

25U158

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Name :

Reg. No :

FIRST SEMESTER UG DEGREE EXAMINATION, NOVEMBER 2025

(FYUGP)

(Regular/Supplementary/Improvement)

CC24UCSC1MN103 - DATA ANALYSIS USING SPREADSHEET

(Computer Science - Minor Course)

(2024 Admission onwards)

Time: 2.0 Hours

Maximum: 70 Marks

Credit: 4

Part A (Short answer questions)

Answer ***all*** questions. Each question carries 3 marks.

1. Demonstrate the basic navigation techniques in excel. [Level:3] [CO1]
2. Microsoft Excel is a program typically used to store, sort, and manipulate data. [Level:3] [CO1]
Determine the various fields that we can use excel for data handling.
3. Demonstrate how would you apply a custom sort to organize a dataset first by department and then by employee name in Excel. [Level:3] [CO2]
4. Demonstrate the usage of absolute cell referencing in Excel formulas using an example. Compare it with relative cell referencing. [Level:3] [CO2]
5. A worksheet contains a mix of values and formulas. Demonstrate the steps to select all cells containing formulas. [Level:3] [CO2]
6. Compare and contrast AVERAGE and AVERAGEIF with example. [Level:4] [CO3]
7. Compare MOD and QUOTIENT in Excel. [Level:4] [CO3]
8. Analyze how knowing the length of text entries can aid in data validation and error checking. Give an example. [Level:4] [CO3]
9. Determine the steps to add a trendline to a chart to forecast future sales based on historical data. [Level:3] [CO4]
10. Determine how would you use a PivotTable to filter and summarize sales data by product category and quarter? [Level:3] [CO4]

(Ceiling: 24 Marks)

Part B (Paragraph questions/Problem)

Answer **all** questions. Each question carries 6 marks.

11. Demonstrate how to enter data into an Excel worksheet and also use basic formulas to calculate totals and averages.	[Level:3] [CO1]
12. Describe various cell formatting options in MS Excel in short	[Level:3] [CO1]
13. Demonstrate the steps to remove duplicate entries from a data set in Excel, and give the advantages of the same.	[Level:3] [CO2]
14. Demonstrate the process of using Excel filters to identify trends in a dataset. How would you apply filters to isolate specific data points, and what benefits does this offer in terms of data analysis and decision-making?	[Level:3] [CO2]
15. Analyze the logical operators AND, OR, and NOT in enhancing the complexity of formulas. Compare how these operators influence the decision-making process when constructing logical tests.	[Level:4] [CO3]
16. Analyze various date functions in excel with suitable examples.	[Level:4] [CO3]
17. Provide the necessary steps to build a KPI dashboard that displays the monthly performance of a sales team, including metrics such as total sales, average deal size, and the number of deals closed. Use data visualizations such as bar charts and line graphs to represent the metrics. Explain how the dashboard helps in analyzing the sales team's performance and making decisions.	[Level:3] [CO4]
18. Demonstrate how to Create and format a table for tracking product inventory, and apply sorting to arrange the products in descending order of stock levels. Then, filter the table to display only products with stock levels below 50.	[Level:3] [CO4]

(Ceiling: 36 Marks)

Part C (Essay questions)

Answer any **one** question. The question carries 10 marks.

19. Compare various categories of formulas and functions in excel giving suitable examples.	[Level:4] [CO3]
20. Apply the INDEX and MATCH functions to a dataset of sales data, where you want to retrieve sales for a specific region and time period. Use INDEX and MATCH to locate the correct data points, and explain the differences in accuracy and flexibility compared to VLOOKUP or HLOOKUP.	[Level:3] [CO4]

(1 × 10 = 10 Marks)
