

Experiment :- 1

Object :- Learning the basics of Microsoft word.

Basic of Microsoft Word :- M.S word is used to create and modify personal and business documents like letters, reports, invoices, emails and books. Document saved in word are saved with the .docx extension by default. M.S word can be used for a variety of tasks :-

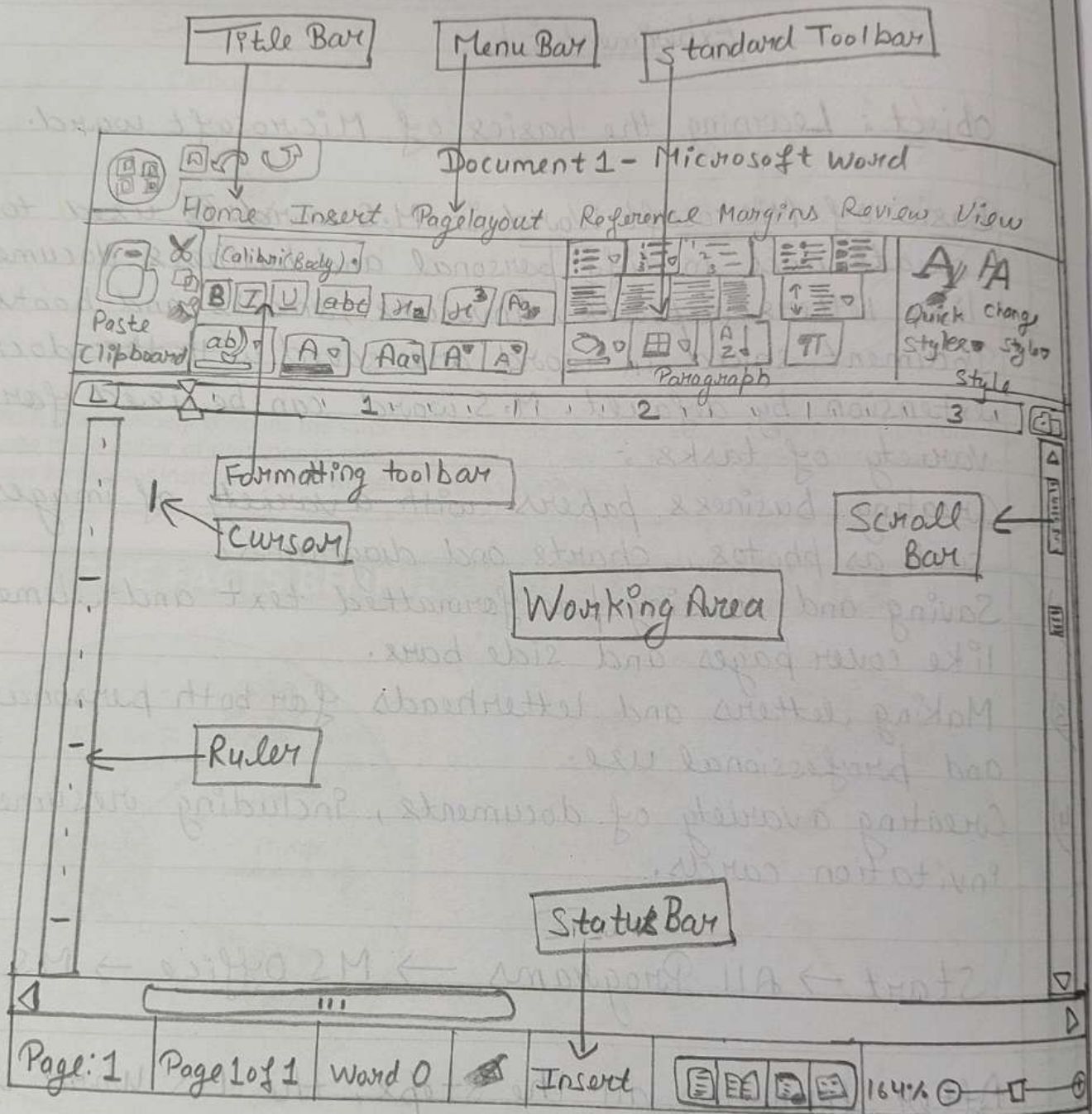
- 1) Creating business papers with a variety of images, such as photos, charts and diagrams.
- 2) Saving and reusing pre-formatted text and elements like cover pages and side bars.
- 3) Making letters and letterheads for both personal and professional use.
- 4) Creating a variety of documents, including resumes and invitation cards.

