Common Interview Questions for EXCEL:

1. What are the common/different types of workbooks?

Answer: Excels comes with variety of workbooks which are curated to suit the systems that we use.

- a. By default, the workbooks are saved as .xlsx which has no limitations unlike other workbook versions.
- b. To interact (import/export) with systems like RDBMS or any other DATA basis. Commonly used format is .csv (comma separated values). This format allows user to save a single worksheet, format them before uploading it; this helps the system to interpret the data in the format assigned while saving. Similarly, data exported from servers/DBs are easily extracted in a CSV format, this format are supported as it can also be accessed using notepad.
- c. Macros enabled files have an different format named as .xlsm. This will allow the file to run automated tasks created in VB.
- d. Compatibility mode: When workbook is shared over email or other channels, due to difference in versions installed in the systems, workbook opens in compatibility mode (.xls is the 97-2003 version). To save workbook with current version and be able to save with new features, one needs to convert the file into .xlsx version.
- e. Excel binary is a version which keeps the file size low and maintaining all excel functionality including macros and can be stored in .xlsb format, extensively used for model build and huge data sets.

2. What is the definition of a CELL in Excel?

Answer: A cells defined as an intersection between a column and a row. Cells are identified /referred by address, which is alphanumeric. Example A1 refers to Column A & row 1. When working with larger dataset and VBA, cell is referred as R1c1(Row 1, column 1). An xlsx worksheet consists of a MILLION + rows & 16 thousand columns, when multiplied a common excel sheet will have seventeen billion cells. The number of rows varies depending on versions as well.

3. What is a name box?

Answer: Name box allows a user to know the active cell & also allows a user to jump a specific cell or cell range. The name box is found on the top left of the worksheet, towards left of the formula bar. Via Name box one can assign a name to a cell/cell range/data table, and can use that name to recall data and use in function and formulas. Created name range can only be used in the same workbook.

4. Name some of the reasons you would use Excel sheets?

Answer: Excel works very similar to any Database, which is used to capture data at a transaction level, the accumulated data can further be analysed in forms of tables or charts. These functionalities can help one to achieve their goals, for example a store to maintain it's daily transaction, a call centre to note its daily attendance and many more.

Database entry, can import data from any source, database management, Data cleaning, Data analysis, Report Visualization, Dashboards (aids in decision making). Also for maintaining huge accounting and taxation related tasks as well which requires complex logics.

5. What is a ribbon?

Answer: Ribbon is a quick access to all the features built within excel, and is present in top of the worksheet below worksheet name, as a horizontal stripe. These are visible on the top of the excel, ribbon have collection of different tabs which have further bifurcation of groups & various commands. The ribbon has limited tabs shown which can be edited by right click -> Customize Ribbon Option. This can be used to modify, add/remove group of commands.

6. How to write a formula in excel?

Answer: To begin a formula one must start by using the mathematical sign "=" (equals), follow by any valid arguments or use the existing list of functions like =SUM(numbers 1, number2,...) or =Average(numbers 1, number2,...) =(A1+A2+A3) etc. Formula can be written in the cell from 'Function argument dialogue box', which can be opened by clicking on 'fx' on formula bar or from 'Formula tab'.

7. How can we find list of available formulas?

Answer: To find the available list of functions one has to go to the ribbon>formulas>look for insert function. In the insert function dialog box, type the approximate of the type of formula you are looking for, the dialog will show up all the available list of function meeting your search criteria. We can also use fx option from formula bar to search for a function as standard search.

8. What are different formatting options/commands are in excel?

Answer: By default, cells in a worksheet have white background with grey grid lines which bifurcate one cell to another. These can be removed and formatted to get better viewer experience. Cells can have a customised colour, row width/height, borders etc. To format a cell, user can navigate to the home tab under the ribbon or use the short key to enable the format dialog by pressing ctrl + 1.

9. What are the different Number formats of a cell values?

Answer: Numbers in each cell can be represented in its original format like a currency can be represented as \$1 instead or 1.

Date can be represented as 1-Jan-2022

Time can be 10:00:00

Currency as \$100

Decimal values as 1.36

Percentage as 100%

These formats can be customised as per user requirements as well using cell formatting

10. What are different operators?

Answer: There are mainly 2 types of Operators, mathematical and logical.

Mathematical Operators

- 1. + means addition of two or more values
- 2. subtracting two or more values
- 3. / is used to divide two values
- 4. * is used to multiply values

Logical Operators are

1. =, equals to

- 2. <, =<, less than/equal to and less than
- 3. >, => , More than/equal to and more than
- 4. <>, not equal to

Like equals sign "=" is required to begin a formula, it is also useful to evaluate if two value are equal to same or not, ex: scripting =A1=B1 means, the first equals denote we want to initiate a function, the second part A1 has a value, equals symbols is verifying if the value in B1 is same, the output will be either TRUE or FALSE which is also termed as binary results.

11. What is a syntax?

Answer: To use predefined functions within the Excel application, a set of characters must be supplied in an system defined sequence to achieve results. The syntax starts with the Equals symbol, followed with the name of the formula eg. SUM; brackets open; numbers and then close the parentheses.

A syntax has different arguments some are mandatory, and some are optional based on the formula we choose.

12. What is the order of scripting a formula?

Answer: Excel follow the mathematical process to arrive at a formula commonly known as PEDMAS. Which Is also known as BODMAS

- Parenthesis (Bracket open)
- Exponents
- Division
- Multiplication
- Addition
- Subtraction

By following a sequence of instructions one can write a formula, user must start the formula with a equal's sign then follow the syntax.

13. Why are shortcuts useful? name any 10 commonly used shortcuts?

Answer: Short cuts reduce the time take to perform any given activity. To execute any operation, one must go to the ribbon, then find the respective tab & then click on the action to apply an operation, example paste special. This requires 3 to 4 clicks which can also be achieved by doing left click. However, that does not reduce the time required to paste special. It is more efficient to make use of short cuts.

Most used shortcuts are

Copy Ctrl + C

Cut Ctrl + X

Paste Ctrl + V

Paste Special Alt > E > S (press V to paste as values & can be extended to various other paste options like paste text, paste only formulas etc.) these are also termed as hot keys where we can press keys one after the other in sequence.

Selection whole table Ctrl+A, Ctrl+Shift+*

Navigation Ctrl+ Arrow keys

Custom selection Shift+ Arrow keys

Editing cell F2

Cell reference toggle F4

14. What is the use SUM and SUMIF?

Answer: The sum function adds up two or more numbers into a single formula and give the final aggregated total. To-sum function can be used for multiple cells, to entire column or extend to multiple columns. However, the SUMIF functions adds up two are more numbers with and additional feature of adding values only if certain criteria is met. =SUMIF(criteria range, criteria, SumRange). Very similar to the SUMIF function we also have SUMIFS these allows use to check for more than one criteria matching before adding any series of numbers. Eg. Assuming we have data table of Expenses for the 12 months, by doing SUM we get the total expenses & with SUM we can bifurcate Expenses by months.

15. What is the use AVERAGE v/s AVERAGEIF?

Answer: The average function derives an arithmetic mean of any given numbers. Adds up the sum of all the digits and divides it with the number of entries. Whereas the AVERAGEIF specifically gets arithmetic mean for only specific values satisfying a condition.

Eg. Considering a class completed their exams, the total class size is of 30 students who took up the exam of 5 subjects. Applying average on the total data gives as the average score for the class. However, AVERAGEIF can split the data at a subject wise average or even student wise average.

16. What is the use MAX v/s MAXIF?

Answer: Max is a shorter name for MAXIMUM. The MAX function identifies the highest number in supplied numbers. However, MAX IF finds the highest number in a series of numbers but with a condition. Let us say we a data into columns Column A having the Months & Column B having Temperature for the last 5 years. If we want to know the Maximum temperature in the recent 5 years, we use MAX on the total 5 years data, if we need to know Maximum temperature in June within the same five years, we can use MAXIF, which will return the MAX with condition June. This function is only available in latest versions from Office 365 onwards, in older versions to achieve the same result we will need to use array functions.

17. What is the use MIN v/s MINIF?

Answer: MIN is a shorter name for Minimum. The MIN function identifies the smallest number in supplied numbers. However, MINIF finds the least number in a series of numbers but with a condition. Let us say we a data into columns Column A having the Months & Column B having Temperature for the last 5 years. If we want to know the Maximum temperature in the recent 5 years, we use MIN on the total 5 years data, if we need to know MIN temperature in June within the same five year we can use MIN, which will return the MIN with condition June. This function is only available in latest versions from Office 365 onwards, in older versions to achieve the same result we will need to use array functions.

18. What is the function Product used for?

Answer: Product function multiplies a set of number into each eg. 10 * 10 * 10. can also be referred as =Product(10,10,10) which will have the same output. the 10 mentioned here can be actual cell address.

19. What is the use COUNT v/s COUNTA?

Answer: As the word defines count the formula compute a series of data points to identify the count 'how many' of a given values or only numerical cell are in the selected range. COUNT computes only numbers and ignores blank cells starting from 0 to infinite. However, the COUNTA identifies both number and alphabets and ignores blank cells and gives the output. Considering we have a data of Employees working hours for a given day (there are some having Absent [cells are left blank]/leave[denoted by writing 'L' in the cell] in the same column & others having their worked hours). COUNT will tell how many employees logged in for the day whereas COUNTA will show up the total employee strength. Can be used to count employees on Leave.

