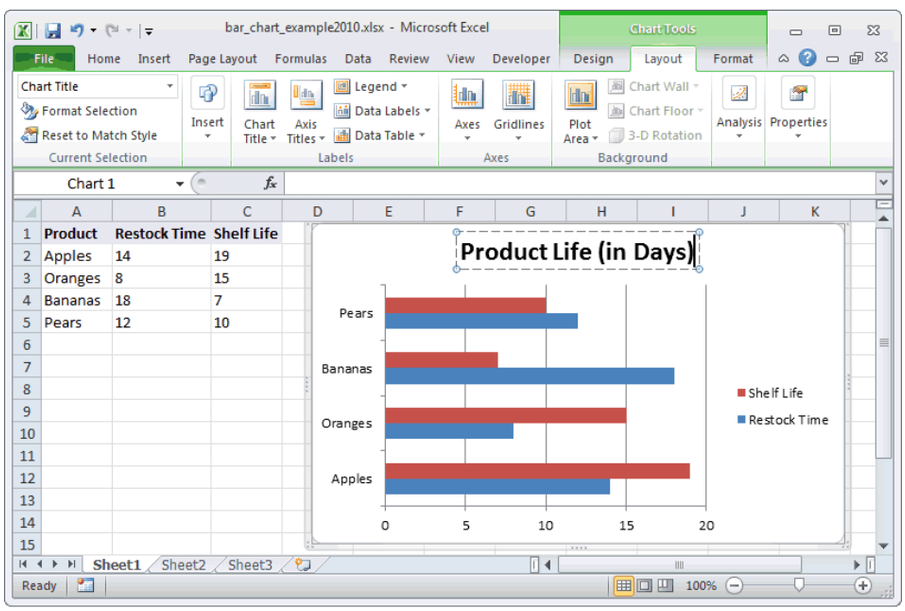
Step 1: Create a new excel sheet and save the document

Step 2: Enter the product life in days

Step 3: Click insert option in tool bar.

Step 4: Select the typed cells and click the bar chart option.

Step 5: It shows the product life in days in bar chart.




| | Product | Restock Time | Shelf Life |
|---|---|---|---|
| 2 | Apples | 14 | 19 |
| 3 | Oranges | 8 | 15 |
| 4 | Bananas | 18 | 7 |
| 5 | Pears | 12 | 10 |

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*FIGURE 34.4 Bar chart.*



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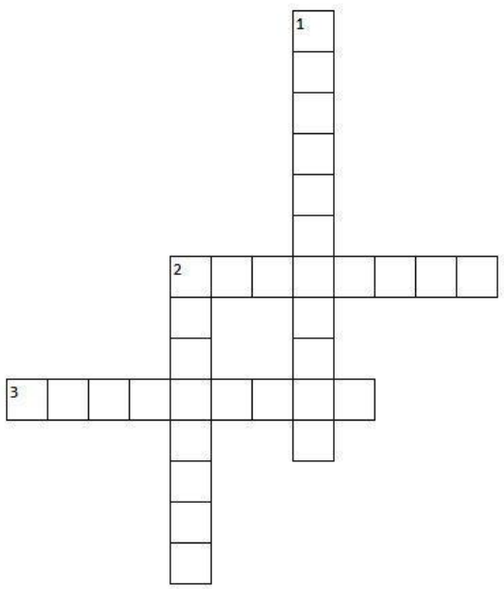
## Result:

Thus the chart has been prepared successfully.

## Video suggestions:

| S.no | Title/purpose | Link |
|---|---|---|
| 1 | Excel chart in tamil | https://youtu.be/CamobfRkSbI |
| 2 | MS Excel - Pie, Bar, Column & Line Chart | https://youtu.be/Z2gzLYaQatQ |
| 3 | Chart creation and in types in excel in Tamil | https://youtu.be/W7m8cNdMz94 |

## Simple Assessments:




### Across

**1.** which chart will be more useful to view sales information?

**2.** which chart will be used to track changes over short and long periods of time

### Down

**1.** it shows data changes over a period of time or for illustrating comparisons among items.

**2.** which chart will be used to show comparisons between categories of data?



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| | |
|---|---|
| **Student project** | Draw the pie chart to view your quarterly examination marks subject wise.<br>Draw the column chart to view the January month income and expenditure of your family. |
| **Guest lecture suggestions** | 1. Invite a MS office technician for a guest lecture.<br>2. Invite a computer subject expert for a guest lecture.<br>3. Invite an office assistant working in MS office platform. |
| **Industrial/ Field visit suggestions** | 1. A field Visit to an office nearby the school.<br>2. Visit nearby banks for field visits.<br>3. A field Visit to the nearby auditing office. |

## EXPERIMENT : 35

## ADVANCE CREATION OF ELECTRONICS SPREADSHEET IN MS EXCEL.

To create a spreadsheet using references, hyperlinks and macro, share the spreadsheet reviewing and merging in Ms excel.

### OPERATIONS:

- Consolidating data
- Creating data
- Setting up multiple worksheet creating reference
- Creating and using 'What if analysis'
- Using Macro Recorder

### SAFETY MEASURE

These are the top do's and don'ts to keep in mind when using Excel:

- Do plan your spreadsheet.
- Don't leave blank rows or columns when entering related data.
- Do save frequently and save in two places.
- Don't use numbers as column headings and don't include units with the data.
- Do use cell references and named ranges in formulas.
- Don't leave cells containing formulas unlocked.
- Do sort your data.



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## TOOLS AND EQUIPMENT REQUIRED:

| S.No | Name of the tools/equipment | Range/Value | Quantity |
|---|---|---|---|
| 1 | Computer or Laptop | i5 processor/4GB RAM | 1 |
| 2 | Microsoft office | MS office 2019 | 1 |
| 3 | Printer | Epson | 1 |
| | | | |

## PROCEDURE

## CREATING AND USING ' WHAT –IF ANALYSIS' IN MS-EXCEL

Step 1- In Ms Excel Open a new workbook.

Step 2-Type the following data:

| S.No | A | B |
|---|---|---|
| 1 | Price | 83 |
| 2 | Qty | 12 |
| 3 | Amt | 996 |

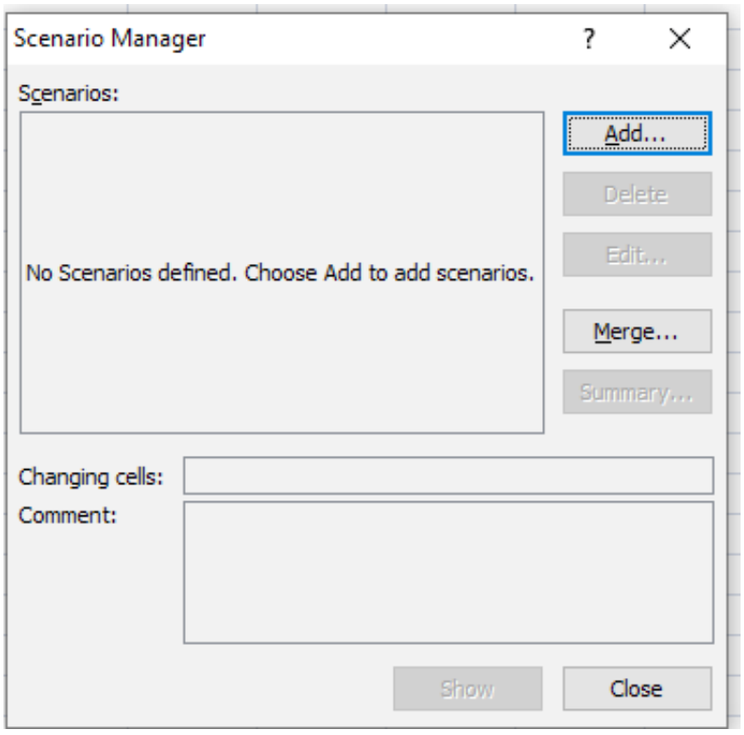



*FIGURE 35.1 Scenario Manager*

Step 3 - Click Data > What if analysis in Data Tools group and select Scenario Manager.