Start → All Programs → MS Office → MS Word

After following all the steps, the MS Word window appears as show below.

Home :- This features of MS Word has option like font colour, font size, font style, alignment, bullets line spacing etc.

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MS Word

Insert : You can enter tables, shapes, images, charts, graphs, header, footer, page number etc.,

Design : You can create or select the template or the design under the design Tab in which you want your document to be by using this features of MS word.

Page Layout : This features of MS word under the Page Layout Tab come with options like margins, orientation columns, lines, indentation, Spacing etc.

Review : Spell check, grammar, thesaurus, word count, language, translation, comments etc., everything is under the review tab. Additionally, it benefits those who review their documents in MS word.

Features of M.S Word

1) Title Bar : Title Bar appears at the top of the screen. It displays the name of the program and documents.

2) Menu Bar : Menu Bar appears below the title Bar. It displays menu such as File, Edit, View, Insert.

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Format, Tools, Table, Windows, Help and many more.

- 3) Standard Toolbars :- Standard toolbars consists of buttons for the most commonly used commands ~~and~~ such as Save, Open and Print.
- 4) Formatting Toolbar :- Formatting toolbars consists of buttons for accessing commonly used formatting features and commands such as font, style and size.
- 5) Ruler :- Ruler measures the width and shows the margins.
- 6) Scroll Bar :- Scroll Bar is a long thin strip with arrows and a sliding section at the edge of the window there are two scroll bars.
- 7) Horizontal Scroll bar :- It is used for shifting the MS word screen display left or right.
- 8) Vertical Scroll bar :- It is used for shifting the MS word screen display up or down.
- 9) Working Area :- Work area is the area is the document window where you type the text.

- 10) Cursor : Cursor is the blinking vertical line in the work area that shows the location.
- 11) Status Bar : Status Bar displays information about the cursor position. It shows page number, the column number and the line number.

Step of Exiting MS Word

- 1) Click on the file menu in the Menu Bar.
- 2) click on the Exit option. Exiting MS word >>
- 3) If your document has not been saved a prompt box appears. Click on save the changes.

Folder Tree

A directory structure (or system or tree) is a simple layout of directories on a computer system. The tree command can make it very simple for you to trace files and folders using the command line. You can view how a directory on your system is structured and where every file is located.

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Experiment: 2

Object :- Learning the basics of MS-Excel.

MS-Excel :- Microsoft Excel is a spreadsheet (computer application that allows storage of data in a tabular form) developed by Microsoft. It can be used on windows, MacOS, IOS, and Android platform.

