

In previous chapter, we have studied about introduction of MS Excel 2016. In this chapter you will learn you will learn how to cut, copy, and paste data; navigate between data cells and worksheets; and customize your Excel workspace. You will also learn about creating and opening workbooks, moving data around in Excel 2016, organizing worksheets, and saving and exporting data. One of the greatest advantages Microsoft Excel offers is the flexibility to easily change the appearance of your data and the structure of your worksheets. You can change the way numbers are displayed so that their appearance corresponds with the type of numbers you are using.

You can also change the width of columns so that the data in the column fits appropriately, and you can increase the height of a particular row to call attention to the data in the row. As you work with worksheets, you'll often find it necessary to move or copy data to other locations—a feature that is easy to perform in Excel. In fact, Excel provides numerous techniques that you can use to copy or move data to a different location in a worksheet or even to a different worksheet.

Excel 2016 Formula Shortcuts

TASKS	SHORTCUT KEYS
Insert a Table	Ctrl + T
Toggle Autofilter	Ctrl + Shift + L
Activate Filter	Ctrl + Shift + L
Select Table Row	Shift + Space
Select Table Column	Ctrl + Space
Select Table	Ctrl + A
Select Slicer Filter	Alt + C

TASKS	SHORTCUT KEYS	
Toggle Table Total Row	Ctrl + Shift + T	
Drag & Cut	Drag	
Drag & Copy	Ctrl + Drag	
Drag & Insert	Shift + Drag	
Drag & Insert Copy	Ctrl + Shift + Drag	
Drag to Worksheet	Alt + Drag	
Drag to Duplicate Worksheet	Ctrl + Drag	

Learning Outcomes

- Selecting Cells
- How to enter numbers as Text,Date and Time
- Changing Cells Content
- Overwrite (Overtype) Mode of Editing
- Using Redo & Undo Options
- Inserting Rows & Columns
- Copying and Moving Data
- Drag & Drop Method
- Using Auto Fill Feature



Selecting Cells



Every worksheet is made up of thousands of rectangles, which are called cells. A cell is the intersection of a row and a column—in other words, where a row and column meet.



Columns are identified by letters (A, B, C), while rows are identified by numbers (1, 2, 3). Each cell has its own name—or cell address—based on its column and row.

Selection of cell can be done by any of the following options:

To Select	Action				
A cell	Just click on the cell				
Contiguous Cells	Click on the first cell, keeping the shift pressed click the last cell.Click on the first cell and drag till the last cell.				
Non Contiguous Cells	Click on first cell, keeping the Ctrl key pressed click all the cells to select.				
• Worksheet	Press Ctrl + AClick on All Select Button.				
A Row/Column	Click on the Row number/ Column letter				
Contiguous Rows/Columns	 Click on the first row/column, keeping the shift key pressed click on the last row/column. Click on the first row/column and drag till the last row/column. 				
Non Contiguous Rows/Columns	Click on the first row/column, keeping the Ctrl key pressed click on each row/column.				

How To Enter Numbers As Text, Date And Time

Date and Time in Excel are stored as numbers. This enables a user to use these dates and time in calculations. For example, you can add a specific number of days or hours to a given date. However, sometimes you may want these dates to behave like text. In such cases, you need to know how to convert the date to text.



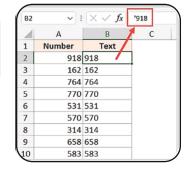






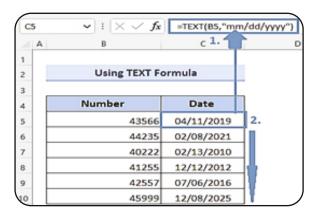
Add an apostrophe (') before the number So if you want to enter 001, enter '001 (where there is an apostrophe before the number). And don't worry, the apostrophe is not visible in the cell. You will only see the number. When you add an apostrophe before a number, it tells Excel to consider whatever follows as text.