20. What does an IF function do?

Answer: If function is used to test of a whether value is meeting certain criteria or not. The IF statement is also known as conditional statement. The IF formula has three arguments

- 1. condition to text.
- 2. True if condition is met
- 3. False if condition is NOT met

When using nested if the maximum if that can be used is 63.

21. What is the difference between now and Today?

Answer: The formula =TODAY() gives the calendar date as per the systems. However, the =NOW() argument returns the date including the current hour, min & second of the day. By using these two functions the time stamp will be refreshing during every recalculate situation, if we close the sheet on 1st Jan 2022 and reopen the sheet next day the date will be automatically changed to 2nd Jan 2022. If we want to achieve date and time without using a function then we can use the shortcut Ctrl +; to add a date and to add time we must use Ctrl + Shft +; This will ensure the date are not dynamic.

22. What is the difference between Cut, Paste and Paste special?

Answer: All the three have the same output which is to repeat a certain value from one position to a newly identified location. However, all the three have their own importance.

- A cut operation (shortcut Ctl + X) is used when we do not want the original value to remain in the source location. instead, we wanted it to be moved to a new destination. This will move the cell contents, the formulas and also renames its dependents with the newly identified location
- A paste operation will reproduce the copied cell from its origin to a newly identified location. This will simply repeat the entire cell content, the cell properties too. The shortcut to paste is Ctrl + V. It can also be termed as duplication.
- A paste special is the commonly used operation when using excel. The paste special
 dialog box can paste a copied data into different options like pasting only values and
 not the formulas, pasting only the formats, pasting only the formulas and not the
- The shortcut to get to the paste special dialog box is Alt + E + S + V
 - Above all the first need to paste in any of the three keys is to copy. The shortcut to copy is Ctrl + C.

23. What is a Range?

Answer: A group cells together form a range. A range can be referring to two cells A1:B1 or it be extended to more than two cells too like A:B. In the first example we are referring to first cell in the column a & the first cells in the column B. However, in the second example we are selecting all the cells in the Column A & Column B.

24. What does referencing mean?

Answer: Referencing is a step to anchor values to a fixed position which helps us to repeat formulas to many other cells without having the need to write the formula every time. This helps an excel user to be more efficient and accurate.

25. What types of referencing does excel has?

Answer: Excel offers multiple types of referencing, namely fixed referencing or mixed referencing. Each of these have their on used cases.

1. Absolute Column, Relative Row

Placing Dollar (\$) before the alphabet like (\$A1) refers that the column value must remain in the A position. However, the row number can change as we copy and repeat the same formula into other cells.

2. Absolute Row, Relative Column

Placing Dollar (\$) after the alphabet like (A\$1) refers that the row number remains in the 1 row position. However, the column name can change as we copy and repeat the same formula into other cells.

3. Absolute Row, Absolute Column

Placing Doller (\$) before the alphabet and before the row number very similar to (\$A\$1). In this case the reference will not change to any other column or cells, irrespective of any number of copy paste.

4. Relative Column, Relative Row

In this case both the row number and the column does not have any added symbols, example A1. Formula containing cell A1 if repeated from the place it was created to any other cell will move its position accordingly. We can use "F4" function key multiple time to assign variation of \$

26. Explain nested IF conditions?

Answer: IF formula identifies a given condition is met or not, there are common needs that a given data has more than two outcomes. It becomes extremely necessary for us to view the data from all the angles. By testing same data point more than once we use IF repeatedly. When using nested if the maximum if that can be used is 63. Example: I have data of average time taken to resolve a complaint in the column A & I want to know if the time taken was within the group of 4 different times (2, 4, 6 & Greater than 6). Single IF will tell if the value is within a single point i.e., within 2 or beyon, to increase this we test the same value with the help of operators. The formula would look like =IF(A2<=2,"2 hours",if(A2<=4,"4 hours",if(A2<=6,"6 hours",">>6 hours",">>6 hours",))). IF() is used when one condition needs to be tested and only 2 respective outputs needs to be displayed, nested IF() is used when more than 2 conditions needs to be checked with displaying respective output for each condition.

27. What is Name manager, give a used case?

Answer: Name manager is a collection of a fixed data. By dedicating a name to a series of cells, we can refer them directly by using the created name and avoiding going to the actual data location. This helps us to maintain a standard fact table and helps reduce error reduction. It

can be used in the same workbook across sheets but not in different workbook reference An example would help us to understand the uses in a better way. I am asked to get employees contact number which exists in the employee_data base sheet and map it to their attendance sheet. To perform this activity, one may choose to do VLOOKUP, the fact table would look like employee_data!A1:A101 (assuming there are 100 employees), we can avoid the address mentioned before instead create a name for this location like "edb" for the same range. This simple change can keep all the important data points handy. To create a name to a given location you must go to the name manager from ribbon or press the short key Ctrl + F3.

28. What is the use of a table? How to create a table?

Answer: Tables help group data into a structured format. Table can be created to any range, simply by pressing Ctrl + T, excel identifies the active range as a table.

- The created table will have dedicated labels(headers) on the top with a filter enabled by default.
- Tables have the auto sum for a series of numbers by default, which can modify to other numerical aggregation or even disable it
- Table to get auto filled vertically and horizontally. Imagine if a table is consisting timestamp in the first column and about 10 more columns having other data points, if I want only date in the 12the column; I would be writing single formula in the first row of column 12 and the rest will be auto filled including the formatting. Very similarly if we add new data in the new empty rows which is after the last row from a table, the added data appends to the current table with all the formatting.
- Since these are named as tables, any corresponding values will update automatically
 in case of a formula & in case of a pivot; one must refresh the pivot to update the new
 changes.

29. Explain the combination of IF with other formulas?

Answer: IF function which is also known as conditional formatting can be used to test more than one condition in a single IF clause, I will only have to add more formulas to it like an AND (mandatory) condition otherwise I can also use OR (optional), I can also use a combination of both.

Let us give an example here. Assuming a data set has students list with their Student ID, Subject1, Subject2, Subject3, Subject4, Subject5, Attendance. As a school principal I decide to set a passing criteria not limited to the average score of all subjects but also want to consider some more conditions like

Student is passed if

- 5. Average marks are above 90 and Attendance is > 80
- 6. Subject 1 has 95% marks with attendance of 95% or the Average of all the subjects is between 70 to 90 with attendance of 90%
- 7. The give requirements can be easily achieved by using IF with AND & or, at time the combination of both AND & or.
- 8. To check the first condition I would code my formula as =IF(AND(Average(Sub1-Sub6)>90,Attendance>80),"Pass 1st condition",
- To check the second the formula would be (continuation to the same formula)
 IF(OR(AND(Sub1>95,Attendance>95),AND(Average(Sub1 Sub6)>70,Attendance>=90)),"Pass 2nd condition","Fail"))

The parenthesis, commas must be placed well else the calculations may be incorrect.

30. Explain Vlookup?

Answer: VLOOKUP stands for Vertical Lookup. When we have two tables, one having limited columns and some of the data has to be found from the other table which has a unique identifier present, and the identifier is present in row order then we use VLOOKUP. VLOOKUP has 4 arguments,

- 1. What data are we looking for,
- 2. Map with the first column of the Unique identifier to the total columns to the right till where we need data,
- 3. Count of columns (must be a positive number & not 0),
- 4. Do you want it to be matched exactly same or approximate is sufficient (0 = Exact, 1 = Approx.[FALSE,TRUE].

31. What happens if the fact table is has multiple entries of unique identity in a fact table to the VLOOKUP?

Answer: Lookup matches the searched data in the given row from top to the bottom & if the Unique value that you are searching is present more than once in the fact table, the output will be of the first row.

Assuming I have same phone number repeated for two employees and when I try do get the use name by using this phone number the returned result will be of the first row from the top, the result will not explicitly mention there were two rows having same number.

32. Can I do VLOOKUP matching column which is to the right and the data to pick up is to the left?

Answer: VLOOKUP is suited for data being arranged from the first column as the unique identifier and the corresponding data to the right side of the Unique column. If the Unique column is to the right and we want the required data is towards the left from the unique identifier, then VLOOKUP has to be used with a combination of CHOOSE or will have to use INDEX or XLOOKUP for revers lookup. CHOOSE formula allows you to reorder the data, ie., choose will virtually interchanged the column order, the syntax can better explain the operation, CHOOSE({1,2},B1:B101,A1:A101). here the first column is A. However, we have used choose to interchange A to B & B with A. Now you can perform VLOOKUP as normal column count as 2.Combination of such VLOOKUP is not only tedious task but becomes more tedious if the columns are more or increasing. To avoid this there are several other alternatives, like using INDEX with MATCH functions.

33. Explain what is Index function?

Answer: INDEX is one among the most versatile functions. INDEX gets output from an array (table), it has 3 mandatory parameters array, row_num & column. Assuming the table has 100 rows with 4 columns, the INDEX would have the array of 4 columns with 100 rows, the row number I want the data from followed with the column number, the output will result in single value from the indexed location.

34. What is the used case of Index with Match?

Answer: INDEX is one among the most versatile functions it's a Matrix function which fetch values from intersection. INDEX gets oupt from an array (table), it has 3 mandatory parameters array, row_num and the column number. MATCH finds a number or a text value from a given condition, MATCH has 3 mandatory arguments, what to match, array to match & match type (-1 less match, 0 exact match & 1 greater match).