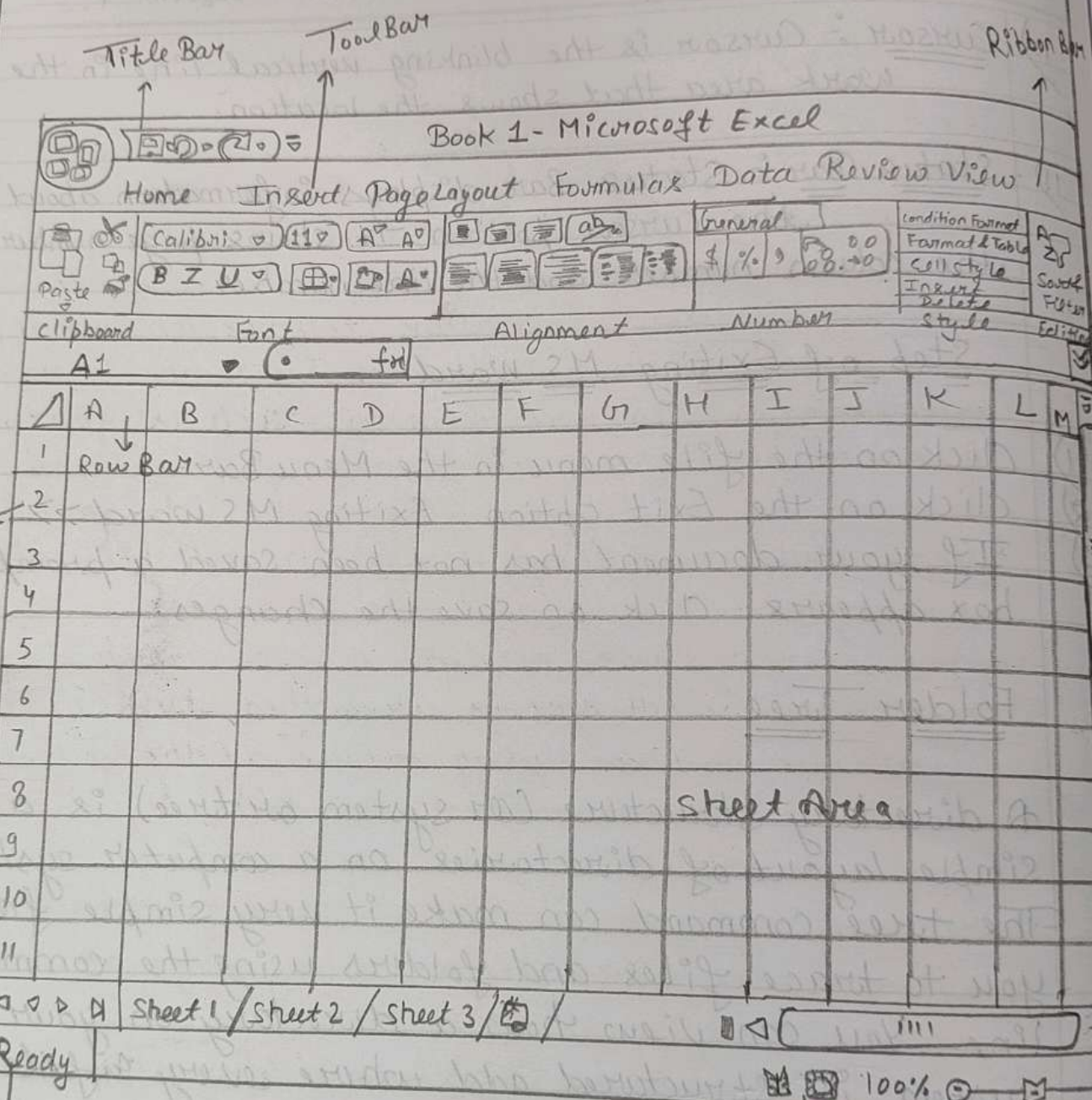
Graphing tools

- 1) Functions (count, sum, text, date and time etc).
- 2) Data Analysis (Filters, charts, tables, etc).
- 3) Visual Basic for Application (VBA).
- 4) Contains 300 examples for user.
- 5) Workbooks and worksheets
- 6) Data validation etc.

Screen option

Title Bar :- It displays the title of the sheet and appears right in the middle at the top of the Excel window.

Quick Access Toolbar :- This toolbar consists of all commonly used Excel commands. In case you want



Title Bar

Tool Bar

Ribbon Bar

Book 1 - Microsoft Excel

Home Insert Page Layout Formulas Data Review View

Clipboard: Cut, Copy, Paste

Font: Calibri, 11, Bold, Italic, Underline, Text Color, Background Color

Alignment: Align Left, Center, Right, Justify, Indent, Decrease Indent, Increase Indent, Orientation, Wrap Text, Merge & Center

Number: General, Currency, Accounting, Date & Time, Percentage, Decimals, Fraction, Text, Scientific, Custom

Conditional Formatting, Styles, Tables

	A	B	C	D	E	F	G	H	I	J	K	L	M
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													

Sheet Area

Sheet1 / Sheet2 / Sheet3 / ...

Ready

100%

Status Bar

View Bar

Zoom Control

MS. Excel: Home Page

to add some command that you use frequently to this toolbars, you can do it easily by customizing the quick access toolbars. To do that, right-click on it and select the option "Customize Quick Access Toolbar".