Step 4 - Scenario Manager Dialog box appears.



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Step 5 - Click add button, Add Scenario dialog box appears.

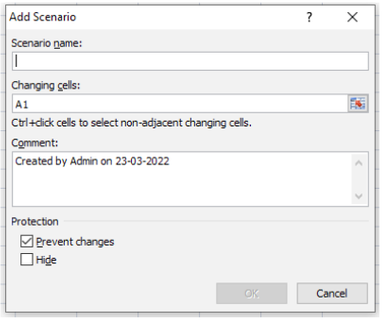



*FIGURE 35.2 Add Scenario dialog box*

Step 6 – In 'Scenario Name' textbox, type the Scenario name. In 'changing cells' textbox, select the cell address whose value is to be changed. Click OK button.

Step 7- Scenario values dialog box appears. Enter values for changing cells then click OK button.

Step 8 –Follow steps from 5 to 7 to create more scenarios.

Step 9 - Finally click Summary button. Scenario summary dialog box appears.

Step 10 – Select Report type and click OK button.

Step 11- Scenario summary will appear in a new sheet.

## INSERTING HYPER LINK IN MS EXCEL

Step 1 - In Ms Excel Open a new workbook.

Step 2 – Click Insert > Hyperlink, dialog box appears.

Step 3 – From link to: section select place in this document.

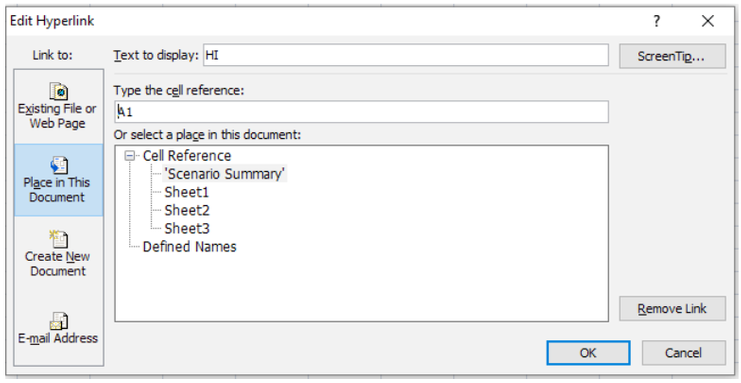



*FIGURE 35.3 Hyperlink dialog box*



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Step 4 – In text to display textbox type the text to display as hyperlink.

Step 5 – In Type the cell reference textbox, type the cell address or select the cell reference from the given list. Click OK button.

Step 6 – In Active cell the text is highlighted as blue in color with underlined. This is the hyperlink, by clicking on it the cursor will take you to the place where it is linked.

Step 7 – Once visited, the color of the hyper link text will be changed.

## LINKING EXTERNAL DATA

To import data from MS Access database,

Step 1- In Ms Excel Open a new workbook.

Step 2 – On Data tab, in Get external data group, click from Access.

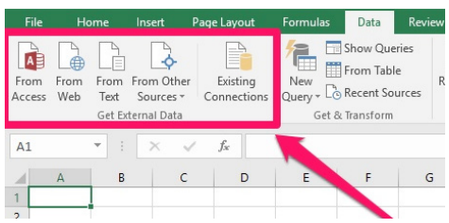



*FIGURE 35.4 Get External Data*

Step 3 – Select any MS Access file and click open.

Step 4 – Select a table and click OK. In Import data dialog box select table and existing workbook. Click OK.

Step 5 – Now we can see our database records in MS Excel.

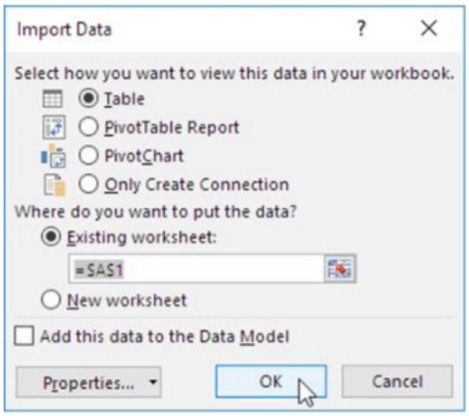



*FIGURE 35.5 Import Data Dialog box*



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## RECORDING A MACRO

Step 1- In Ms Excel Open a new workbook.

Step 2 – Click View > Macros > Record Macro. A dialog box will appear.

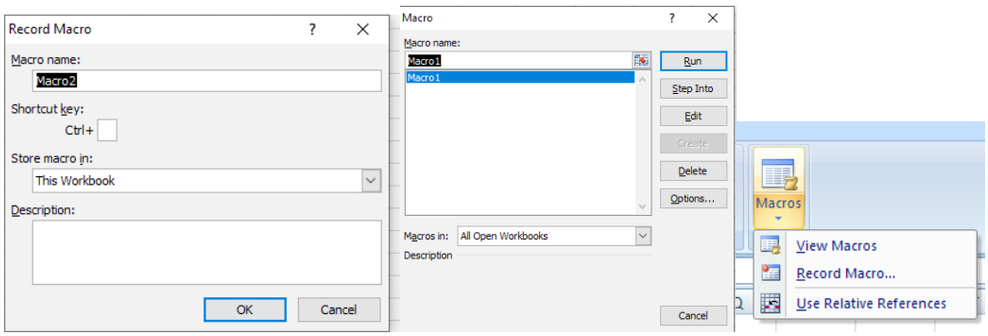



*FIGURE 35.6 Recording a Macro*

Step 3 – Give a name for the Macro. Assign shortcut key for the macro apart from the regular shortcut keys used in MS Excel.

Step 4 – Type the description for macro. Click OK button.

Step 5 – Now do the actions (typing text or number or formatting) to record, click stop recording once you complete.
Step 6 – The created macro will be available in view macro option.

Step 7 – Now we can use the shortcut key or Click Run button in View Macro option to see our repeated actions

## CONCLUSION:

Thus the spreadsheets using external data, hyperlinks and macro, 'what if analysis' in MS excel clearly obtained and verified.

## VIDEO SUGGESTIONS:

| S.No | Title | Video link |
|---|---|---|
| 1 | What if analysis in Excel | https://youtu.be/FXaV4lckino |
| 2 | MS Excel - multiple worksheet creating reference, hyperlink, sharing the spread sheet | https://www.youtube.com/watch?v=0-I1BpSlE3sz |
| 3 | MS Excel - sorting the columns using macro recorder | https://www.youtube.com/watch?v=KobPARZhN2c |

## SIMPLE ASSESSMENTS:

1 _____ can be used in spreadsheet software to jump to a different location from



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within a spreadsheet

2.A _____ is an action or a set of actions that you can run as many times as you want in spreadsheet.

3. _____refers to a cell or a range of cells on a worksheet.

4. _____ short cut key is used to open an existing workbook.

5. _____ short cut key is used to insert a new worksheet.

Answer (1. hyper link 2. macro 3. cell reference 4. ctrl+o 5. shift+f11 )

| | | |
|---|---|---|
| 1 | **Student project** | Prepare an account summary sheet with a blank Balance column by using what if analysis.<br>Prepare a macro file with an example<br>Prepare a hyperlink data file with an example |
| 2 | **Guest lecture suggestions** | 1. Invite a MS office subject expert for a guest lecture.<br>2. Invite an auditor for a guest lecture.<br>3. Invite a business analyst working in MS office platform. |
| 3 | **Industrial/ Field visit suggestions** | 1. A field Visit to an auditing office nearby the school.<br>2. Visit nearby banks for field visits.<br>3. A field Visit to the nearby front office of the organization. |

## EXPERIMENT : 36

## PREPARE A BALANCE SHEET IN MS EXCEL

### Objective:

To prepare a balance sheet in MS excel.

### Operations/Exercises Covered Under the Project:

1. Creating the excel file
2. Enter the data's of balance sheet
3. Print the document



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## Tools and Equipment Required:

| S.No | Name of the tools/equipment | Range/Value | Quantity |
|---|---|---|---|
| 1 | Computer or Laptop | I5 processor/4gb ram | 1 |
| 2 | Microsoft office | MS office 2019 | 1 |
| 3 | Printer | Epson L3250 | 1 |

## Procedure:

### Section 1: Creating the excel file:

Step 1: Open Excel.