A used case could be extracting data from table 1 which has all the corresponding details & table 2 is expected fetch only a selected number of row, in the table 2 we have similar row identity and column names are same, by using match we can get the row & column number, we use this with INDEX to retrieve the desired data.

35. What is the use of address formula?

Answer: The ADDRESS function returns a cell address as text, based on a row and column number. It can return an absolute or relative address, in A1 or R1C1 style & with the MATCH formula we can get row number & column number with very less effort. It can be merged with &: & to produce an array which can further be used into various other uses.

36. What is IFERROR? Give used case.

Answer: IFERROR is useful function when we need to know a set of expression is valid or invalid. For instance, we want to do a VLOOKUP for a set of phone numbers & we have a datasheet with existing mobile numbers. The result of VLOOKUP function may result some of the entries as #N/A if the numbers are not present in the existing mobile numbers, to represent this #N/A error (or any other form of error) with some legitimate value we use IFERROR followed with VLOOKUP(),"DataNotPreset"), this way the output will be phone numbers and some as DataNotPresent.

37. What is Excel?

Answer: Excel is an electronic spreadsheet program that can be used for storing, organising and manipulating data. It uses a grid of cells arranged in numbered rows and letter-named columns. It offers a large number of built-in functions for managing data and the option of writing your own scripts if necessary.

38. How would you freeze sheets in Excel?

Answer: Freeze feature retains the selected row or column in the same position despite we scroll the sheet several times. View tab \rightarrow Freeze dropdown

39. How would you make a hyperlink in Excel?

Answer: Hyperlinks are utilized to explore among worksheets and records/sites. To make a hyperlink, the alternate way utilized is Ctrl+K. Links can be within the same sheet, range, a web address. Post assigning the hyperlink, the cell is coloured into Blue, by a click you will reach the assigned address, if a web address is assigned the same will be opened in the browser.

40. How would you merge more than one cell into single cell?

Answer: Select the range of cell with value in the 1st cell \rightarrow Home tab \rightarrow Alignment group \rightarrow Merge and centre.

[this is known as join not merge→

41. What is Data Validation?

Answer: Manual data capturing can result in many typographical errors. Users can type Invalid as "In valid", "Nvalid" and many different ways, to avoid this, we can prefix the accepted text like Valid,Invalid. To achieve this, you have to go to the ribbon>data ribbon>Data Validation>>

from the dialog box, user can select list and enter the text. Any other text entered will throw an error and disregard the entered data, this will avoid incorrect data getting into the sheet. It validates the data to be entered based on underlined rules for the designated cell/cell range. For instance, We have New Joined Information form, in the Name cell, Length of name should be more than 5 letters, if not excel should not allow the entry and throw error pop box. This can be done using Data tab → Data Validation.

42. How to calculate a difference between two dates?

Answer: Difference between to valid dates can be found simply by subtracting the dates, then divide them into the output format we expect. The output we get out of this would be in days, to convert it to year we divide it with 365.25 (.25 to account the leap year), further to know difference in month we need to divide it with 30 days. By multiplying the output with 24 will convert the difference into hours. Or Use Yearfrac(), it gives exact difference in years, where months and days are displayed in decimals. For ex, 1 Jan 2020 minus 30 June 2021, will be 1.5 years. And hidden fundtion =Datedif() can also be used to get difference in desired format, years, month,dates. or use the inbuilt function =DATEDIF(start_date, end_date, unit).

43. What are macros in Excel?

Answer: Macros are the action recorder of excel, it records the user steps of execution of any task, interpret them into VBA codes and save it. Thereafter, it helps us to redo a set of actions within Excel repeatedly. Macros can be executed in different ways example on_open, on close, at a click of a defined button, after a cell is changed extract. Macros help reduce the manual efforts also increase the accuracy. It also helps in building tools and set automations for reports and reduce manual intervention.

44. How can we repeat same task multiple times?

Answer: Repeating same activity multiple times we can use the Macro feature. To repeat a set of instructions, we can either record a macro, the option available in the ribbon, under the developer tab or even go to the code editor window and code the steps using the VBA (code editor).

45. How can I add comments to a cell on Microsoft Excel?

Answer: You can add custom comments to particular cell from the ribbon. From the ribbon choose review tab>new comment>type the comments. These comments can be left in two view modes, 1. when highlighted 2. always visible. These are very useful in case we want to share any additional inference about a particular cells value/outcome. The shortcut to add comment is SHFT+F2. Now in new version, the comments can also be used is conversation to understand the amendment made and to discuss the way forword.

46. How can you protect a particular cell getting edited?

Answer: To protect a particular cell(s) and leaving the rest of the worksheet editable is possible by following below method.

 1st We need to remove protection from all the cells by default any new worksheet has the protection enabled (works only once we keep a passord to the sheet)

- 2nd we will have to select the cell that needs to be protected. To do both we need to go to the format dialog, use command ctrl + 1> navigate to the protecting tab to find protect check box
- 3rd we will have to go to the ribbon Home>Format>Protect Sheet{enter the password to lock only the selected cells}

47. Can you protect Excel workbooks?

Answer: Protecting workbook is possible, we can customize the password of your choice. The password can be restricted at various levels like one can open the workbook but in view only mode or you cannot open the workbook without entering the password, users with must not rename or add sheets etc. This is essential, case of sensitive information being circulated on public systems or the sheet, to protect the workbook you will have to go to the ribbon>file>info>Protect workbook & choose the level of protection entered the password to prevent it accordingly.

48. What is the use of pivot tables?

Answer: Pivot tables are statistical tables that contain detailed data. The summary of the table can depend on fields such as averages, amounts, and revenue. These fields are intelligently and efficiently described with a pivot table.

Another answer: Pivot tables is the feature in excel, which helps the user to make summarized reports, analyse data out of a larger raw dataset. It helps to create 'n' number of reports from a single dataset. Filters, slicers, timelines are use to drill down the reports to gain the insight into the data. For eg. Year wise sales, Top 5 performers and more.

49. What is BEDMAS?

Answer: The order of operations used for evaluation formulae on Excel is the same as that in standard mathematics. It is defined by the term 'BEDMAS' (brackets, exponents, multiplication, division, addition, subtraction).

50. What is filter used for?

Answer: Filter feature helps us to get view only for selected values, this be further filtered to many other columns. To apply a filter one can apply shortcut CTRL+Shift+L.

51. How can you merge multiple sheets into one?

Answer: There are different ways to append data from multiple sources into one, the hard way is to copy the data from original files and paste them into a master file or use the get data option available in the data tab or even develop a VBA code to execute this.

I prefer the get data option as it has many other built-in features like cleaning data, organizing it, it can also be created as a data model for reuse in future. To access the multiple sheets appending open from the ribbon go to the data tab> Get data > choose from the available options to start the process into Power Query and Power Pivot workspace.

52. What is the fastest way to prepare a summary of any given data?

Answer: The fastest way to summarize any data is to use the feature Pivot table. This show different types of statistics within few clicks, to name sum, we can get SUM, AVERAGE, MAX, MIN, COUNT of a given column within few clicks. This can be further visualized into various categories like day wise, month wise, year wise etc., by adding the corresponding columns in the respective format a user prefers to view the table in.

53. How is a Formula different from a Function in Excel?

Answer: A formula is any statement or equation used in the calculation. These formulae are designed by the user and can be simple or complex, and always starts with an = (equal to) sign, example =1+1, = 10*100 etc.,. However, A function is a pre-defined code that performs calculations and is a part of the formula. example SUM(10,10,100) etc.,

54. What does a red triangle at the top right of a cell indicate?

Answer: The red triangle indicates that some comment is associated with the cell. Hover the mouse over it, and you can read the full comment.

55. How can you add a new Excel worksheet?

Answer: To add a worksheet you can simply press Shift + F11 or use the ribbon go to home > Insert > Insert sheet OR right click on the sheet name below → Insert or can use the "+" icon next to the last sheet below.

56. How can you resize the column?

Answer: To resize the column, you should change the width of one column and then drag the boundary on the right side of the column heading till the width you want. The other way of doing it is to select the Format from the home tab, and in Format you have to select AUTOFIT COLUMN WIDTH under cell section. On clicking on this, the cell size will get formatted.

57. To move to the previous worksheet and next sheet, what keys will you press?

Answer: To move to the previous worksheet, you will use the keys Ctrl + PgUp, and to move to the next sheet you will use keys Ctrl + PgDown. The fast wat will be right clicking on the navigation button on the bottom left to get sheet names.

58. What is the quick way to return to a particular area of a worksheet?

Answer: The quick way to return to a specific area of the worksheet is by using name box. You can type the cell address or range name in name box to return to a specific area of a worksheet. We can also use "Ctlg + G" go to, to navigate to the cell.