Zoom Control :- It allows you to zoom in and zoom out the sheet as and when required. To do this you will just need to drag the slider towards the left side or the right side to zoom in and zoom out respectively.

View Buttons :- Consists of three options namely, the Normal Layout View, Page Layout view, and the Page Break view. Normal Layout view displays the sheet in a normal view.

Sheet Area :- This is the area wherein the data will be inserted. The flashing vertical bar or the insertion point indicates the position of data insertion.

Row Bar :- The Row bar shows the row numbers. It starts at 1 and the upper limit is 1,048,576 rows.

Column Bar :- The column bar shows the columns in

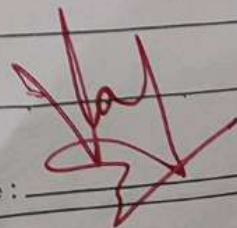
the A-Z order. It starts at A and goes on till Z following which it goes on as AA, AB etc.

Status Bar :- It is used to display the current status of the cell that is active in the sheet. There are four states namely Ready, Edit, Enter and Point.

Backstage View :- The backstage view is the central managing place for all your Excel sheets. From here, you can create, save, open, print or share your worksheets.

Option	Description.
New	Used to open a new Excel sheet
Info	Gives information about the current worksheet.
Open	In order to open some sheets created earlier, you can use open
Close	Closes the open sheet
Recent	Displays all the recently opened Excel sheets.
Share	Allows you to share the worksheet.

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Experiment : 3

Object : Learning the basics of Ms PowerPoint.

Introduction : Powerpoint is a presentation tool that helps you create eye-catching and effective presentation in a matter of minutes. A presentation comprises of individual slides arranged in a sequential manner.

Navigating in Power Point : The various command and toolbars, let us see how we can carry out simple operation like saving and opening files, creating and printing slides etc.

Creating a New Presentation

- 1) Choose New command from File menu.
- 2) The following dialog box would be displayed. General this option always comes highlighted, but if not click to highlight.
- 3) Click on OK button to continue.
- 4) The following dialog box would appear. click on the type of slide that you want.
- 5) Click on OK button.

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Opening a Presentation

- 1) Choose open command from File menu.
- 2) Choose the file that you want to open or type the name of the file in the "File Name" window.
- 3) Click on open button.

Creating a New slide

- 1) Click on the New slide icon from the Standard toolbars or alternatively, click on the common tasks roll down menu and choose New slide command.
- 2) Choose the slide type that you want.
- 3) Click on OK button.

Auto Save

- 1) Choose options command from "Tools" menu.
- 2) The following dialog box would be displayed. click on save Folio / Tab.
- 3) Click on the scroll buttons to increase or decrease the Auto save recover time.
- 4) Click on OK button to continue.

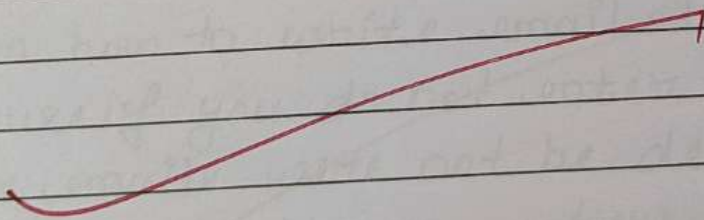
Printing a Presentation

- 1) Choose Print command from File menu.
- 2) click on the roll-down list and choose your printer.
- 3) click on the Properties button to choose whether you want to print in Best, Normal or Ecofast.
- 4) click on OK button.

Automatic Text Formatting

Microsoft Powerpoint by default automatically formats certain types of text as you type. For example if you type two hyphens with no spaces around them, they're instantly formatted as an em dash. If you type network or internet path, it is formatted as a hyperlink. Common fractions such as $\frac{1}{4}$ and $\frac{1}{2}$, when changed to fraction

symbols.



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Experiment :- 4

Object :- To learn different e-mail services.

Introduction :- Email (electronic mail) is a way to send and receive messages across the Internet. It's similar to traditional mail, but it also has some key differences.

Email advantages :- Productivity tools; Email is usually packaged with a calendar, address book, instant messaging and more for convenience and productivity.