Step 2: Click New Blank Workbook.

Step 3: Enter column headers into row 1.

Step 4: Enter data on individual rows.

Step 5: Click the Page Layout tab to format the data.

Step 6: Click File > Save As to save the document.

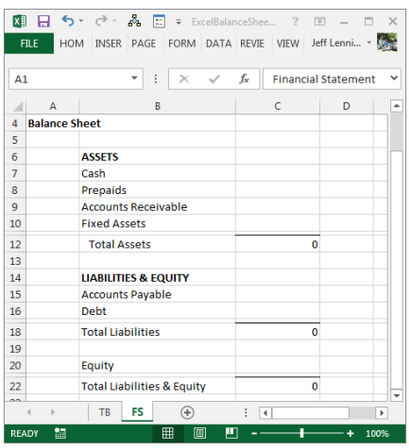



*FIGURE 36.1 Creating the excel file.*

### Section 2: Enter the datas of balance sheet:

Step 1: Pick the balance sheet date

Step 2: List all of assets

Step 3: Add up all of assets



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Step 4: Determine current liabilities

Step 5: Calculate long-term liabilities

Step 6: Add up liabilities.

Step 7: Calculate owner's equity

Step 8: Add up liabilities and owners' equity

| | A | B |
|---|---|---|
| 3 | | |
| 4 | Fixed Assets | 30,000 |
| 5 | Long Term Investments | 20,000 |
| 6 | Trade Payables | 25,000 |
| 7 | Dividends Payable | 2500 |
| 8 | Share Capital | 75,000 |
| 9 | Cash & Bank | 83,500 |
| 10 | Debtors | 25,000 |
| 11 | Reserves and Surplus | 67,500 |
| 12 | Short Term Loans | 13,500 |
| 13 | Loans and Advances | 25,000 |
| 23 | | |
| 24 | Total Assets is Calculated as: | |
| 25 | **Total Assets Formula** | **=B10+B13+B9+B4+B5** |
| 26 | **Total Assets** | **183,500** |
| 27 | | |

*FIGURE 36.2 Enter the datas of the balance sheet.*

## Section 3: Print the document:

Step 1: Open the MS excel document to be printed

Step 2: Click **File** in the left top corner of the excel file or Click **CTRL + P**

Step 3: Click the print icon to print the document

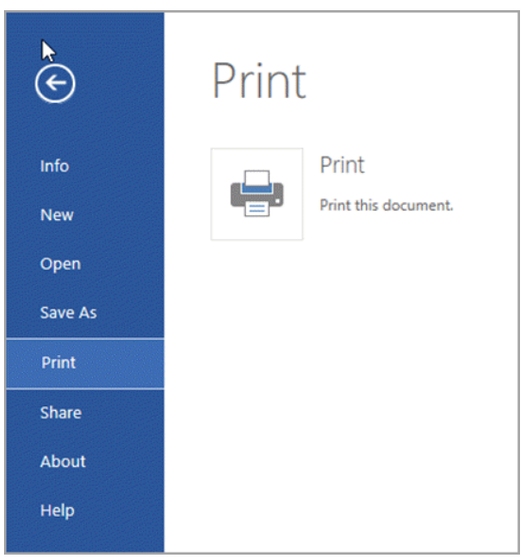



*FIGURE 36.3 Print the document.*



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## Result:

Thus the balance sheet in Ms excel has been prepared successfully.

## Video suggestions:

| s.no | Title/purpose | Link |
|---|---|---|
| 1 | How to Prepare Balance Sheet in Tamil \| Final Accounts in Tamil | https://youtu.be/2JY04NU_qsk |
| 2 | Salary Sheet of Cutechinfo Pvt Ltd in excel | https://youtu.be/B--Dkqpcqd8 |
| 3 | Microsoft excel Personal Accounts example \| House incomes and Expenses Sheet | https://youtu.be/HDlTAYedZjs |

## Simple Assessments:

| | |
|---|---|
| **Student project** | 1.Student should have to prepare the balance sheet of the sole trader.<br>2.Student should have to prepare the balance sheet of a partnership firm.<br>3.Student should have to prepare the balance sheet of a joint stock company.<br>4. Students should have to prepare the balance sheet of a not for profit organisation. |
| **Guest lecture suggestions** | 1. Invite a MS office subject expert for a guest lecture.<br>2.Invite an office assistant working in MS office platform.<br>2.Invite an auditor working in MS office platform. |
| **Industrial/ Field visit suggestions** | 1.A field Visit to an office nearby the school.<br>2. Visit nearby banks for field visit.<br>3.A field Visit to the nearby auditing office. |



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EXPERIMENT : 37

# CREATE A POWERPOINT PRESENTATION AND ITS VARIOUS OPTIONS

## Objective:

To create a power point presentation and use of various options in MS power point presentation.

## Operations/Exercises Covered Under the Project:

1. Create a presentation
2. Work with slides
3. Format the text in presentation
4. Create and use tables in presentation
5. Insert and format image in presentation
6. Work with slide master

## Tools and Equipment Required:

| S.No | Name of the tools/ equipment | Range/Value | Quantity |
|---|---|---|---|
| 1 | Computer or Laptop | I5 processor/4gb ram | 1 |
| 2 | Microsoft office | MS office 2019 | 1 |

## Shortcut keys:

Table 1 Table showing Shortcut keys

| Sl.no | To do this | Press |
|---|---|---|
| 1 | Create new presentation. | **Ctrl+N** |
| 2 | Add a new slide. | **Ctrl+M** |
| 3 | Make selected text bold. | **Ctrl+B** |
| 4 | Change the font size for selected text. | **Alt+H, F, S** |



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| | | |
|---|---|---|
| 5 | Open the Zoom dialog box. | **Alt+W, Q** |
| 6 | Cut selected text, object, or slide. | **Ctrl+X** |
| 7 | Copy selected text, object, or slide. | **Ctrl+C** |
| 8 | Paste cut or copied text, object, or slide. | **Ctrl+V** |
| 9 | Undo the last action. | **Ctrl+Z** |
| 10 | Save the presentation. | **Ctrl+S** |
| 11 | Insert a picture from your device. | **Alt+N, P, D** |
| 12 | Insert a shape. | **Alt+N, S, H** |
| 13 | Select a theme. | **Alt+G, H** |
| 14 | Select a slide layout. | **Alt+H, L** |
| 15 | Go to the next slide. | **Page down** |
| 16 | Go to the previous slide. | **Page up** |
| 17 | Go to the Home tab. | **Alt+H** |
| 18 | Go to the Insert tab. | **Alt+N** |
| 19 | Start the slide show. | **F5** |
| 20 | End the slide show. | **Esc** |
| 21 | Close PowerPoint. | **Ctrl+Q** |

## Procedure:

### Section 1: Create a presentation:

Step 1: To create a new blank presentation, select the File Menu→New or click on the icon New or use the combination of keys Ctrl+N.