59. What steps can you take to handle slow Excel workbooks?

Answer: You can use the following techniques to handle slow Excel workbooks:

- ✓ Avoid Volatile Functions such as INDIRECT, OFFSET, etc.
- ✓ Use Helper Columns instead of array formula.
- ✓ Use Conditional formatting only when absolutely necessary (as it is volatile too).
- ✓ Use Excel Tables and Named Ranges.
- ✓ Convert Unused Formulas to Values.
- ✓ Keep All Referenced Data in One Sheet.
- ✓ Avoid Using Entire Row/Column in References.
- ✓ Use Manual Calculation Mode.
- ✓ Avoid using data table with lookup functions
- ✓ Use pivot for summary rather then sumifs

60. What is Flash Fill?

Answer: Flash Fill is an amazing tool that was added in Excel 2013 and is available in all versions after that. It is machine learning tool.

You can use Flash Fill in Excel to make data entry easy. It's a smart tool that tries to identify patterns based on your data entry and does that for you.

Some simple examples of using Flash Fill could be to get the first name from the full name, get name initials, format phone numbers, etc. Excel user will copy a piece of text and paste it in an empty column, after two entries one can simply press Ctrl + E for the excel to repeat same activity for all the rows with data.

61. How can you wrap text in Excel?

Answer: Wrapping text in Excel allows you to avoid any text overflowing out of the cell. By applying the wrap text option, you can make sure all the text fits nicely in one single cell (which may change its height though).

To wrap text, select the cell, go to the Home tab and click on the Wrap text option in the Alignment group. Note that this is a toggle button, which means that if you click on it again, it will unwrap the text.

62. What is conditional formatting?

Answer: Conditional Formatting allows you to format a cell based on the value in it. For example, if you want to highlight all the cells where the value in less than 30 with a red colour, you can do that with Conditional Formatting.

63. Name some Text Functions?

Answer: CONCATENATE() – used to join several text strings to one string.

TEXT() – Converting a value into text formatting.

PROPER () – Arranging the characters in proper way.

LEFT () – Returns the specified number of characters from the starting character.

64. Which function would you use to get the current date and time in Excel?

Answer: The following functions can be used:

TODAY() – This function takes no argument and would return the current date value. NOW() – This function takes no argument and would return the current date and time value. Remember that that date and time are stored as numbers in Excel. So that you can perform operations such as addition/subtraction with these dates.

65. How would you get rid of leading / trailing / double spaces in a text in Excel?

Answer: To get rid of leading, trailing, and double spaces, you need to use the TRIM function.

66. What are the difference between Pivot Charts Vs Regular Charts

Answer: While Pivot Charts are amazing and come with the ability to update when the Pivot Table updates, these are not as flexible as the regular charts.

In general, you can do a lot of customization in a regular Excel chart, but not in a Pivot chart. Also, if you customize a Pivot Chart, and then update the Pivot Table, you are likely to lose the customization.

Despite the limitations, Pivot Charts are useful and can help create quick views from a Pivot Table.

67. What is the use of Calculated field in a Pivot table?

Answer: A calculated field is useful when we want to aggregate two or more numerical values from the datasheet and represent it into the pivot table. For instance, we have two columns Net Quantity & price per Item. We can directly get the total cost (net quantity * Price per Item) within Pivot & avoid creating a supporting column. It can also be used to calculate a layer above existing calculation, such as Average of average which is comber sum when done on standard excel.

68. What is the use of Calculated Item in a Pivot Table?

Answer: Calculated item gets data only for specific categorical item without having to create any additional columns in excel. This can be explained by using an example, assume we have a data set of sales amounts for 12 months (first column) and its values in the second column. By adding months to the row fields & the sum of sales column to the value fields we can see the sum against each month. However, what if We want to add some more rows of sales value, by quarter. We can use Calculated Item as Select column1 (Jan+Feb+Mar) will generate a new row in the pivot having a sum sale only for these months & similarly we can add for other quarters too.

69. How will you create a full name from two columns having first and last name separately?

Answer: We can use manual formula with the help of "&" symbol to join two or more strings. To create full name we will be using first cell address, place the "&" symbol followed with " " (space) to ensure the last name is not merged with the first & then add another "&" complete it by mentioning the last name's cell address. We can also use CONCATENATE or TEXTJOINT function to perform the action.

70. How will you merge multiple sheets into a single sheet in a short period?

Answer: The fastest way to do this is to use a power query in office 365, to get to this. We need to file in same column labels so that the tables/sheets can be mapped accordingly. Steps to get this are

- 1. Data tab > Get Data > From File > From Folder
- 2. Select the folder, Click ok and at the folder screen click Transform Data:
- 3. Expand the Tables, Click on the double down arrow on the Custom column > click OK: We can further modify the data, columns that we need/and we do not need and load it all as a data model, load it as a power pivot or load as a table. With these simple process we can more data present in single folder into single sheet with very easy steps.

71. You have a notepad with lot of data & you need to convert it to a proper column format of data to do analysis, what will you do?

Answer: To convert text file data we can user the get data option present in the data table. You need to go to the Data table> Get data> From File> From Text/CVT

The system will automatically identify the data patter & will be prompted to share the delimiter (comma is the common delimiter) we can specify the delimiter and convert the note pad data into table form.

72. Explain what is a FOR loop?

Answer: The For loop is a control structure that allows the user to write a loop that will be executed a specific number of times. In this case, the user specifies the number of times they want the loop to run. For loop is classified into Next Loop and For Each Loop. It has 3 parimeter, loop, Assign to start the 1st value and steps for intervals in loops

73. How will you write a formula to get the final bill value and then divide it by 2; cell A1 has a number 1986 which is the session price of an item, cell B 1 Has the total Quantity, which is 18, cell C1 has the discount of 10%?

Answer: We need to follow the PEMDAS order to ensure we get the correct output. =((A1*B1)-(C1*(A1*B1)))/2

- 1. We will have to get the bill value which is (A1*B1) which will give the final value, we add braces to ensure this does not overlap the next formula
- 2. To deduct the discount, we use braces after the minus sign this will ensure that only the discount value is subtracted from the final amount, (C1*(A1*B1))
- 3. We add braces to the first and 2nd values and then use forward slash and mention 2 to get the final value 16,086.20/-

74. How can you split a group of text data into multiple columns?

Answer: Extracting such data into columns works more efficiently if the data is divided with delimiters. If not we use fixed width to divide the data in to multiple parts.

This feture is called text to column, to access this you must go to the ribbon; DATA> Text to columns> from the dialog box we can choose the respective options to split the data into multiple columns

75. How can you find duplicate values from a column without deleting them?

Answer: We can use the condition format which will higher the cells which are repeated and same can be further filtered by colour. This way the rows having duplicates will not be deleted. We can also use FILTER option and FILTER function to identify the same but at an individual level.

76. Given below is a data of employees working in a company define a function that can tell if the employee has met his/her target? The target to achieve is 92%.

Answer: To get the top/Bottom we can use =IF(A2>=Target,"Achieved","Not Achieved")

77. Write a nested if function to arrive at Bottom, Average, Top performer for below table. Bottom <=50%, Average <=75%, >75% Top performer.

Answer: As these are numbered value we will use an ascending order to get the value. =IF(A2<=50%,"Bottom",IF(A2<=75%,"Average","Top"))

78. What is a CSE Function?

Answer: A CSE which can be read as Control, Shift, Enter. These will generate an array formula that must be entered with control + shift + enter. An array stores the data I the memory and process the whole range at once.

79. What is the way to get the week number of the year for a given date?

Answer: We can use the =WEEKNUM() function to know the week number for any given date.

80. How to add Rows in any given active cell?

Answer: We can add rows using two of the most commonly used methods

- 1. use the short cut Select the row by pressing SHFT + Space then CTRL+SHFT+PLUS (+) rapidly.
- 2. Go to the ribbon; Home>Insert>Insert Rows
- 3. Right click on row number →insert

81. How to add Columns in any given active cell?

Answer: We can add rows using two of the most commonly used methods

- 1. use the short cut Select the row by pressing CTRL+ SPACE then CTRL+SHFT+PLUS (+) rapidly.
- 2. Go to the ribbon; Home>Insert>Insert Columns

82. What is a Combo Chart?

Answer: A combo chart is a combination of line and columns together in single chart. It comprises of two data point, for example the total sales value in columns and % of profit earned in the line format. The Axis can be switched to Primary and Secondary based on the objective. This makes the chart more decipherable for conclusions. Some of the examples are Thermometer chart, Paratoo chart, Win and Loss Chart.

83. What is the best way to represent performance of 4 zones in a single year?

Answer: Since the data is only for single numerical variable, 'performance' the best is to use a Pie chart. This will be a clear representation of which zone's performance. Remember, Pie chart will automatically convert 'numbers' into 'percentage'. Plus, pie chart should not be used to represent for more than 5 different zones.

84. You have data of total review & % of profit we made for the last 4 months. How will you represent this data?

Answer: I will choose to present this in a combo chart. Primary data point will be the total revenue the company made as column and a line chart go show the profit % but as a secondary access as the prime will have integers and the profit is in decimals. Additionally will use pivot to aggregate value under one bucket.

85. What is grouping in a Pivot table?

Answer: Grouping in pivot tables helps understand a frequency of a number. This works only for columns having numbers. Assuming we have a column having age of certain population, to know the count of different age groups we do not require to create another supporting column. Use the group feature after creating the pivot, drop the age field into the row section then group it by 5. this will show the minimum + 5 till the max and the value field can be count or contribution count. Grouping is used for 'Date and Time' data also, to see range of duration. The column should be formatted as 'date and time'. One can group time from seconds, minutes, hours, days, Quarters, Months and years. Grouping can also be done for text after selecting the labels that are to be grouped in one bucket.