Understanding Email Address

To receive emails you will need an email account and an email address. If you want to send emails to other people you will need to obtain their email addresses also. It's important to learn how to write email addresses correctly because if you do not enter them exactly right, your emails ~~were~~ not be delivered or might be delivered to the wrong person.

From :- Facebook <security@facebookmail.com

Webmail Providers :- Today, the top four webmail providers are Yahoo!, Microsoft's Outlook.com (previously Hotmail), Google's Gmail and Rediffmail. These providers are popular because they allow you to access your email account from anywhere with an internet connection. You can also access webmail on your mobile device.

- 1) Yahoo! Features
- 2) Outlook.com Features
- 3) Gmail Features
- 4) Rediffmail.com
- 5) other email providers

Email Applications :- Many companies and organizations use an email application, like Microsoft Outlook, for communicating and managing their email. This software can be used with any email provider but it is most commonly used by organizations that host their own email.

Setting up your own email account

If you want to sign up for your own email account, choose any one of the four major webmail providers.

- 1) Yahoo! Mail :- click Create Account.
- 2) Outlook.com :- click sign up.

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- 3) Gmail :- click create an account.
4) Rediffy.com :- click create account.

Comparison between different Email Providers

Email Provider	Mailbox Storage	No. of supported Languages	Supports use of own domain.
G-Mail	15 GB	71	Yes
Outlook.com	15 GB	106	Yes
YAHOO! MAIL	1 TB	27	-

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Experiment : 6

Object :- To learn to create and participate in an interactive zoom meeting.

Zoom Meeting :- Zoom offers multiple methods to schedule a meeting. A host has control over the options for their scheduled meetings, except for settings that an administrator has locked for all users in the account or for all members of a specific group.

How to sign in to your Zoom account on the web

You can sign in to your zoom account on the web at any time at zoom.us/signin. Once you're logged in, use the panel on the left side of navigate the zoom web portal.

Zoom meeting on Window, macOS, Linux

- i) Schedule from the zoom desktop client or mobile app
- (ii) Schedule from the zoom web portal.
- (iii) Schedule for someone else :- PDF guides for executives assistants (outlook, google).
- (iv) Sign in to the zoom desktop client.

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click on the Schedule icon

This will open the scheduler window.

- 1) Topic
- 2) Date & Time
- 3) Meeting ID
- 4) Security
- 5) Video

How to invite others to join your meeting

Inviting others to join your meeting is as simple as sharing the invitation or join link. You can do this after scheduling your meeting by clicking copy and invitation.

URL or invitation Text

Click copy Invite Link or copy invitation if you want to send your instant meeting information elsewhere.

Copy Invite Link :- Copy the meeting join link.

Copy Invitation :- Copy the full invitation text. Paste the URL or invitation using $\text{Ctrl} + \text{V}$ on windows or $\text{Cmd} + \text{V}$ on a Mac. You can also

right click and click Paste.

How to invite others to a scheduled meeting

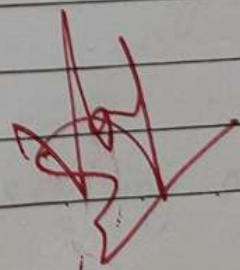
You can also schedule a meeting and invite other before starting the meeting.

Desktop client

- 1) Sign in to the Zoom Desktop client.
- 2) Schedule a meeting.
- 3) click the Meetings tab.
- 4) Select the meeting that you want to invite others to and click Copy Invitation. The meeting invitation will be copied and you can paste that information into an email or anywhere else you would like to send it out.

Web Portal

- 1) Sign in to the zoom web portal.
- 2) In the navigation menu, click Meetings.
- 3) Click the topic of the Meeting.



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Experiment : 7

Object :- To create a Bonsai.

Bonsai (Tray planting) is one of the beautiful art form of plants actually originated first in China and then spread east ward to Korea and then Japan. "Bonsai" is a Japanese pronunciation of the earlier Chinese term penzai. Bonsai literally means "tree in a tray".

Materials Required :- Suitable plants for Bonsai making are Ficus spp., Juniperus, Bougainvillea spp., Hibiscus, Pine, Cypress.