Step 2: A window 'Select a Template' will appear. Choose a template as per your choice by clicking on the template



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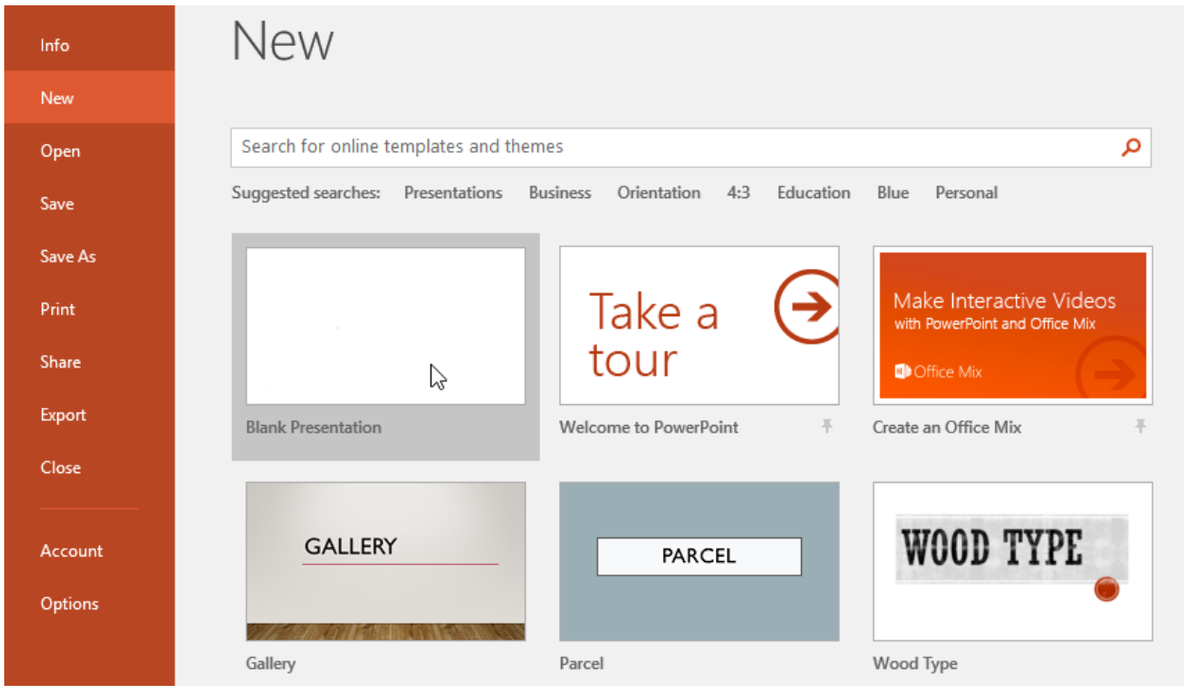



*FIGURE 37.1 Create a presentation.*

## Section 2: Working with slides:

The appropriate layout can be selected from the Layouts section in the Properties window. The layouts included in Libre Office range from a blank slide to a slide with six content boxes and a title. You can also select a slide layout by using menu, Slide → Slide Layout → Title slide

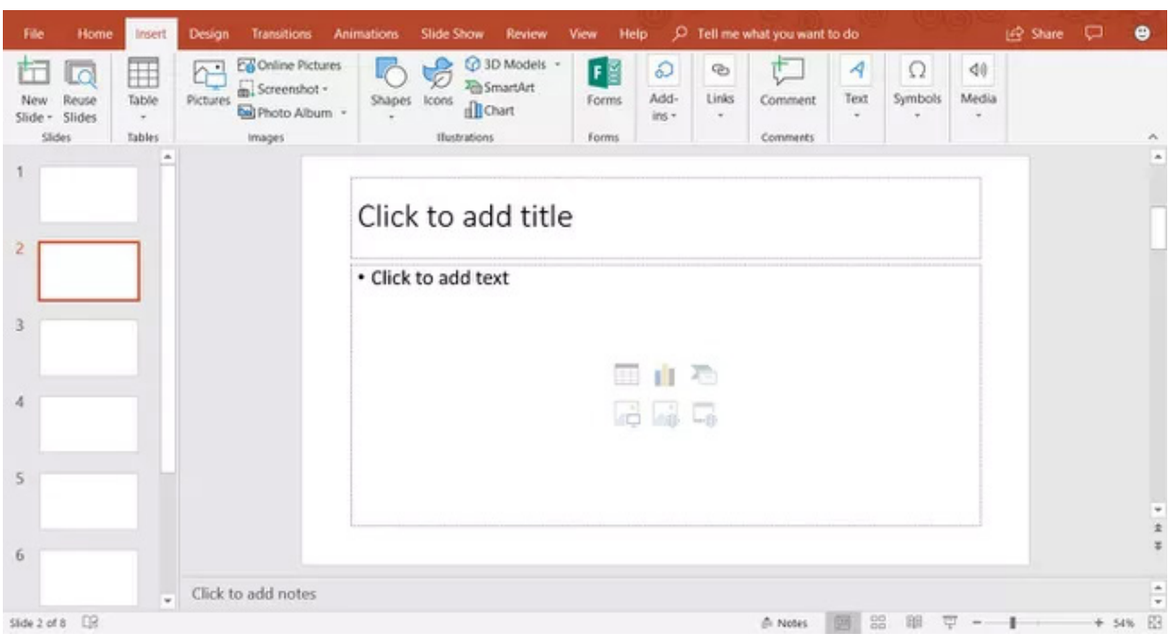



*FIGURE 37.2 Working with slides*



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*Adding text:*

To add text to a slide that contains a text frame, click on Click to add text in the text frame and then type your text. The Outline styles are automatically applied to the text as you insert it.

**Saving a presentation:**

While creating a presentation, you can save it to the disk with some name, so that the content may not be lost or to use the presentation further. Select the File Menu→Save, or, use the shortcut key combination Ctrl+S, or click on the Save button on the Standard Toolbar.

**To Select the slide you want to duplicate from the Slides Pane:**

Step 1: Select from menu bar Slide → Duplicate Slide.

Step 2: Or right-click on the slide and select Duplicate Slide from the menu.

Step 3: Or right-click on a slide in Workspace and select Slide → Duplicate Slide from the menu.

Step 4: Or click the Duplicate Slide icon in the Presentation toolbar. Select from menu bar Slide → New Slide.

Step 5: Or right-click on a slide and select New Slide from the context menu.

Step 6: Or right-click in an empty space in the Workspace and select Slide → New Slide from the context menu.

**Section 3: Create and use tables in presentation:**

A Table can be inserted from the Insert menu by selecting Insert→Table. In the Insert Table dialog box, the Number of columns and the Number of rows are specified in the Insert Table dialog box, the Number of columns and the Number of rows are specified. Adjusting column width and row height using the mouse to change the width of the column, position on the border line between the two columns, and when the cursor changes to a (▸) sign, press the left mouse button, hold and drag it until the column achieves the desired width. The same can be done for adjusting the row height. The various table formatting options can be applied on the table just like Writer. The borders and background can be assigned to the table. To do this, right click on the table border, the Table Properties dialog box will open from where you can change the borders and background of the table.



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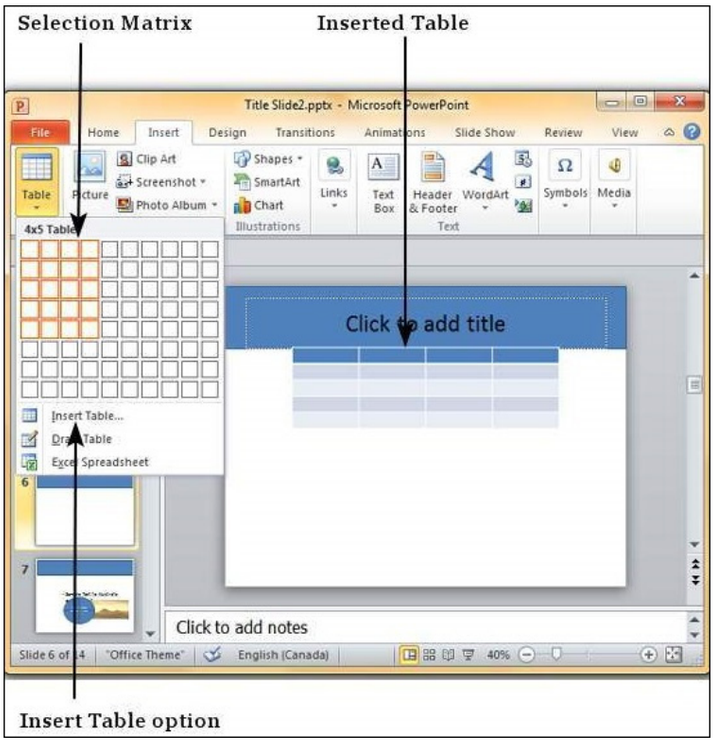



*FIGURE 37.3 Create and use tables in presentation*

## Section 4: Insert and format image in a presentation:

Step 1: To insert an image into the presentation, select Insert → Image on the menu bar or, click on the Insert Image icon located on the standard toolbar. The Insert Image dialog opens. Select the file from the desired directory. By selecting the Preview option, a thumbnail of the selected image will be displayed in the preview pane on the right Moving images.