86. What is a DIM stands for in a VBA script?

Answer: DIM stands for dimension, these are objects which are to be declared when writing a code. Objects can be of different types, Numbers, Letter, Sentences, Worksheets, Workbooks, Cells, Range Etc

87. What does Sub mean in a VBA script?

Answer: Sub is a short name to subroutine. Each macro step starts with the key word called SUB and ends with an END SUB. without which a Macro cannot be created. It is also termed as head and tail of the macro.

88. How to create a simple macro to enter time stamp.

Answer: This can be achieved by recording a macro. We need to go the Developer tab in the ribbon> Click on record macro> Give a name> Click OK. On any empty cells type =NOW()>Ctrl+Enter>Ctrl+C>Alt+S+E+V>Esc. By doing this we have entered the current time by using now() function, to ensure we complete the function and remain in the active cells we use Ctrt + Enter> We copy paste the same value in the active cell which will ensure the time stamp does not change. To re-execute this macro we can go to macro & press the run button or assing the macro to an image or even assign a short cut at the time of creation itself.

89. Can we use Excel without having excel installed on local system?

Answer: It is possible to use Excel in a system where we do not have excel installed. User must have an office365 account to use excel online without installing on the respective system. This has some limitation in functionalities. However, works nearly similar to an excel. This also allows users to share the sheet with others for collaboration. This version will be accessed over mobile and do require internet access.

90. Name some of the data types in VBA?

Answer: Some of the common types of data types that can be declared are

- INT INT stands for integer which can only store natural numbers only
- FLOAT Float is another form of data type that is used for numbers which can contain decimals
- STRING Stings are used when we need to pass text data
- BOOLEAN Boolean data types can store only true or false values

91. What is an INT data type in VBA?

Answer: INT means Integer which can handle only numerical values, by default the value of any assigned variable with such data type is 0. The size of such variable is of 2 KB & it can handle numbers from –32,768 to 32,767.

92. What is a varchar in VBA?

Answer: A string data type can handle as many as 2 billing characters. These data types are very heavy on the code, the size of the variable is 10 bytes, plus the actual size of the data that the variable must store. Var can store any variable type in itself.

93. What is a Decimal in VBA?

Answer: The Double Data Type is used to store Double data type, ie., precision floating point numbers from -1.79769313486232E308 to -4.94065645841247E-324 or 1.79769313486232E308 to 4.94065645841247E-324. It can be also termed similar to floar.

94. To declare a particular sheet what type of data type will you choose?

Answer: To declare a sheet as a variable we need to assign the data type as WORKSHEET or ActiveWorksheet.

95. Explain what is RAND?

Answer: A rand function generates random numbers, starting from 0.001 to 0.999. All the rand numbers generated here are unique, a caution that any user must take when working with rand is keep the formula calculations to manual else the RAND will generate a fresh set of numbers. A use case to use this function is when we have a large data and we need only sampled rows, to avoid being biased we can let the system give some random numbers. We can further take help of IF condition to filter the exact samples we need to pick.

96. Explain what is RANDBETWEEN?

Answer: RANDBETWEEN Function is available in the versions above 2013 and office365 version, this can generate random numbers between any given numbers. However, these are not unique. You need to keep the calculation into manual when using this function else every change will lead to a random number from the range. The syntax allows you to access random numbers of Integers alone & not decimals. The syntax needs only to arguments bottom integer like 10 & the top integer like 100, RANDBETWEEN(bottom, top).

97. We have a text string, how to identify the total characters in the cell?

Answer: To know the length of a string present a cell we must use the =LEN(string) which will show the count of characters present in the given string. This includes all the spaces and special character present in the cell. (String is the 'text' written in the cell, it can be a letter, word or sentence/s.)

98. At the time of data submission there was an additional text (Z+530) in the time stamp column. what would you do to get rid of the time zone?'

Answer: To remove any known character we can use the SUBSTITUDTE function, this will remove the invalid text from the supplied cell. In this case we need to type the function =SUSTITUDTE(timestamp,"Z+530",""), this will show only the time stamp and not the timezone. However, we cannot perform any numerical calculations on this (Use HOUR, Day, Year functions) as this is still a text, to convert it to number we will have use one more function VALUE, to conclude we will have to use =VALUE(SUSTITUDTE(timestamp,"Z+530","")) which output reusable data.

99. At a scale we have data where there is leading and trailing space, how will you deal with it? Answer: The trim function will ensure there are no white spaces before or after the characters are entered. The function does not require any addition arguments, you just need to type =TRIM(string), this will show the corrected data.

100. If I need to pick up only the First name from a field which has both first and last name, what is the best way to do get it?

Answer: The delimiter between the first and the last name will be the key identifier to pick up the first name. A combination of functions will help us achieve this, first we will have to find

the SPACE, use the find function to know where the space is, then calculate the string length of the first name, ie., get the total length of the full name then minus the length where the space is. We now have to use =LEFT() function to get the length we desire. Assuming cell A1 has the Full name "John Rich" we will have to use =LEFT(A1,((LEN(A1)-(FIND(" ",A1,1)))+1)). OR use Data \rightarrow Text to Column(TTC) \rightarrow Delimiter \rightarrow space/tab \rightarrow Finish. To have a faster approach, we can also use Flash Fill (Ctrl + E for 2013 and higher version).

101. A project is starting on 1st working day of a given month and needs 15 working days to get completed, how will you calculate the project completion date?

Answer: Excel has a built-in function to get this, the function to use is =WORKDAY.INTL(). The function has two mandatory parameters, 1. the project start date and the next is the total days required to complete it, we can also supply the weekly offs and holidays (if any are present in that given period). The function will directly show the project end date.

Or use NETWORKDAYS.INTL() gives option to give end date and choose weekend type and holiday list. Available in advanced versions, the holiday list is to be individual dates specified in alternative cells vertically.

102. Explain Indirect function?

Answer: An indirect function is a powerful function where a user can get the information of various other cell address without having to change the original function. Example I need to get the sum of Range A2:A30.. It is known behaviour we would type =SUM(A2:A30). However, now the requirement is to get sum of column B2:B30, you may have to delete the existing sum function and replace the range with the new one. This can be avoided by adding INDIRECT after the sum function. The indirect will change the range and convert it to actual data present in the specified range. The range can be kept in a separate cell, we keep changing the range in the supporting cells, the indirect function will keep showing the sum of the specified range. This function is extensively use to navigate across sheets and create dashboards.

103. What is the difference between a formula and a function?

Answer: Formula are user defined. However, functions are inbuilt and defined formulas and calculations in excel. An individual can add up data present in cells A1, B1, C1 & D1 as =A1+B1+C1+D1 to get the output as sum. This can be achieved by using a sum function =SUM(A1:C1).

104. What are the different types of data value formats in Excel?

Answer: Data can be customized the way user wants to view it. However, there are 11 types of inbuilt formats which are available in the format dialog box,

- 1. General
- 2. Number
- 3. Currency
- 4. Accounting
- 5. Date
- 6. Time
- 7. Percentage
- 8. Fraction

- 9. Scientific
- 10. Text
- 11. Special

105. What are slicers? what is the use of it?

Answer: Slicers are a form of filters which are used along with the Pivot feature. Slicers can be of two types 1. Timeline 2. Attribute selections. Apart from filtering, slicer provides direct buttons on the screen to apply and remove filters. One slicer can be connected to multiple reports and charts unlike Filter. This makes dashboard interactive, easy to drill-down and User friendly.

106. What are the basic principles of creating a dashboard?

Answer: Some of the basic principles must be followed when creating one must include.

- 1. Who the audience is?
- 2. Decide the flow- write it
- 3. What value does the dashboard add?
- 4. What type of dashboard to prepare, Operational, Analytical or strategic
- 5. Make it interactive
- 6. Keep in mind: No scrolling, keep required stuff and within a single page
- 7. All reports need NOT to be on same sheet, you can connect multiple sheets later with 'Hyperlink'
- 8. Add drill down by using form controls which can navigate to next levels of the metrics
- 9. Include actional insights this will help the audience to take actions against your insights
- 10. Always name the Pivot reports
- 11. Do Not use redundant reports and charts (giving same information).
- 12. Keep it Simple
- 13. Apply orders
- 14. Use alt to align chart and snap to the cell grids.

107. What is a dashboard?

Answer: Dashboards are highly effective in validating the effectiveness of the metrics captured over time and bring out the leading trends. A dashboard is generally defined as a real-time tool which has easy to read user interface showing a graphical presentation of data, it is also an effective way to take actionable insights.

A dashboard is an information management tool used to track KPIs, metrics, and key data points that are relevant to your business, department, or a specific process. Dashboards aggregate and visualize data from multiple sources, such as databases, locally hosted files, and web services. It would instantly answer important questions such which regions are performing better and which products should the management focus on. • These dashboards could be static or interactive (where the user can make selections and change views and the data would dynamically update)

108. When preparing a pivot, you kept data limited to certain range now you have to add more data to same sheet, will the pivot update itself?

Answer: To increase range in an existing pivot we need to go to the ribbon Pivot Table Analyse>Data tab Change Data Source> Change the data range & refresh the pivot by pressing Ctrl+Alt+F5 which will refresh all the pivots. The alternative will be to create Data Table to make the range dynamic from the get-go.