1	A
1	Number with Apostrophe
2	00918
3	00162
4	00764



Adding Apostrophe

Adding a apostrophe changes cell alignment to left



Using TEXT Formula

Enter Numbers as Date:

Let us take below mentioned example:

We can use a formula with the TEXT function to the converted results.

Step 1. You must write the formula in **Cell C5.** The formula:

=TEXT(B5,"mm/dd/yyyy")

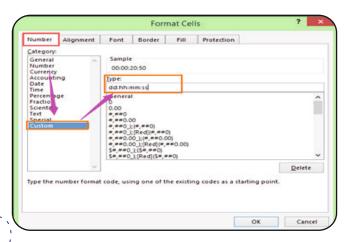
- Step 2. After that, press Enter.
- **Step 3.** Lastly, drag the **fill handle** icon until the end to get the result for all the data.

Enter Numbers as Time Format:

Let us take below example:

Step 1. Enter this formula: =A2/86400 into a blank cell where you want to output the result, and drag the fill handle down to the cells that you want to apply this formula, and you will get some numbers as following screen shot shown:

	A	В	С
1	Seconds		Time
2	1250		00:00:20:50
3	230901		02:16:08:21
4	256		00:00:04:16
5	4509		00:01:15:09
6	623097		07:05:04:57
7	20054		00:05:34:14
8	70452		00:19:34:12



Step 2. Select theses formula cells, and right click to choose Format Cells option from the context menu, in the popped out Format Cells dialog box, under the Number tab, click Custom option, and enter dd:hh:mm:ss into the Type box, see screenshot:







Step 3. And then click **OK** button, and the cells have been displayed as dd:hh:mm:ss time format, see screenshot:

1	A	В	c
1	Seconds		Time
2	1250		00:00:20:50
3	230901		02:16:08:21
4	256		00:00:04:16
5	4509		00:01:15:09
6	623097		07:05:04:57
7	20054		00:05:34:14
8	70452		00:19:34:12

Changing Cell Content

Once you have entered data in a cell, you can change contents in two ways:

Step 1. Click on the cell which you want to modify and type the new content.

You can click Cancel button (towards left of the formula bar) to cancel the entry or click on Enter button to accept the entry.

Step 2. Click on the cell which you want to modify and click on the formula bar and change the value. Click on cancel button to cancel the entry or Enter button to accept the entry.

Step 3. Alternatively, you can press Enter key to accept the entry and ESC to cancel the entry.

Step 4. When you edit a cell the status from the Ready changes to Edit mode as you are editing the text inside the cell. Once you press Enter key/button or Cancel key/ button it again changes to Ready mode.

To Edit Cell Contents

Click on the cell and press **F2** key or double click on the cell

Overwrite (Overtype) Mode Of Editing

When you are editing text in overtype mode, you are typing text over your previous text. In this mode, typing new characters replaces any existing characters to the right side of the insertion point.

Step 1. Double-click the cell in which you want to overtype text, and then press INSERT or INS to turn on or off the overtype mode.

Note: The Allow editing directly in cells check box must be selected (it is selected by default).

Step2. To select or clear this check box, click the **Microsoft Office Button** , then at the bottom of the dialog, click **Excel Options**, and then in the left pane, click **Advanced**. The check box is under the **Editing options** section.

Using Redo And Undo Option

Undo an action:

To undo an action press Ctrl + Z.

If you prefer your mouse, click Undo on the Quick Access Toolbar. You can press Undo (or CTRL+Z) repeatedly if you want to undo multiple steps.

FILE HOME INSERT DESIGN PAGE LAT

Calibri (Body) v 11 v A

Calibri (Body) v 11 v A

B I U v abc X2 X2

Format Painter

Clipboard Fort

Redo and Undo Option

To undo several actions at the same time, click the

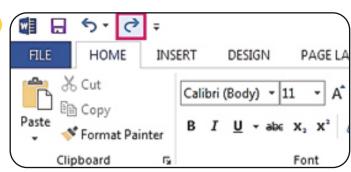
arrow next to **Undo** select the actions in the list that you want to undo, and then click the list.