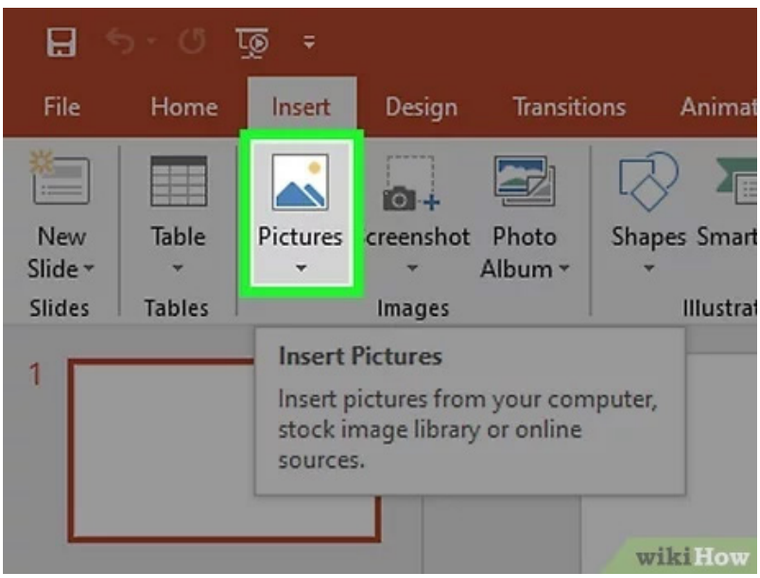



*FIGURE 37.4 Insert and format image in a presentation*



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Step 2: To move the image in the slide, click on an image, observe that the cursor changes to hand shape.

Step 3: Click and drag the picture to the desired position.

Step 4: Release the mouse button.

### Resizing images:

Step 1: Select the image by clicking on it. Observe that selection handles are displayed.

Step 2: Position the cursor over one of the selection handles. The cursor changes the shape giving a graphical representation of the direction of the resizing.

Step 3: Click and drag to resize the image

Step 4: Release the mouse button when satisfied with the new size.

### The image can be rotated in any direction using the Rotate icon. To manually rotate an image:

Step 1: Select the image to display the selection handles.

Step 2: Click the Rotate icon on the Line and Filling toolbar.

Step 3: Click again on the selected image and the selection handles change shape and colour Formatting using the Image toolbar When an image is selected, the Image toolbar becomes available under the Properties window. This toolbar provides a number of formatting options. The Image toolbar can also be displayed by selecting View → Toolbars→Image from the menu bar.

### Drawing tools:

Powerpoint provides various drawing tools. The Drawing toolbar having the majority of the tools are used to create graphical objects. To activate this toolbar, select View → Toolbars →Drawing from the main menu bar.

## Section 5: Work with slide master:

Working with Slide Masters comes with various slide masters. These slide masters are available in the Master Pages section of the Sidebar. There are three subsections namely, used in this Presentation, Recently Used, and Available for Use. Click the expand marker next to the name to expand it. It will show thumbnails of the slides. Just click the collapse marker to collapse the subsection to hide the thumbnails. Every slide masters shown in the Available for Use lists form templates with the same name.



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### Adding transitions:

Step 1: In the Slidebar, select the Slide Transition icon to open the Slide Transition section.

Step 2: In the Slides pane or Slide Sorter view, select the slides to apply the transition. If you want to apply the transition to all the slides, do not select any slides.

Step 3: In the Apply to selected slides list, select a transition.

Step 4: Modify the selected transition by changing the speed or adding a sound, in the Modify transition section. To play a sound during transitions, select a sound from the Sound list.

Step 5: If a sound is selected, the Loop until the next sound option becomes active. Select this option to play the sound repeatedly until another sound starts.

Step 6: Select how to advance to the next slide: manually (By mouse click) or automatically (Automatically after). To select an automatically advance, you will have to specify how long the slide should remain visible before it automatically advances to the next slide.

Step 7: To apply transition to all slides, click Apply to All Slides.

Step 8: To start the slide show from the current slide, check transitions, click Slide Show.

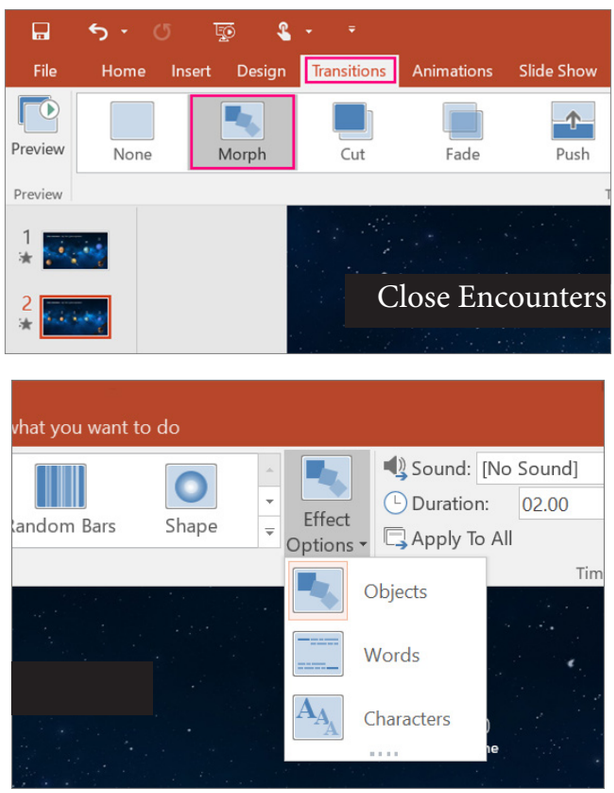



*FIGURE 37.5 Work with slide show*



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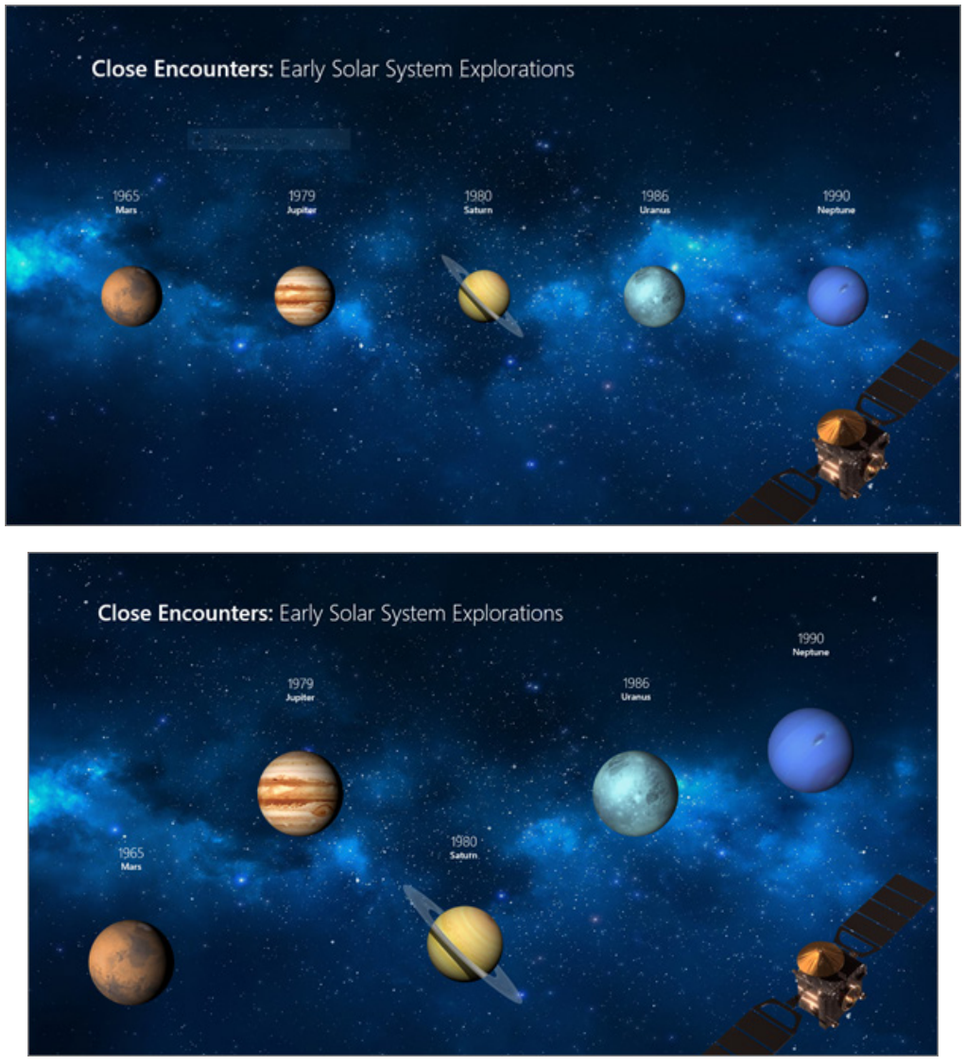