109. You have to add a chart to your dashboard & that is linked to a Pivot? How will it refresh?

Answer: To refresh the data source for any pivot table or charts linked with the pivot table, you need to go to the ribbon Pivot Table Analyse> Data Refresh or use the short cut to execute this, Ctl+Alt+F5

110. What is rank function do?

Answer: A RANK function returns position of a given number from a list of numbers present in the same list. Rank can be identified either by ascending or descending order. Students with highest marks needs descending order (), similarly employees with least absent%.

111. You are being given a table of sales done by executives, I want you to highlight the top 5 executives with highest sales. What will you do?

Answer: A built in function is available which can highlight a series of numbers are on top or bottom. To get to this we will have to use the conditional format, go to ribbon>Home> under styles tab> Conditional Format>Top Bottom Rules>Top 10 items hit enter post selecting the range. The to 10 cells will be auto highlighted

112. Name some of the predefined conditional formatting rules?

Answer: A varied number of conditional formatting rules are available to name some.

- Highlight Cell rules
- Top or bottom rules
- Data bars
- Colour scales
- Icon sets

113. Your dashboard has a date wise performance, you need to place arrows if the performance for current day is increased, decreased or stable in the same cell. What will you do?

Answer: First add an additional column which has formula to calculate difference from previous to current value. To highlight the data in the forms of arrows we will have to use conditional formatting, Select the rang in the new column, and then go to the ribbon>Home>ConditionalFormatting>Icon Sets>Directional. This will show data in form of arrows.

114. You sheet is updated with a lot of new data. However, the function applied to the new data does not seem to be correct, because all the cells have the same value. What is the first thing that comes to your mind?

Answer: The workbook has the formula calculations turned to manual, I will recalculate the sheet from the ribbon or press F9

115. Below table has set of sales done, what formula will you write to know how many repeat sales came from same customer?

Answer: To do this we need to use the custom sort function which will arrange the data in the order to group same users in to one order. (Custom sort is available from the ribbon>data>sort>custom sort: Add two level 1st Level, Customer ID in ascending 2nd Level time of order from the customer in smallest to largest order. After the sort in an empty column use if function, =if(A2<>A1,"Unique","Repeat").

OR create a separate report, Extract unique customer id/names and Use COUNTIFS() to calculate how many repeat sales are there from same customer.

116. I want to see the cell colour to be turned into 4 types, Green for >80%, Amber for >60%, Red for anybody below 60% & while if cell is empty. This must be dynamic, how to achieve this?

Answer: Conditional formatting comes handy when we have to achieve this. We need add 4 rules from the manage rules dialog box. Go to access the dialog box, go to Home>Styles Conditional Format>Manage Rules: New Rule, Format only cells that contain> Format Cells only with: Cell Value > Less than or equal to 60% then click on the format tab and choose fill to be a red. Similarly repeat for other two conditions having numbers & for the empty change the format cells only with: blanks and keep the cell fill to be white.

117. Where can we see instant summary of a any selected range in a worksheet window?

Answer: Any selected range can show it's summary like average, sum, min, max for number values at the bottom right side of the sheet, which is also called as status bar, for text only data only the count of cells in the selected range will be shown at the status bar.

118. Name any 10 excel short cuts?

Answer: Short cuts save a lot of time & hence it is absolute to know as many short cuts as possible. To name some of them,

- 1. The most used is the past special function Alt+E+S+V which will paste copied cells as values directly
- 2. Add & remove Filter Ctl+Shft+L
- 3. Ctrl + Space will select the entire column> We can add a column/s by pressing Ctrl+Shft+Plus will add column(s) instantly
- 4. Sift + Space will select the entire row> We can add a row/rows in the selected rows by pressing Ctrl+Shft+Plus will add row(s) instantly
- 5. Press Ctrl+; to add date
- 6. Press Ctrl+Shft+; to add time
- 7. Set cells to auto format by pressing Alt + O + C + A
- 8. Ctrl+A will select the active table, Ctrl+A if repeated twice will select the entire sheet
- 9. To toggle between open workbooks, use Ctrl + Tab & Ctrl+Shft+Tab to go reverse

10. To insert Sheet in the active workbook press Ctrl+F11 and to delete press rapidly Alt+E+L & enter will remove the current worksheet. (do not use Shift F11 as it will create macro sheet)

119. What is a watch window?

Answer: Watch window help you to know the changes in a small window within same worksheet. This is useful when working on a function which is will have changes in other cell (which can be a window) and track it immediately without having to navigate to the depended cell. It also help understand the source reference of any formula.

120. The developer tab is not visible in the ribbon, how to enable it?

Answer: We need to go the excel options to enabled it. The steps to ge this is File>More>Options>CustomizeRibbon>MainTabs (Enable Developer)

121. I get a pop up the file is not trusted every time I open any workbook, is there a way I can get rid of this?

Answer: Excel blocks all external files from opening as they may contain harmful files that may corrupt your files. This can be avoided by adding folders which you trust will not have any form of virus or infectious items. To add a trusted folder, you need to go to File>More>Options>Trust Center>Trust Centre Settings>Trusted Locations>Add New Location All the files from this folder will not have a warning message.

122. Can I increase the number of sheets that are to be during a new workbook, I see only one?

Answer: Yes, we can redefine how many sheets a new workbook must have when opening. To change the default count, you must go to File>Options>General>Look for When creating new workbooks>Include this many worksheets (increase the number of sheets). The maximum number of default sheet is 255.

123. How to get rid of the grid lines in a worksheet?

Answer: We can remove it for a particular worksheet by going to the ribbon>View>under the show tab: uncheck the Grid lines check box. This will disable the grid lines, cells if manually coloured will remain unchanged.

124. What must have happened that the row numbers and the column alphabets are missing?

Answer: This happens when the heading are disabled, to re-enable them you need to go to the ribbon>View> Under show section check the Heading check box to get them back. We can also use the short cut Ctrl + F1 to Hide and unhide the ribbons.

125. What does Ctrl + D do?

Answer: This short cut is assigned to fill any data from above cell to below location.

126. A list of names are typed in incorrect case. Some in capital and some are in small case, we need to send emails to these list of names which requires the list to be corrected, how you correct them?

Answer: To address this we must use a =PROPPER(name) function which will place the names in camel case.

- 127. You have a received a data file from a third party, you need to know how many of the fields do not have data in the respective cells, how will you identify and report them?

 Answer: We can use the =COUNTBLANK(range) function to identify the blank entries and report them accordingly. We can also use Filter tool and filter out all the blank rows as well.
- 128. A file having the order placed time stamp is present, you are asked to share the hour wise orders summary and state the hours where the most and least orders are received. How will you deal with this?

Answer: The time stamp column needs to be broken into only hour, to get the hour from a time stamp we need to use = HOUR(timestamp) function which will fetch only the hour from the time stamp. We can then pivot the column to know the % of column, to further visualize better we can use a line chart, which will show the hours with highest and lowest contribution. Or create a histogram from the extracted hour column.

129. We have list of users who have their names with prefixed with Mr. Mrs. You are asked to show a summary of contribution of married an unmarried. How will you achieve this?

Answer: To classify this data will have to use a combination of multiple functions. We will have to find Mrs first if found we mark it as Mrs else we search for Mr then mark it as Mr. =IF(ISERROR(FIND("Mrs",NAME,1)),IF(ISERROR(FIND("Mr",NAME,1)),"Neither Mrs nor Mr.","Mr"),"Mrs"). To once we get the result, we can create a pivot to know the count, take the contribution of grad total; apply this as pie chart.

130. What is the shortest way to find the unique values from a given range?

Answer: We can use the function =UNIQUE(range) which will show all the unique values in the given range. This function is available only in Office 365 version. Other versions can do the same activity, but it has a hard way, this is by removing duplicate values from the range (we need to create a copy of the range, else we will spoil the original data), to remove duplicates we must go to ribbon DATA>under data tools>REMOVE DUPLICATES. Or use 'Advanced filter' to extract 'unique value' to other sheets. We can also use pivot table to get similar results.

131. When you have more than one function in same cell what seperate the next function?

Answer: To separate more than once function in a single cell then we need to use comma (,) to add in the next function in single formula.

132. The range A1=40, B1=30, C1=50 & D1=40. What will be output of =AVERAGE(A1:D1) ?

Answer: The output for this will be 40.

133. Which category in Format Cells Dialog helps you to reduce a large number format to a short readable format?

Answer: To convert a "**number**" data to a readable format like, 0 decimals, digit separators is "custom". We can also use "," (come) separate as well.

134. How can we change the column having numbers in a pivoted data output in a SUM format to a count of it?

Answer: This can be changed from the values tab in the pivot fields, Value Filed Setting change the format to count, similarly you can change this to MIN, MAX, AVERAGE etc.

135. What feature helps you group data into intervals?

Answer: The grouping feature in Pivot helps us to group data into each class of interval. It can also be termed as number bucketing.

136. Explain what is a Pivot table?

Answer: Pivot table is a data summarization tool which helps us to analyse data in a form of a table. A Pivot Table is an interactive worksheet based table that quickly summarizes large amounts of data using the format and calculation methods you choose.