Tools :- Concave branch Pruner, Trimming shears, spatula, Wire cutter, Bud scissors, Root sake, wire plier.

Procedure

1) Plant sources :- (i) From seed :- Seeds are mostly sown in autumn season.

(ii) From vegetatively propagated plants :- Cuttings are used for vegetative propagation.

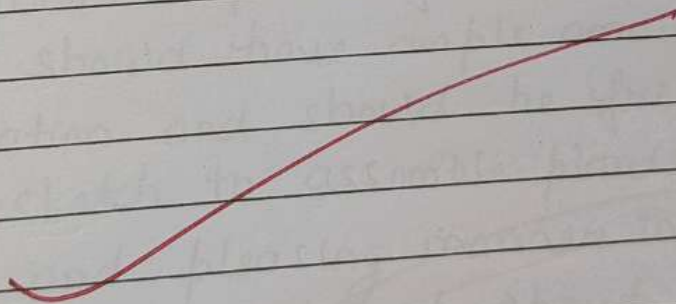
(iii) Seedlings from local origin :- The seedling of

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locally originated trees can be used for Bonsai.

- 2) Shaping and styling of Bonsai :- Before planting one has to decide the final shape and size of the Bonsai tree a proper plan and a sketch of the style should be made on the paper sheet. Pruning, wiring and pinching are the basic methods to shape and style of a Bonsai. When wiring a branch first wind the wire around the trunk several times and then around the branch. The wire coils should be spaced evenly by about 0.5 to 0.6 cm.

Another important step is rewinding to be done every six months to avoid injury to the bark.



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Experiment: 8

Object: To develop a Miniature Garden.

Material Required: Containers of concrete, stones, plastic or fibre glass with drainage system for excess water, soil mix and sand, plants.

Miniature Garden Accessories: Miniature benches or chairs, tables, fountains, pebbles, toys, lights, bird, house, treehouse etc.

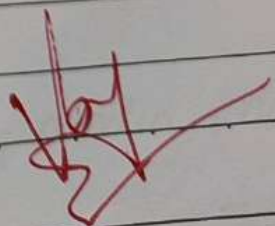
Plants for Miniature Garden: Bedding plants (dwarf mondo grass), Corsican mint, sugar vine, zebra cactus, creeping thyme, creeping juniper, parlour palm, false cypress, english boxwood, miniature daisies etc.

- Choose a precise place for miniature garden. The place should have ample amount of sunlight and ventilation and should be free from pests.
- Draw a sketch to assemble plants in an organised and pleasing manner in the container.
- Plants should be spaced about 10 cm apart. Taller plants must be placed in garden's back whereas the shorter should be placed in the front, water the plants as needed.
- When all these things are done decorate it.

with miniature garden decors.

Care and Maintenance of Miniature Garden

- 1) Inspect all the plant thoroughly and also the pot on all sides. Look for tiny eggs, spider web and bugs of any kind. To avoid such problem safer's soap spray can be used, safer's soap is an organic pest control and is earth-friendly.
- 2) Cut off any dead, diseased or dying foliage.
- 3) Remove dead plant parts from the underneath the plant.
- 4) Use water soluble fertilizer
- 5) Water as needed, the frequency of watering will depend on the size of the container and the exposure.

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Experiment :- 9

Object :- To draw layout of different types of plant Propagation methods.

Sexual Propagation :- Plants are propagated Sexually by seeds.

Spores :- A spore is an asexual body, plants propagate asexually by means of spores.

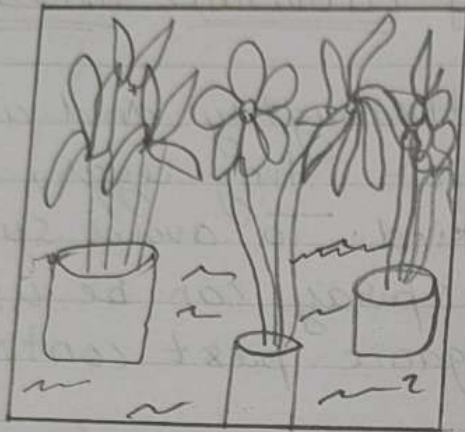
Vegetative Propagation :- Propagation of plants from vegetative parts such as buds, stem, leaves, root. It may be through separation or division, cutting, layering, budding and grafting.