*FIGURE 37.6 Work with slide master*

## Result:

Thus the power point presentation has been created successfully.

Thus the various options in MS power point presentation has been used successfully.

## Video suggestions:

| s.no | Title/purpose | Link |
|---|---|---|
| 1 | PowerPoint Tutorial in Tamil | https://youtu.be/gtGz4elezS8 |



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| | | |
|---|---|---|
| 2 | DATA ENTRY WORK IN EXCEL IN TAMIL \| How to do data entry work in excel in Tami | https://youtu.be/TwRf2J8xj_Y |
| 3 | MS PowerPoint - Basic Presentation | https://youtu.be/tcj2BhhCMN4 |
| 4 | PowerPoint Full Tutorial in Tamil | https://youtu.be/S2KqmNq7eP8 |

### Simple Assessments:

| | |
|---|---|
| **Student project** | |
| **Guest lecture suggestions** | 1. Invite a MS office subject expert for a guest lecture.<br>2. Invite a computer technician for a guest lecture.<br>3.Invite an office assistant working in MS office platform. |
| **Industrial/ Field visit suggestions** | 1.A field Visit to an office nearby the school.<br>2. Visit nearby banks for field visit.<br>3.A field Visit to the nearby auditing office. |

## EXPERIMENT : 38

## PREPARE THE +1 ACCOUNTANCY JOURNAL ENTRIES AND LEDGER ACCOUNTS

### Objective:

To prepare the +1 accountancy journal entries and ledger accounts using MS power point presentation.

### Tools and Equipment Required:

| S.No | Name of the tools/equipment | Range/value | Quantity |
|---|---|---|---|
| 1 | Computer or Laptop | i5 processor/4gb ram | 1 |
| 2 | Microsoft office | MS office 2019 | 1 |

### Flow chart:

1. Create a presentation using PowerPoint
2. Create a new slide



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3. Insert a table
4. Enter the labels and datas

## Safety Measures:

1. Make sure to save your presentation at regular intervals.
2. Remember that before closing your PowerPoint document you need to save the document and it's file path location.

## Procedure:

Step 1: Open a presentation on your computer.

Step 2: Click **File>New >Blank presentation.** Double click on the blank presentation.

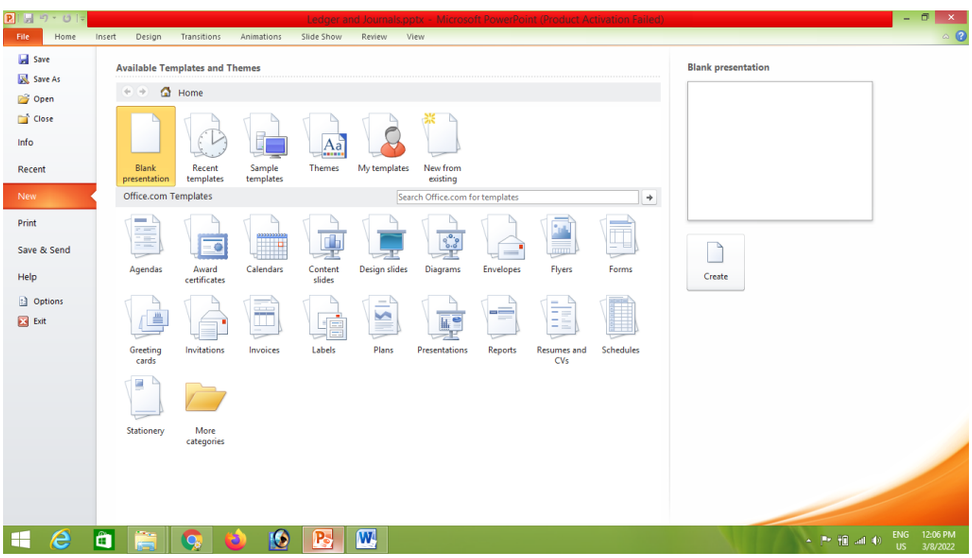



*FIGURE 38.1 Create a new presentation.*

Step 3: Click **Design>Themes**, Select any theme shown in the options.



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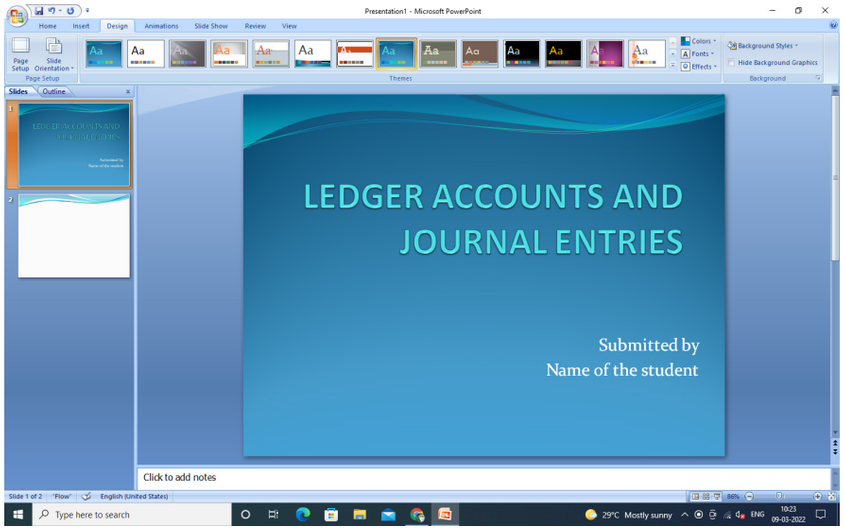



*FIGURE 38.2 Add design in the presentation.*

Step 4: Enter your title name and submit it by your name in boxes.

Step 5: Click on slide 1 and press enter.