- It is called a Pivot Table because you can rotate its row and column headings around the core data area to give you different views of the source data.
- As source data changes, you can update a pivot table. It resides on a worksheet thus; you can integrate a Pivot Table into a larger worksheet model using standard formulas.
- A PivotTable is a powerful tool to calculate, summarize, and analyse data that lets you see comparisons, patterns, and trends in data. Which can be present in an Excel workbook or imported from an external database such as Microsoft Access or SQL Server and 98 more sources. The key feature is it is a summary of data considering data in the centre of the whole report.

137. What is the use of GoTo feature?

Answer: The GoTo feature helps us find for specific cell address, a range, go to only empty cells from a range or go to formulas etc. It also have special option to select only content, error and comments.

138. What is the short cut to access the GoTo dialog box?

Answer: To get the GoTo dialog box you need press CTRL+G or press F5.

139. How to evaluate a custom formula withing the formula bar?

Answer: To evaluate a created function or a formula we need to highlight the complete formula or the function and then press F9 the formula will be evaluated to its actual value & to revert to the formula/its original function press CTRL+Z.

140. How to access the code of an existing macro?

Answer: To access the existing code we need to go to the ribbon>View Tab/Developer tab> Under controls>View Code. This will open the VBA code editor window.

141. What is the use of an immediate window in VBA code window?

Answer: The immediate window can help us run temporary code and get the instant results. To get the immediate window in the code window we need to go to the menu bar>View>Immediate Window or press CTRL+G.

142. A created macro needs to be assigned to a button.

Answer: To assign an existing macro to a button we need to insert the icon or an button from its respective menus, then right click on the image or button click on assign macro. The assign macro dialog box will show up all existing macros present in the current workbook. Choose the macro name and click OK.

143. You have data in time format (hh:mm:ss). You are asked to convert it into absolute seconds eg, 00:01:30 to 90 seconds, what must you do?

Answer: Same can be achieved using the formula we can simply multiply the value with 86400 do get the actual seconds. Or use the inbuilt function =CONVERT(data,"day","sec") to get the exact seconds.

Name any two ways to get date from a full date dd/mm/yyyy? eg., the date is 01/09/2022 we need the output as 01?

Answer: We can use the text function to get the data in a given format, =TEXT(dd/mm/yyyy,"DD") or use the date function to get the same output =DATE(dd/mm/yyyy).

145. How do you freeze rows and columns simultaneously?

Answer: Click the cell from where you want to freeze the required columns and rows. Select the cell of which the above valu and the left column will be static view. Then go to Menu bar > View > Freeze panes > the first option ('Freeze panes').

146. How many report formats are available in MS Excel?

Answer: There are three report formats in MS Excel – compact, report, and tabular.

147. What logical condition will you use when there are two different criteria?

Answer: Use the 'AND" or "OR" logical condition when there are two different criteria. And depending on the logic the use case will change respectively.

148. What is the Logical Function?

Answer: There are 4 logical functions – AND, OR, XOR, and NOT.

A Logical function helps in:

- Checking if a condition is true or false
- Combine two or more conditions together

149. What is the difference between relative and absolute cell referencing?

Answer: When you copy a formula to another cell and it repeats, it is relative referencing. It exists by default in MS Excel. Absolute cell reference does not change when the formula is copied from one cell to the next.

150. What is the difference between DIM and SET?

Answer: DIM declares the variable. E.g. Dim r As Range. On the other hand, SET sets the variable to an object reference. E.g. Set r = Range("A1")

151. What is Option Explicit and Option Base?

Answer: You can just differentiate between the two as pointers below.

1. Option Explicit makes the declaration of the variables mandatory. (Recommended when using VBA)

2. Option Base is used at the module level to declare the default lower bound for array subscripts.

152. How can you stop VBScript when it goes into the infinite loop?

Answer: Ctrl + Pause/Break is used to stop VBScript if it goes into an infinite loop. Or we can use Break button from the keyboard.

153. How can you pass arguments to VBA functions?

Answer: If the arguments are approved to VBA function, the following two ways will help in passing the arguments to VBA functions:

- ByRef The called procedure may change the value of the argument passed
- ByVal The called procedure does not want to change the value of the argument passed

154. Which are some of the different types of error handling techniques?

Answer: The following are three different types of error handling techniques:

- o On Error Goto 0
- o On Error Goto Err Lbl
- o On Error Resume Next

This will help to redirect the macro and complete with no hiccups.

155. How do you count a string in MS Excel?

Answer: By using CountA we can count a string in MS Excel.

156. Shortcut Key for Autowidth of columns

Answer: To adjust the column width we need to select the column by pressing SHFT + SPACE the press ALT + O + C + A.

157. What is difference b/w Google sheet and Excel?

Answer: Here are some of the key differences between the MS Excel and Google sheets:

- 1. MS Excel is included with the MS Office suite, whereas Google sheets is a part of the G Suite (Google suite).
- 2. MS Excel is expensive, and its latest version (Office 365 Excel Online) charges a monthly or yearly fee, depending on the user's selection. Besides, Google Sheets is entirely free for personal use and only requires a Google Account.
- 3. MS Excel supports over 400 functions/ formulae, while Google sheets has limited options.
- 4. MS Excel deals with complex tasks and large data sets efficiently. On the other hand, Google sheets is more suited for basic operations and small data sets.
- 5. USP of MS Excel is == managing for larger datasets and data analysis. Google sheets USP == easy share options with other users for collaboration.

158. Tell me something about Google sheet.

Answer: Google sheets is another popular spreadsheet program developed by Google. However, this program is slightly different from MS Excel. The Google sheets works with the web browser like a typical web page and saves the data on the cloud, such as Google drive. Google Sheets also helps users store data in tables like MS Excel and perform various data sets related tasks.

159. What does the INT function do? Give a used case

Answer: INT Function is used to get a rounded down value of a number. A used case would be if we have time stamp i.e., date/month/year hh:mm:ss, by using INT(timestamp) we can get only the date month and year from it.

160. What does MOD function do?

Answer: MOD (modulus) function returns a the remaining value after dividing it with a number.

161. How to Reduce Excel File Size?

Answer: Few steps that can help us reduce an excels file size which generally impacts saving time, recalculating or saving time can be

Reduce Excel File Size Manually by

- Remove not required worksheets
- Remove hidden worksheets from a workbook
 - 1. Unhide rows and columns which may have data but is not relevant
 - 2. Remove formatting if not necessary (raw data)
 - 3. Remove conditional formatting, takes higher memory as it is dynamic
 - 4. Move worksheets into separate files if are relevant but not required to be in the same workbook
 - 5. Keep formulas only in the first row and the rest can be converted to values after the first calculation
 - 6. Convert (Save As) Excel Files to Binary Format (.xlsb)

162. What are some of the common uses of MS Excel?

Answer: MS Excel or Microsoft Excel is an essential software program of Microsoft Office Suite developed by Microsoft. It is one of the most powerful spreadsheet software that uses rows and columns to organize the data

Excel seems like an essential number-crunching software primarily used for managing household expenses or generating some basic reports. However, excel is more than just a simple reporting program. Excel is powerful software and can help perform a wide range of jobs for personal or business purposes. Therefore, there are plenty of uses of MS excel, and the list goes on.

- 1. Data Entry and Storage
- 2. Performing Calculations
- 3. Data Analysis and Interpretation
- 4. Reporting and Visualizations
- 5. Accounting and Budgeting
- 6. Collection and Verification of Business Data
- 7. Calendars and Schedules
- 8. Administrative and Managerial Duties
- 9. Forecasting
- 10. Automating Repetitive Tasks

163. Explain fill Handle?

Answer: Fill handle appears towards the bottom right side of the row, this; by double clicking on the area the data/formula/function in the current cell gets replicated in all the subsequent cells in active range. One can fill copy, series, with formatting, without formatting. When data is dragged different fill options will be activiated. To activate the drag function, go to File> Options> Advance> under formulas> Enable fill handle check.

164. Is it possible to have a header for each sheet that you create in a workbook to have a header or a footer similar to a word file?

Answer: Yes, it is possible to add header or footer in worksheet very similar to a word file, to do so we need to follow these steps.

We need to go to the ribbon> Insert > and then select the text group> select the Header & Footer option> {It will switch the excel worksheet to the Page Layout view} Here, we may type the text, add an image, and insert a present header in any of the three Header boxes that show at the top of the excel worksheet. In the three Header boxes, the central box is selected by default. We may also choose the header boxes according to the requirement. Once done, just hit escape to see the header. Very similar process has to be repeated to get a footer. This is useful in case of generating invoices/documents.

165. How to rename a work sheet?

Answer: To rename a work sheet we can double click on the current name "Sheet1" and type a desired text. There are other ways to do it too, we can use a short cut to reach the rename area that is by pressing ALT + O + H + R & then type the new name.

166. How can you know the open workbook's location?

Answer: There are multiple ways to fine the workbooks location. To name two,

- 1. By using an inbuilt function we can get the file location, just type =CELLS("filename"), the cell will show the complete file path along with the file name
- 2. Hit F12 on your keyboard, the save as dialog box will show the current location where the file is residing

167. How to delete a work sheet?

Answer: To remove a worksheet from a workbook you will have to right click on the target work sheet and click on the delete action, you will be asked to confirm the delete; upon agreeing the sheet will be deleted. This can be achieved by a shortcut too, just press ALT+E+L and the given you agreement, the file will be deleted. Remember one she is mandatory in a workbook.