1) Object :- Plant propagation by cutting.

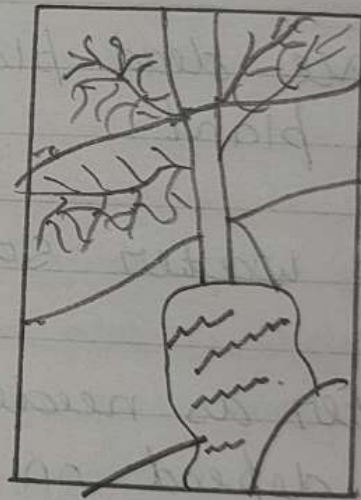
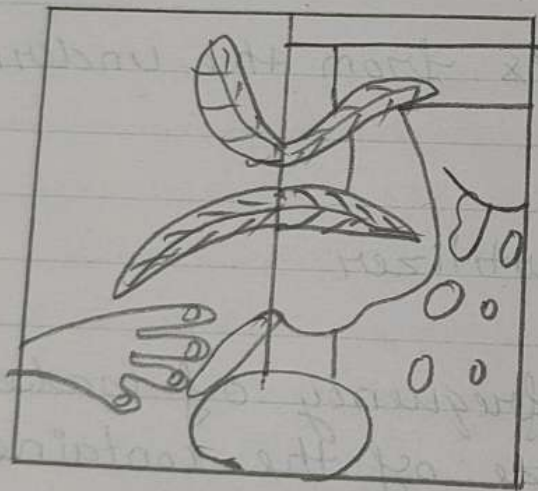
Cutting :- In this method of propagation any vegetative part of the plant is separated and planted to regenerate into a new plant. The plant parts that are used for this purpose are stems, leaves and tubers, corms, rhizomes, runner and bulbs.

Material Required :- Secateur, rooting media, nurse

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Layering



Grafting

bed / pot, khurpi

Procedure :- ① Select healthy, vigorous and young plants.

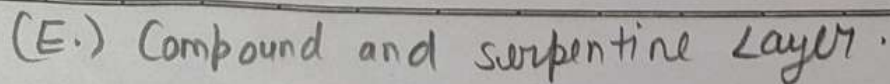
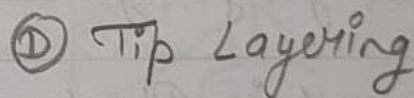
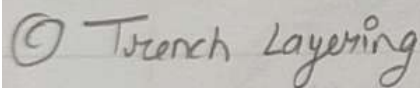
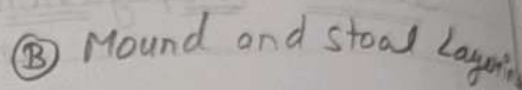
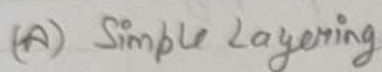
- 2) The length of cutting varies from 10-25 depending upon species.
- 3) Each cutting should have at least 2-3 buds.
- 4) Give a straight cut at the base of shoot about 0.3cm below the node.
- 5) Slanting cut 1-2cm above the bud.
- 6) Treat the cutting with 100-500ppm IBA before planting for better results.
- 7) Make holes in the nursery bed and bury the $\frac{2}{3}$ basal portion of cutting. Press the soil around the cutting firmly.
- 8) Sprinkle water is needed.

2) Object :- Plant Propagation by Grafting

Grafting :- It is an art of joining parts of two plants of the same or allied species in such a way that they will unite and continue to grow as single individual / composite plant.

Types of Grafting Inarching or approach

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grafting also called repair grafting as it is generally used for repairing damaged root system.

Material Required :- Grafting knife, secateurs, plant material, Polythene strip, wax.