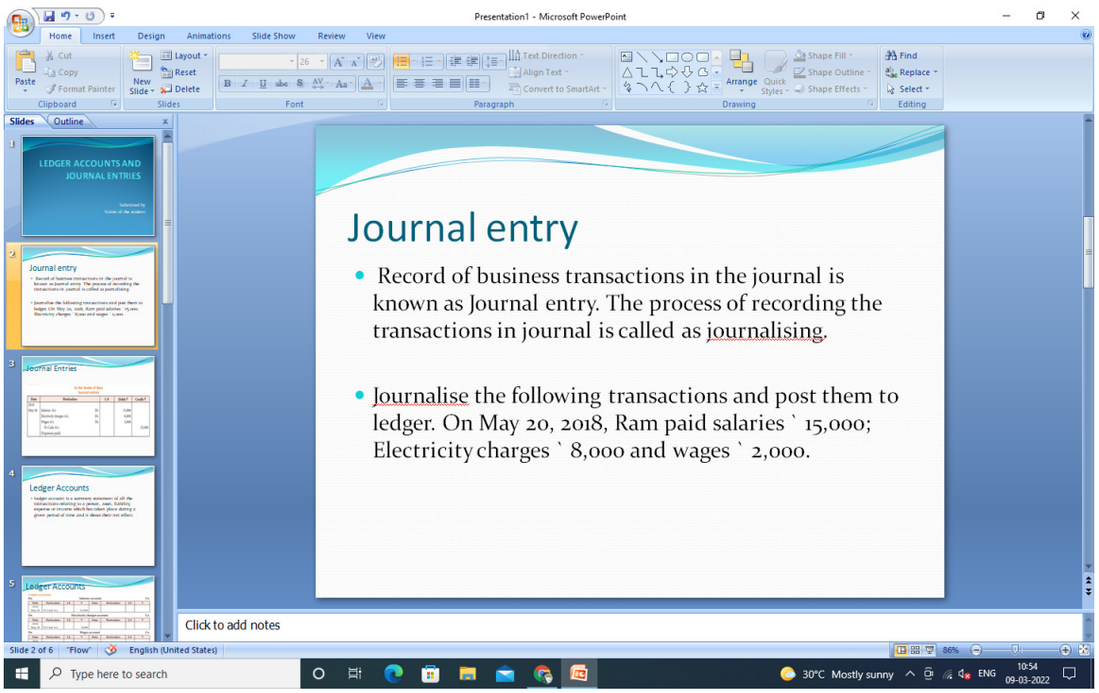



*FIGURE 38.3 Add more slides and enter data in the presentation.*

Step 6: Enter the title for the Journal Entries. And Click **Insert>Table>Insert Table** enter the no of rows and columns.



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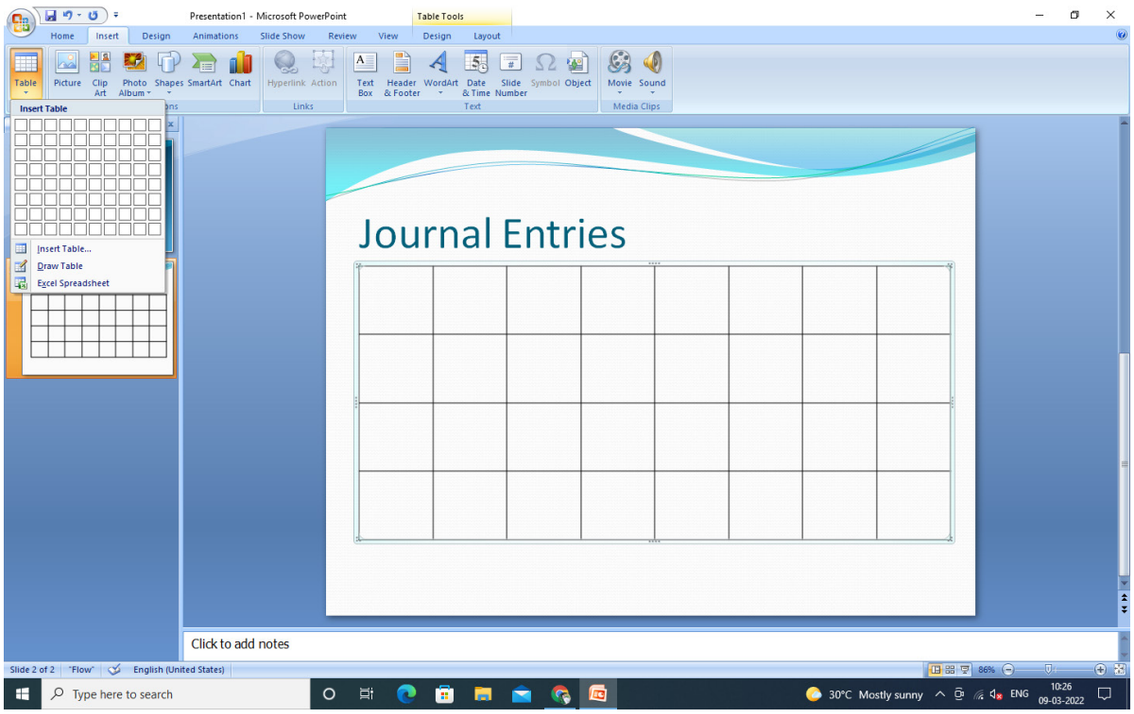
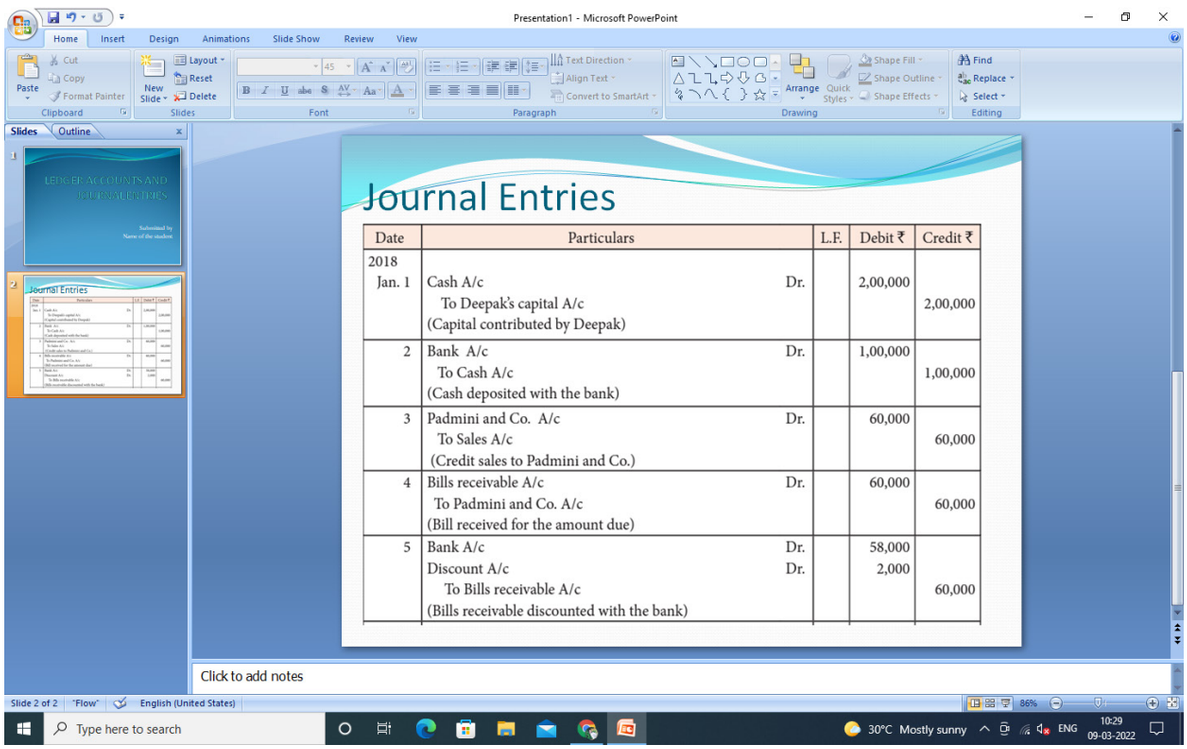



*FIGURE 38.4 Insert the table in presentation.*

Step 7: Enter Labels and data in the table.




| Date | Particulars | | L.F. | Debit ₹ | Credit ₹ |
|---|---|---|---|---|---|
| 2018 | | | | | |
| Jan. 1 | Cash A/c | Dr. | | 2,00,000 | |
| | To Deepak's capital A/c | | | | 2,00,000 |
| | (Capital contributed by Deepak) | | | | |
| 2 | Bank A/c | Dr. | | 1,00,000 | |
| | To Cash A/c | | | | 1,00,000 |
| | (Cash deposited with the bank) | | | | |
| 3 | Padmini and Co. A/c | Dr. | | 60,000 | |
| | To Sales A/c | | | | 60,000 |
| | (Credit sales to Padmini and Co.) | | | | |
| 4 | Bills receivable A/c | Dr. | | 60,000 | |
| | To Padmini and Co. A/c | | | | 60,000 |
| | (Bill received for the amount due) | | | | |
| 5 | Bank A/c | Dr. | | 58,000 | |
| | Discount A/c | Dr. | | 2,000 | |
| | To Bills receivable A/c | | | | 60,000 |
| | (Bills receivable discounted with the bank) | | | | |

*FIGURE 38.5 Insert the labels in table.*

Step 8: Follow step 5 & 6 for Ledger Accounts.



