BCS01T1001 – Data Analytics using Excel and Tableau

Short Questions

CO1

Q1. How to replace one value with another in MS Excel?

Q2. What is Freeze Panes in MS-Excel?

Q3. **How is sorting different from filtering in MS excel?**

Q4. **Can you protect cells of a sheet from being copied? If yes, then write steps.**

CO2

1. Which function is used in excel to determine the current date?
2. Explain the sum function with suitable example.
3. Which formula you will prefer to count the no. of students present in class. Show.
4. Explain the MID function using an example.

CO3 , CO4

1. What do you mean by visualization?

2. Name different data sources supported by Tableau.

3. Explain advantages of data visualization?

4. Differentiate bar chart and line chart.

5. How to connect a worksheet for visualization? Explain.

1. What is Tableau?

2. Explain Measure?

3. Explain Dimension?

4. Differentiate .twb and .twbx extension?

5. What are the different types of joins in Tableau?

1.What is histogram and why it is used?

what do you understand by interval in case of moving average and what role does it play?

2.What are bins in context to histogram in Excel?

3.What are statistical function available in MS Excel?

Q1. Examine the Use of Scatter Plots in Tableau.

Q2. What types of data does a Scatter Plot require in Tableau?

Q3. Examine the use of Graphs in Tableau.

Q4. What type of Graphs can be created using Tableau?

1.Explain Linear regression equation.

2.Explain independent and dependent variable with the help of suitable example.

3.What do you mean by positive, negative and no correlation?

4.Expain the formula to find the Pearson correlation coefficient.

5.What is the application of exponential smoothing?

Long Questions

Long Questions

Q1. Discuss the uses of analysis tool pack. Also write down the steps for activating it in Excel.

Q2. List down the advantages of sorting and filtering in excel.

Q3. Explain how to sort data in an excel spreadsheet by taking a suitable example.

Q4. What do you mean by data analysis? Elaborate all the levels of data analysis.

CO2

1. Differentiate among COUNT, COUNTA and COUNTBLANK in Ms-Excel by taking a suitable example.
2. Explain the use of IF function in Excel? Create a table (of 5 rows) with first columns as Name and second column as age. Write an IF statement to display "eligible for voting" if age is >=18 and "not eligible for voting" if age is<18.
3. Create a table with 5 rows having following columns

S. No	Name	Roll No	Marks1	Marks2	Marks3	

Show the step-by-step process and write the formula for the average marks and percentage calculation. (Consider the cell address of S. No is A1).
4. What is the use of formulas in excel? Create a table which has 10 years (2011-2020) record of temperature for a particular day (25th December). Which formula you will use to determine lowest and highest temperature. Show it.

CO3, CO4

1. How to create histogram in Excel using Data Analysis ToolPak?

2. Write down the steps to calculate Mean, Median, Mode and standard deviation of given data in Excel.

3.What is moving average? How to find out the moving average in Excel?

1. Illustrate the different Tableau Products.

2. Name the components of a Dashboard.

3. Categorize the different filters in Tableau and how are they different from each other?

4. Discuss various types of charts in Tableau and their default datatype.

Q1. How do you Combine Scatter Plots in Tableau? Explain

Q2. List down the advantages of Scatter Plots in Tableau.

Q3. Why do we use a *Waterfall chart* in Tableau?

Q4. List down the advantages of Graphs in Tableau.

1. Write all required steps to connect data source for data visualization.

2. What do you mean by Tableau worksheet?

3. Differentiate between excel and tableau

4. Discuss various types of maps for visualization in Tableau.

1.Write the steps to do linear regression analysis in Excel with Analysis Tool Pack.

2.What is regression analysis? Explain linear regression with the help of equation and graph.

3. Write the steps to check the correlation between two set of data in Excel with Analysis Tool Pack.

4.What is exponential smoothing? Explain the formula for the single exponential smoothing with the help of suitable example.

5.write down the steps to apply exponential smoothing to a time series in Excel with Analysis Tool Pack.