168. What is a CORREL function?

Answer: CORREL is a shorter name of corelation, the function helps us to find if the two given variables have any relationship with each other, -1 output mean the of one of the variables drops the other will increase or vis-a-vis. Positive sign means if one increases the

other variable also increases. Example, if the age of a person increases then the weight increases is an example of positive corelation.

169. I have a huge data having highest of various people in inches, what can you do to convert these into Feet instead of inches?

Answer: We can use the inbuilt function called CONVERT. CONVERT function is one among the other versatile functions. CONVERT can change a various numbers from one format to another, in our case to convert feet to inches we need to use =CONVERT(value, "ft", "in")

170. How to perform a spell check in excel?

Answer: You can find the spell check named Spellings inside the Review tab present in the Excel ribbon. When you click the Spellings option here and it finds any incorrect word, it opens a dialogue box containing various options on it or simply hid the F7 key to get the errors if present.

171. How to add text Trademark (™) to s statement in a given row?

Answer: We can add this by going to the ribbon>insert>Symbols>search for the TM icon and insert it in the given cell. These are termed as autocomplete options.

172. Does each cell have unique address?

Answer: Yes, each cell has a unique address depends on the row and column value of the cell.

173. Is it possible to hide or show the ribbon?

Answer: You can hide or show (minimize or maximize) the ribbon by pressing CTRL F1 or double click on the current highlighted tab.

174. What does OOPs mean?

Answer: OOPS stands for Object oriented programming, this is a programming language. OOPS is the language used when designing a code in VBA/Macro.

175. How can you rotate the text in a cell?

Answer: We can format the cells text direction and move it to any order. To achieve this we can go the ribbon, Home>Alignment>choose from the predefined angles or press CTRL+1 to get to the format cells dialog box, go to the alignment tab and arrange the cells angle and hit OK.

176. We have an array of numbers ranging from 10 to 1000. If you are asked to find the 10th smallest number in a range, what will you do?

Answer: We have an inbuilt function named SMALL that will allow us to find the lowest number in the order we want. In our case =SMALL(array,10) to know the smallest number, if our values are continues from 10 till 1000 the smallest 10th number would be 19.

177. We have large data of customer orders, and all the order values are aligned to the left with a red triangle to the left corner of each cell's. What does this mean?

Answer: This indicates that the cell's values could be a number. However, it is formatted as a number. This will not allow us to do mathematical calculation. To convert these to numbers we can highlighted the targeted column and convert it to number.

178. What is Formula Auditing?

Answer: Formula auditing is an essential tool in Excel that enables users to show the relationship between formulas and cells.

Excel Formula Auditing toolbar helps the user to quickly and easily find:

- the cells contribute to calculating a formula present in the active cell.
- the formulas that refer to the active cell.
 - o The tab can help you
 - o Trace Precedents
 - Trace Dependents
 - o Remove Arrows
 - Show Formulas
 - Error Checking

179. What is Drop-Down List in Excel?

Answer: Drop-down lists are commonly used on many websites or applications that accept data from users. Similarly, we use them in excel sheets so that users can fill in form details or provide/select other data types. Also, the drop-down lists are user-friendly, easy to use, and attractive. These dropdown can be made dynamic using combinations of functions like Offset.

180. When I type =DATEDIF I do not see the function existing in my excel, what is the problem?

Answer: DATEDIF does not show up in the intelisense window. However, the function exists in most of the versions of MS Excel. You only need to enter the right syntax; the function will work.

181. What is the difference between =TODAY() v/s NOW()

Answer: The =TODAY() function represents the system date & the =NOW() function shows the systems date along with the current time stamp.

182. When was the first version of excel introduced?

Answer: Excel was introduced in the year 1987, after the first release MS had released several versions with the recent one comes with office 365.

183. I downloaded a file from a web address the file was a CSV, I had formatted the file applied a pivot go the summary. I saved the file as is and closed it, did I follow all the appropriate steps? What are the potential losses?

Answer: A CSV (Comma Separated Values) file can contain only single sheet and if the pivot was created in a separate sheet and if it was saved in the pivot window the next time you open the file will be having only the actual values present in that sheet and also the raw sheet will be deleted. It is recommended to save the file as .xlsx before applying any sort of formatting or applying any forms summaries.

184. How many types of charts can you think excel has? Share some examples?

Answer: Excel provides 12 types of charts, and each one has different features that make them better suited for specific tasks. To name some

- 1. Column Chart
- 2. Line Chart
- 3. Pie Chart
- 4. Doughnut Chart
- 5. Bar Chart
- 6. Area Chart

185. What is HLOOKUP?

Answer: In the name of HLOOKUP, "H" refers to Horizontal. It means that the searching and retrieve operations are performed horizontally on rows moving to the right. Hence, HLOOKUP is also known as Horizontal LOOKUP. HLOOK() function consists of four parameters, and here is the syntax for it:

HLOOKUP(LOOKUP_value, table, row_index, [LOOKUP_range])

186. Name some of the Substring functions?

Answer: A substring is a string that is extracted from a complete string. Excel does not provide any direct function for this. But it offers several other functions, such as LEFT, RIGHT, MID, TRIM, LEN, FIND, SUBSTITUTE, REPT, and MAX. They help the users to extract the substrings in different ways.

187. What is a REPT function?

Answer: REPT() is a function in excel that specifies repetition. It means that the function repeats the specified characters, symbols, numbers, etc., into the desired number of times.

188. You have date, item and count of orders placed by customer for a month, we need a summary of items orders in terms of % of orders by each item. How to achieve it?

Answer: We can apply a pivot add item to the rows and add the count filed into the values. Then go to the value field settings from the pivot filed section and then click Show Value As change it from no calculation to % of Grand Total to get the Contribution%.

189. What is paste as transpose?

Answer: Any copied data from multiple rows if pasted as transpose will be pasted into column if done using pasted as transpose. The same process is repeated if copied from columns and then pasted as transpose it gets pasted as rows. I simple tern its flipping values of rows to column and vice versa.

190. What is rolling average?

Answer: A rolling average commonly known as a moving average or running average, it is an average calculated on the basis of subsets of data at specified intervals.

191. What is #REF error?

Answer: The #REF! error of Excel is one of the formula errors that may occur for a few reasons related to used cell references. The #REF! itself represents the meaning of reference. In particular, the #REF! error is the result of invalid or non-existent references used inside the formula(s) in the sheet.

192. What is #N/A Error?

Answer: The #N/A error is most found when doing lookups, it denotes that the lookup value is not present in the fact table. If the errors are expected we can add another subfunction to handle, the error just add =IFERROR(YOUR function, "Value does not exist"). This will show data for rows where data is match and for not matching cases the result will be Value does not exist.

193. What is #NULL Error?

Answer: The Excel #NULL error value is shown whenever the user commits a typing error, such as incorrectly typing the range name or referring to a range name already deleted or failing to put quotation marks for a string data in a formula. This error typically occurs mostly because of syntax errors. For example, if the user forgets to put a comma, semicolon or space in a formula.

194. What is #DIV/0! Error?

Answer: The #DIV/0! error occurs in Excel whenever in a formula the user tries to divide by zero, or any number equivalent to zero.

195. Explain ROUND() function in Excel?

Answer: Excel offers a ROUND() function to round the numbers to a specific number of digits you want. For example, A cell A2 contains a number 93.143 and you want to round the value to three decimal places. If we use he function =ROUND(A2,0) the output would be 93. Using (-) negative decimal option means the value units or tense or thousands value will be rounded off.

196. What are different the views of 'excel' and their uses?

Answer: View→Normal, Page break, page layout, custom

Normal = to work with the database

Page Layout= Print out settings to see where page breaks

Page Layout = Formatting the print out version, insert header, footer, pictures page wise preview

Custom = Filtered database, hidden worksheets view, No need to edit data or create multiple files while presenting the excel file.

197. Write about pivot table calculations.

Answer: In a pivot table, you can create a new field that performs a calculation on the sum of other pivot fields, using your own formulas. On the Analyze tab, in the Calculations group, click Fields, Items, & Sets, and then click Calculated Field. → In the Name box, type a name for the field.

In the Formula box, enter the formula for the field. (For eg. Sales * 10%) Click Add.

198. What are sparklines, where we can use them?

Answer: Sparklines are another form of Data Viz. Sparklines are tiny charts inside single worksheet cells that can be used to visually represent and show a trend in your data. Sparklines can draw attention to important items such as seasonal changes or economic cycles and highlight the maximum and minimum values in a different colour. It is extensively used for mini chart dashboard and to identify trends with a quick glance of info.

199. Write difference between Microsoft/office 365 versions and Office 2019 and above versions

Answer: Office 365 is the application based, monthly, yearly subscription. Other are one time purchase, desktop version. 365 gets updated with new features and With a subscription, you'll always have the latest features, fixes, and security updates along with perennial tech support at no extra cost. At some cases we also get to be the Bata testers to test the new features even before its released to general public. In 2019, there are no upgrade options.

200. What is use of 'eraser icon' on right hand top of screen in Home tab → Editing group.

Answer: That is Clear option, which helps to erase/delete data quick and precisely. Clear – clear data with all formatting, borders and comments, Clear formatting- Data remains intact only formatting is deleted, Clear content-work same as keyboard button 'del', Clear link – will delete any hyperlink from the selected cells.