28/05/22

**CTIS 186 Business Computer Applications**

**Final Exam**

1. Open ExcelExam and save it as **ExcelExamLastFirst** (i.e. with your surname and name) (**1** Point)
2. Name Sheet 1 as **ExamStatistics**. (**1** Point)
3. Apply the following to the whole current sheet: Times New Roman, 12, column width 24, row height 20. (**2** Points)
4. Create a copy of ExamStatistics worksheet at the end. Name it **Tableau**. (**2** Points)
5. Create a blank sheet after ExamStatistics. Name it **Chart**. (**2** Points)

Go back to ExamStatistics Worksheet:

1. Label B1 as **Year**, C1 as **Inflation Rate (Turkey)**, D1 as **Inflation Rate (USA)** and E1 as **Exchange Rate (USD to TRL)**. Wrap text and merge cells **B1** and **B2**. Do the same thing for **C1** and **C2**, **D1** and **D2** as well as for **E1** and **E2**. Center the aligned cells horizontally and vertically. Finally make the aligned cells bold. (**3** Points)
2. Insert a column following C column. Label D1 as **Percentage Change 1** (Center, Bold). (**1** Point)
3. Insert a column following E column. Label F1 as **Percentage Change 2** (Center, Bold). (**1** Point)
4. Label H1 as **Percentage Change 3**. (**1** Point)
5. Label I1 as **Inflation Turkey minus Inflation USA** (Center, Bold). (**1** Point)
6. Exactly as performed in part f), wrap and merge **D1** and **D2**, **F1** and **F2**, **H1** and **H2** as well as **I1** and **I2**. (**2** Points)
7. Format B4:I20 as centered, C4:C20, E4:E20 as percentages with 1 decimal, G4:G20 as number with 3 decimals. Finally, format D4:D20, F4:F20, H4:H20 and I4:I20 as percentages with 2 decimals. (**3** Points)
8. Zoom the worksheet at 80 %. (**1** Point)
9. Percentage change is calculated as (New Number – Old Number) / Old Number. Fill appropriately D5:D20; F5:F20 and H5:H20. (**3** Points)
10. Fill I4:I20 as to reflect the difference between the inflation rate in Turkey and that in the USA. (**2** Points)
11. Label B22 as **Average**, B23 as **Standard Deviation** and B24 as **Range** (i.e. difference between Maximum and Minimum values). Format B22:B24 as bold and right aligned. (**2** Points)
12. Calculate the average, standard deviation and range of each column appropriately. Format the answers as bold centered. Format your answer as a percentage with 1 decimal except for the range G22:G24 to be formatted as a number with 2 decimals. (**4** Points)
13. Enter the following table in L4:M13 range. Stick to the same format of the table. (**2** Points)



1. Label J1 as **Description** (Bold, centered). Merge J1 and J2 as in step f. Use VLOOKUP function to fill cells J4:J20 (consider column C) bearing in mind the table entered in step r. Center the range and apply light green fill to it. (**5** Points)
2. Format B4:J20 range with thin lines from the inside and a thicker line as a border. Do the same thing for B1:J2 as well as for B22:I24 range. (**2** Points)
3. Hide column A. (**1** point)
4. In the same chart, prepare a line (with markers) chart showing the Inflation Rate (Turkey) as well as Inflation Rate (USA) across years. Move the prepared chart to Chart worksheet. Resize the line chart as to fit entirely B2:Q23 range. Make sure to label appropriately x-axis, y-axis, and legends as well as to have a title. Rescale chart so that y-axis crosses the x-axis at – 0.40 %. (**5** Points)
5. Prepare a 2-D Stacked Column chart showing Exchange Rate (USD to TRL) across years. Move the prepared chart to Chart worksheet. Resize the line chart as to fit entirely B25:Q44 range. Make sure to label appropriately the title, x-axis and y-axis. Remove the legend. Rescale chart so that y-axis crosses the x-axis at 1. (**5** Points)
6. In K8 (ExamStatistics work sheet), create a column sparkline for C4:C20 range. (**2** Points)
7. In K10 (ExamStatistics work sheet), create a line sparkline for E4:E20 range. (**2** Points)
8. In K12, create a column sparkline for G4:G20 range. (**2** points)

Now consider Tableau sheet.

1. Delete A column as well as the 2nd and 3rd rows. Center all entries. Create a table for the range A2:D18. Change the table name to **Statistics**. Format B3:C19 range as percentage with one decimal. Format D3:D19 as number with 3 decimals. (**4** Points)
2. Change Statistics style to Table Style Medium 10. (**2** Points)
3. Consider Column4. By adding a Row Total, calculate the variance as a number with 4 decimals (Algerian, 14). (**3** Points)
4. Apply conditional formatting on Statistics Column 2 so that cells whose values between 7 % and 10 % are marked with Green color, Yellow fill, Blue outline boarder and Bold. (**3** Points)
5. Consider ExamStatistics sheet. Select B1:M24 as your print area. Go to print preview, change the orientation to landscape. Decrease all margins to the extent possible and fit to 1 wide by 1 tall page. Center the range horizontally. Insert the header: **CTIS 186 Final Exam** and the footer: **Page 1** (Centered, Bold, Arial Narrow, 12, Red). (**3** Points)
6. Consider Chart sheet. Select B2:Q44 as your print area. Go to print preview, change the orientation to landscape. Decrease all margins to the extent possible and fit to 1 wide by 1 tall page. Center the range horizontally and vertically. Insert the header: **CTIS 186 Final Exam** and the footer: **Page 2** (Right Aligned, Bold, Algerian, 12, Green). (**3** Points)
7. Consider Tableau sheet. Select A2:D20 as your print area. Go to print preview. Decrease all margins to the extent possible and scale the printout area to 140 %. Center the range horizontally. Insert the header: **CTIS 186 Final Exam** and the footer: **Page 3** (Left aligned, Bold, Book Antiqua, 12, Purple). (**3** Points)
8. Save your Excel file and submit it as indicated by your Senior Lecturer. (**1** Point)

**GOOD LUCK!**