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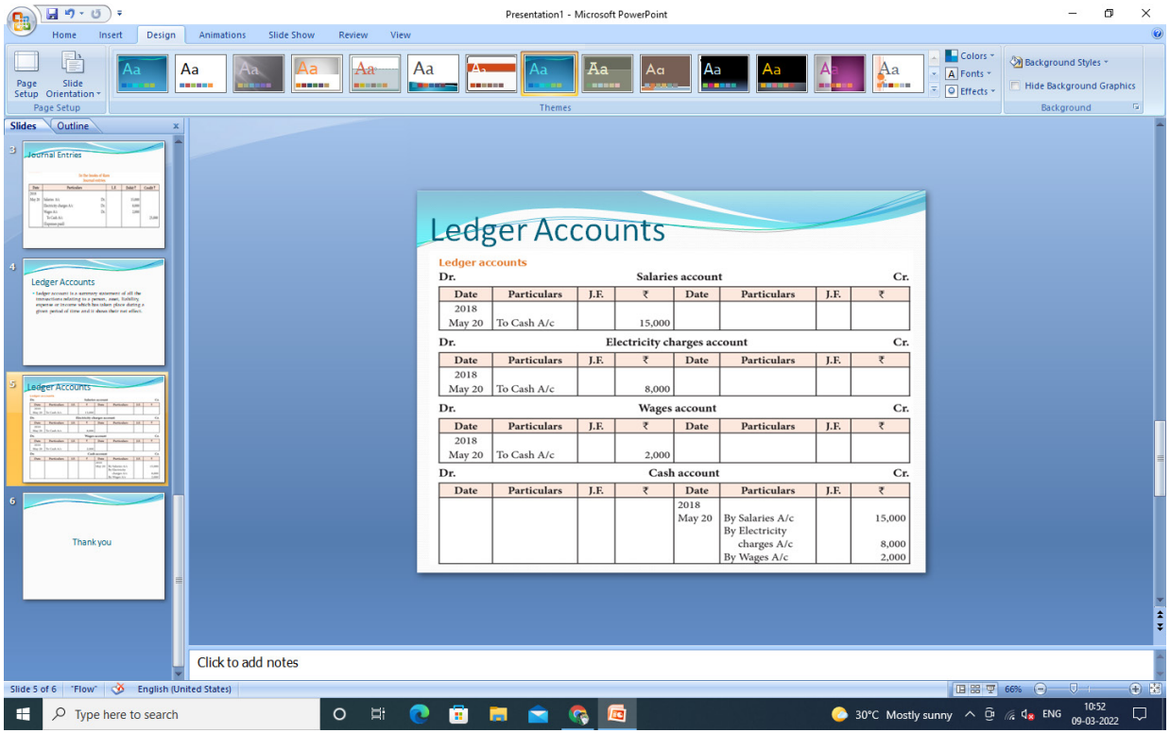



*FIGURE 38.6 Prepare ledger account in presentation.*

Step 9: Click **Home>Layout** and choose your layout for thanks.

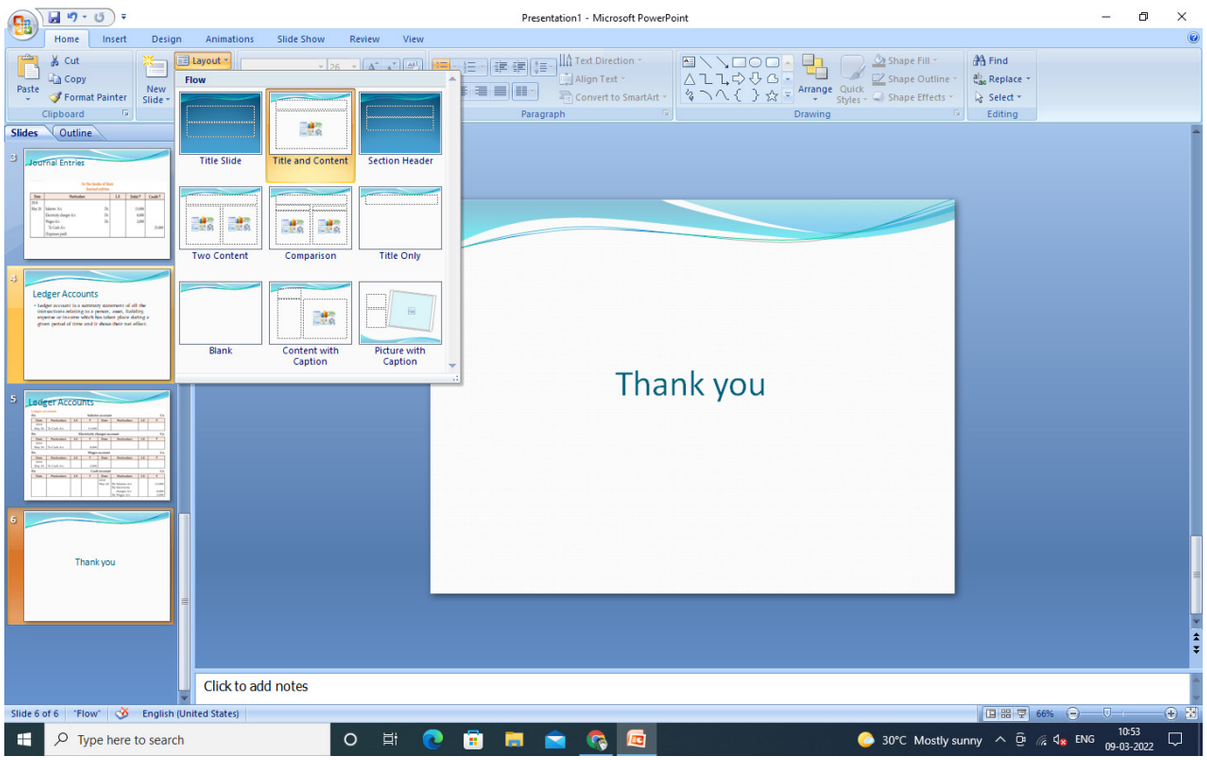



*FIGURE 38.7 End of the slides.*

Step 10: Click **Slide show>From beginning** or **Press F5 key** to view in full screen for



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presentation.

## Result:

Thus the +1 accountancy journal entries and ledger accounts has been prepared successfully.

## Video suggestions:

| s.no | Title/purpose | Link |
|---|---|---|
| 1 | PowerPoint Tutorial in Tamil | https://youtu.be/gtGz4elezS8 |
| 2 | DATA ENTRY WORK IN EXCEL IN TAMIL \| How to do data entry work in excel in Tami | https://youtu.be/TwRf2J8xj_Y |
| 3 | Class 11 - Accountancy - PPT Presentation - Journal, Meaning, Objectives, Limitations 7-8-20 - MCS | https://youtu.be/82WeltyaYog |

## Simple Assessments:

1. Write down the method to open a presentation page?
2. Which shortcut key is used to view your presentation in full screen?
3. How many rows and columns are used for a Ledger account?

| | |
|---|---|
| **Student project** | 1. Create a data ledger presentation for your school.<br>2. Create a data of journal presentation for your school.<br>3. Create a presentation of a trial balance with an imaginary Figure.<br>4. Create a presentation and present it to your friends. |
| **Guest lecture suggestions** | 1. Invite a MS office subject expert for a guest lecture.<br>2. Invite an accounts auditor for a guest lecture.<br>3. Invite an office assistant working on the MS office platform. |
| **Industrial/ Field visit suggestions** | 1. A field Visit to an office or data maintaining center nearby the school.<br>2. Visit the nearby insurance office for a field visit.<br>3. A field Visit to the nearby computer center. |



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# Higher Secondary – Class XI
# Office Management and Secretaryship & Typography and Computer Applications
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