Redo Option

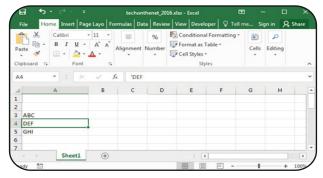
Redo an action:

To redo something you've undone, press Ctrl+Y or F4. (If F4 doesn't seem to work, you may need to press the F-Lock key or Fn Key, then F4). If you prefer to use the mouse, click **Redo** on the Quick Access toolbar. (The **Redo** button only appears after you've undone an action.).

Inserting Rows And Column

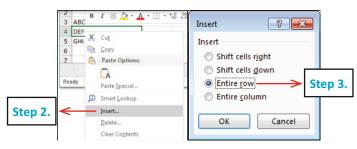
Inserting a Row:

Step 1. Select a cell below where you wish to insert the new row. In this example, we have selected cell A4 because we want to insert a new row in row 4.



Inserting Row

"Entire row" option and click on the OK button.



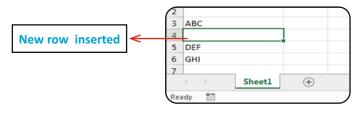
Inserting Row Option

popup menu.

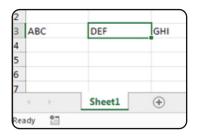
Step 3. When the Insert window appears, select the

Step 2. Right-click and select "Insert" from the

Step 4. A new row should now be inserted above your current position in the sheet. As you can see, a new row has been inserted into row 4 and the



Inserted Row



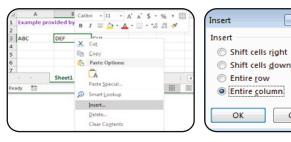
rows below it have been shifted down.

Inserting Column

- **Step 2.** Right-click and select "Insert" from the popup menu.
- **Step 3.** When the Insert window appears, select the "Entire column" option and click on the OK

Inserting Column:

Step 1. Select a cell to the right of where you wish to insert the new column. In this example, we've selected cell B3 because we want to insert a new column between column A and column B.

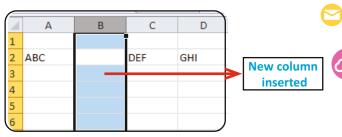


Inserting Column





Step 4. A new column should now be inserted in the spreadsheet. In this example, we've inserted a new column into column B. All of the columns to the right of column B will be shifted to the right.



Copying & Moving Data

Inserted Column

You can use the **Move or Copy** Sheet command to move or copy entire worksheets (also known as sheets), to other locations in the same or a different workbook. You can use the **Cut & Copy** commands to move or copy a portion of the data to other worksheets or workbooks.

Copy data in the same workbook:

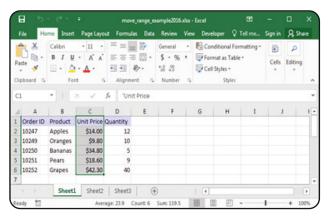
Press CTRL and drag the worksheet tab to the tab location you want.

OR

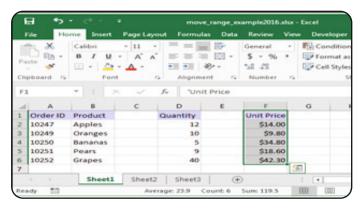
- **Step 1:** Right click on the worksheet tab and select Move or Copy.
- **Step 2:** Select the Create a copy checkbox.
- **Step 3.** Under Before sheet, select where you want to place the copy.
- Step 4. Select OK.

Moving Data in the same workbook

- **Step 1.** To move a range, select the first cell in your range.
- Step 2. Hold down the SHIFT key and click on the last cell in the range.
- Step 3. Now, press CTRL + X to let Excel know that you want to move this range. You will see a dotted border appear around the range of cells indicating that the cells are ready to be moved to another location in your spreadsheet.



Moving Data



- **Step 4.** Finally, press **CTRL** + **V** to move the range (or press the **ENTER** key to choose **Paste**).
- **Step 5.** Now you should see the range moved to the new location in your spreadsheet.