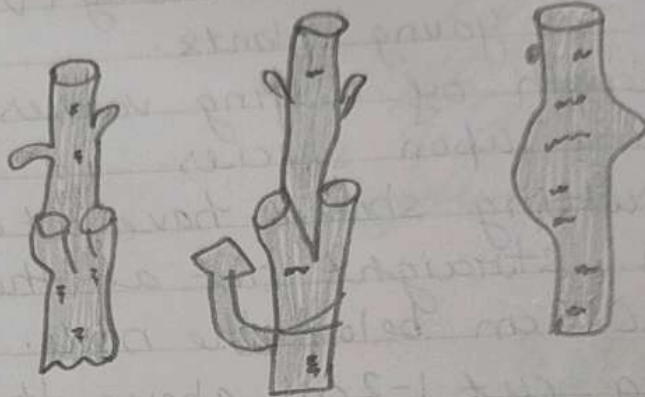
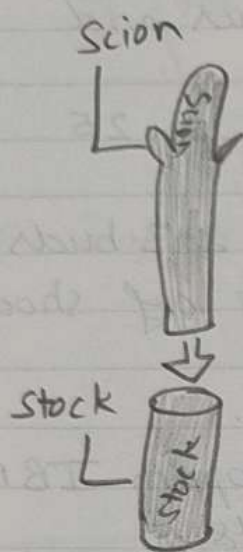
Procedure :- ① Select a healthy, vigorous plant for scion.

- 2) The stock is brought close to the scion.
- 3) A thin slice of bark (5-8cm long) at about 20cm above the ground level is removed from the stock.
- 4) Same type of cut is made on scion and the two cuts are placed face to face and tied firmly with polythene tape or cloth.
- 5) When the union is complete, the root stock is removed from the top of the graft area and scion is cut from the bottom.

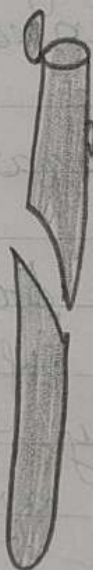
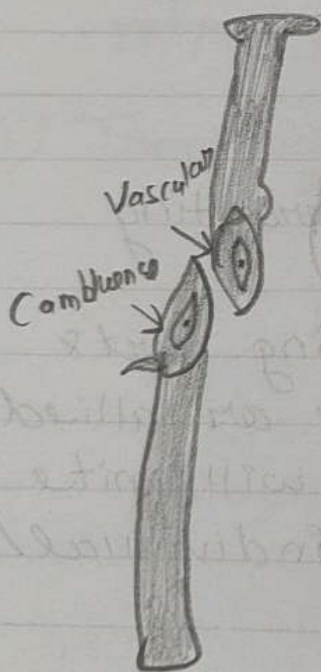
Veneer Grafting :- This is modification of side grafting. Veneer grafting is a technique used for stock larger than 1cm in diameter. The scion is as thick as a pencil. e.g. Mango.

Material Required :- Grafting knife, rootstock

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Cleft / Wedge Grafting



Whip Grafting

and scion, string, plastic tape, budding rubber, wax, bed of moist sphagnum.

Procedure:- (a) Make a shallow inward cut of 2.5-4 cm long in a smooth area just above the crown of the stock plant.

b) An oblique cut is made at the base of first cut so that a piece of wood along with bark is removed.

c) Then the scion wood is fitted into the rootstock in such a manner that cut surface including the cambium layers can be matched as closely as possible.

Cleft Grafting:- It is suitable in rootstock having diameter greater than scion.

The base of the scion is prepared like a wedge. The root stock split in which scion is inserted. Examples:- Avocado, apple, mango, pear.

Material Required:- Grafting knife, root stock, scion, clefting tool, wax.

Procedure:- (a) Cleave the root stock.

(b) Make a long wedge at each scion's base.

(c) Insert the scions the full depth of their wedge.

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bottoms, two scions are inserted at the ends in such a way that the cambial layers of stock and scion are in contact.

- d) Seal the unions with sealing wax.

Trench Layering

Trench layering is similar to mound layering except the plants are initially placed horizontally in the stool bed. It is suitable for those plants that have strong optical dominance.

- a) Establish a permanent row of plants to be propagated.
- b) The mother plants are planted at the base of a trench at an angle of 45° in rows.
- c) Long and flexible stems of these plants are pegged down on the ground to form a continuous line of layered plants.
- d) The young shoots arise from these plants are gradually mounded upto a depth of 15-20 cm e.g., Apple rootstocks, cherry, Plum.