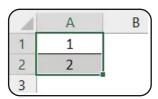
Drag & Drop Method

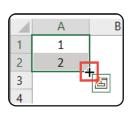


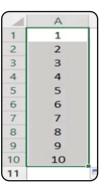
Drag and Drop are often called a <u>fill handle</u>. The drag and drop is the alternative available to the copy and paste method. We can drag and drop to a single row and a single column at a time.

Example: Firstly two consecutive numbers are to be entered.

- So we have entered two consecutive numbers: 1 and 2 in cells: A1 and A2.
- Now we select these two cells and then over the cursor to the right bottom of these.
- Now drag and drop up to the row number; we require the serial number. So let's say we require serial numbers from 1 to 10, so we drag and drop up to row number 10.

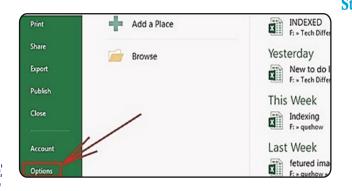






So let's see the working of this in Excel. Using the two numbers: 1 and 2 entered, Excel identifies the increment value from the first cell to the second cell. In this case, the increment value is 1 (from 1 to 2). So every time a value is dragged to the next cell, the next value is incremented by 1. Thus, we get serial numbers: 1 to 10 in this case since we have dragged up to row number 10.

Using Auto-fill Feature

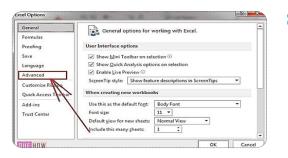


Step 1: Before proceeding further, you must beaware of enabling or disabling the feature of autofill in MS Excel 2016. For that first, you have to open a document in MS Excel 2016. Go to the File and click on the Options tab present on the left side of the screen.





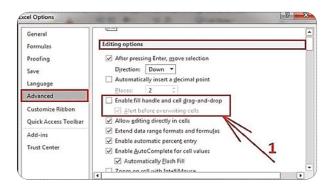




Step 2: A pop-up dialog box Excel Options will get opened on your screen. You will find the Advanced Tab on the left column of the box click on Advanced tab.



Step 3: In Advanced tab under Editing Options search for the checkbox "Enable fill handle and cell drag and drop". Click on that check box and then click OK. It will enable the autofill feature in MS Excel 2016.



Step 4: Come back to the Home tab. Now, we will learn how to use the autofill feature of Excel.

Quick Look

- Excel provides a lot of facilities to modify and process data.
- Date and Time in Excel are stored as numbers. This enables a user to use these dates and time in calculations.
- Combining two or more cells are known as Merging.
- To further enhance your worksheet, you can format a number of elements such as text, numbers, coloring, and table styles.
- You can also customize the worksheet tab.
- A spreadsheet can have up to 512 fonts. A cell can have up to 32,767 characters.
- Autofill feature automatically fills a series of data in your worksheet.
- Excel calculates expressions within parenthesis (',") first.
- The drag and drop is the alternative available to the copy and paste method.
- You can use the Move or Copy Sheet command to move or copy entire worksheets (also known as sheets), to other locations in the same or a different workbook.







Section - I

Objective Type Questions

Α.	. Fill in the blanks with the correct option:
	CTRL + Z Numbers 512 Merging Appostrophe
1.	Data & Time in Excel are stored as
2.	Combining two or more cells is known as
3.	Adding anbefore the number makes the number act like a text.
4.	Shortcut for UNDO is
5.	A spreadsheet can have fonts.
В.	Write T for the true statement and F for the false one:
1.	User cannot change the width of column in a worksheet.
2.	To select a cell Double Click on the cell.
3.	Excel calculates expressions within Paranthesis.
4.	To Redo a task user can use CTRL + Y or Fn Key + F4

C. Tick the correct answer:

1. What is the Shortcut key for Selecting complete Table?

5. Drag and Drop Method is also called File Handle.

a) Ctrl + A



b) Ctrl + T

c) Alt + C

- d) Ctrl + Drag
- 2. What is the Shortcut key for Drag to Duplicate Worksheet
 - a) Ctrl + A



b) Ctrl + T

c) Alt + C

d) Ctrl + Drag

3. Which	h bar shows the name of th	ne workbook?							
a)	Address bar		b) Formul	a bar					
c)	Title bar		d) Quick	Access Toolbar					
4. Clicking on the first row/column and draging till the last row/column Selects. :									
a)	A Cell		b) Contigu	ous Row/Columns					
c)	Worksheet		d) Pivot Sl	heet					
5. Add _	before a	number, it tells Ex	xcel to cons	ider whatever follows as	TEXT.				
a)	?		b)	í					
c)	%		d)	@					
D. Answ	ver the following questions:								
dif	her inserting a blank row and give complete steps to this task. Juhi wants to make a salary record for her employees in Excel workbook. Help her adding different worksheets for the records of salary for different months, also tell the steps to copy data and formulas from one worksheet to another.								
		Section -	II						
Des	criptive Type Question	ons							
E. Ansv	ver the following questions:	:							
1. Write	down the steps to Enter Nu	mber as Date & Ti	me Format.						
2. Mention steps to insert Rows & Columns in an existing sheet.									



3. What is File Handle?



4. How to use Auto-Fill feature in Microsoft Excel?

5. Difference between UNDO & REDO, with shortcuts?



LAB ACTIVITY

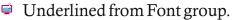




RUNS SCORED BY INDIAN TEST PLAYERS

4	Α	В	С	D	Е	F	G	Н
1								
2	RUNS SCORED BY INDIAN TEST PLAYERS							
3								
		Test Match	Total	Average				
4	Name	1	2	3	4	5	Runs	Run Rate
5	Virat	65	66	72	60	68		
6	Dhoni	80	87	83	75	79		
7	Sehwag	55	56	51	42	30		
8	Rahane	40	48	33	37	20		
9	Ashwin	21	29	35	20	15		
10	Rishabh	30	39	25	34	26		
11	Rahul	48	43	38	34	49		
12	Shami	12	18	10	17	21		
13	Murali	30	25	18	20	10		
14	Bumrah	10	8	11	20	6		
15	Mayank	40	43	51	48	41		
16	Hardik	49	52	49	53	54		
	Total							
17	Runs	480						

- Create a worksheet as given below in Microsoft Excel 2016.
- Open Microsoft Excel 2016 by clicking on Start -> All Programs -> Microsoft Office -> Microsoft Excel 2016.
- A blank worksheet will open.
- In cell A2, write **RUNS SCORED BY INDIAN TEST PLAYERS.** Make the text Bold.



- To make the text in the middle of the table, select Cells A2 to H2 by dragging the mouse over these cells. Click Merge & Center option from Alignment group in the Home tab. Enter the records as given in the book image.
- Once **RUNS SCORED BY INDIAN TEST PLAYERS** created,
- Insert scores for **Match 6 b adding a column**
- Insert scores for **Player 17 by adding a row**
- **©** Calculate Total & Average run for all the players.
- \triangleleft Save the worksheet by pressing **Ctrl** + **S.**

PROJECT WORK



- Select or Create a Worksheet: Choose or create a worksheet related to a topic relevant to the class curriculum. This could be a math exercise, a reading comprehension passage, or a science experiment procedure.
- **Introduce Errors:** Intentionally introduce errors into the worksheet. These errors can include spelling mistakes, grammatical errors, incorrect calculations, unclear instructions, or missing information.

GROUP DISCUSSION



Divide the class into groups and discuss:

- Selecting Cells
- Using Redo & Undo Options
- Drag & Drop Method
- Changing Cells Content

- Overwrite (Overtype) Mode of Editing
- Using Auto Fill Feature
- Copying and Moving Data

ONLINE LINKS



- www.howtoexcel.com
- www.itconnect.uw.edu/learn/modifying-a-worksheet