26/05/24

**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 **Population**. (**1** Point)
3. Apply the following to the whole current sheet: Calibri, 14, column width 20, row height 18. Lastly, change the width of column A to 25. (**3** Points)
4. Insert 4 rows above the first row. (**2** Points)
5. Label A3 as **Country Name / Year**, B3 as **1960**, C3 as **1970**, D3 as **1980**, E3 as **1990**, F3 as **2000**, G3 as **2010**, H3 as **2020**, I3 as **2021** and J3 as **2022**. (Bold, Center, Light Green Fill) (**3** Points)
6. Create a copy of Population worksheet (after Sheet1). Name it **Statistics**. (**2** Points)
7. Insert a sheet between Population and Statistics. Rename it as **Graphs**. (**2** Points)

Go back to Population Worksheet:

1. Label A1 as **Population of some crowded Countries in the World (1960 – 2022)**. Merge and center A1 on A1:J1 range (Bold, 16, Light Orange Fill). (**3** Points)
2. Center B5:J14 range. Format the range as number with 1000 separator. (**1** Point)
3. Label A16 as **Average**, A17 as **Standard Deviation** and A18 as **Range** (i.e., difference between Maximum and Minimum values). Format A16:A18 as bold, italic and right aligned. (**2** Points)
4. Calculate the average, standard deviation and range for B5:J14 appropriately. Format the answers as bold centered. Format your answer as a number with 1 decimal (use 1000 separator). (**5** Points)
5. Zoom the worksheet at 87 %. (**1** Point)
6. Label A20 a **Number of Countries where Population is greater than Average (2022)** (underline, merge and center on A20:D20 range). (**2** Points)
7. Use an appropriate formula and apply it on J5:J14 range to calculate your answers in E20. Format E20 as Bold, Centered with blue color. (**4** Points)
8. Change Column K width to 10. Change Column L width to 40. (**2** Points)
9. Label L3 as **Population less than 50,000,000 ?** (Bold, centered). Consider H5:H14 range. Apply an appropriate function that turns **Yes** if the population is *less than 50,000,000* and **No** *otherwise*. Fill appropriately L5:L14 range. Center the range and apply yellow color fill to it. (**5** Points)
10. Format A5:J14 range with thin lines from the inside and a thicker line as a border. Do the same thing for A1:J1; A3:J3 as well as A16:J18 ranges. (**3** Points)
11. Consider A13:J14 range. Prepare a line chart showing **Year** in the x-axis and **Population** in the y-axis. Label appropriately the x-axis, y-axis and prepare an *appropriate* title for the chart. Rename, if needed, the legend series appropriately. Rescale chart so that y-axis displays values between 25,000,000 and 85,000,000. Finally, move the prepared chart to Graphs worksheet. Resize the line chart as to fit entirely B2:Q30 range. (**5** Points)
12. In K5 (Population worksheet), create a line sparkline for B5:J5 range. Do the same for the other 9 countries. (**2** Points)

Now consider Statistics sheet.

1. Delete Rows 1, 2 and 4. Hide Columns B through I. Label J1 as **Population** andK1 as **GDP** **(Billion $)** and L1 as **GDP per Capita** (Bold, centered, Light green fill color, White color). (**3** Points)
2. In K2:K11 range, enter the following respectively: (**2** Points)

 631.1

476.7

126.8

413.5

1674

62.26

404.3

688.1

495.4

907.1

v) Format J2:L11 range as centered. Format J2:J11 as number with 1000 separator, K2:K11 and L2:L11 as number with 2 decimals and 1000 separator. (**2** Points)

1. Create a table for the range A1:L11. Change the table name to **PerCapitaStatistics** (**3** Points)
2. Change table style to Blue, Table Style Medium 9. (**2** Points)
3. Consider GDP Per Capita column. Use an appropriate formula to calculate GDP Per Person for each country (make sure to have your answer as $ per person **not** as Billion $ per person). (**3** Points)
4. Sort table by GDP Per Capita in a descending order. (**3** Points)
5. Consider GDP Per Capita column. By adding a Row Total, use an appropriate function to calculate the median GDP Per Capita (Times New Roman, Bold, right aligned, orange, 16). (**3** Points)
6. Apply conditional formatting on GDP (Billion $) column so that cells above average are marked with Green outline and Red Fill. (**3** Points)
7. Consider Population sheet. Select A1:L20 as your print area. Go to print preview, change the orientation to landscape. Decrease all margins to the extent possible and adjust size as to fit to 1 wide by 1 tall page. Center the range horizontally. Insert the header: **CTIS 186 Final Exam** and the footer: **Page 1** (Both Centered). (**2** Points)
8. Consider Graphs sheet. Select B2:Q30 as your print area. Go to print preview, change the orientation to landscape. Decrease all margins to the extent possible and adjust size as to 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** (Both Right Aligned). (**2** Points)
9. Consider Statistics sheet. Select A1:L12 as your print area. Go to print preview. Change the orientation to landscape. Decrease all margins to the extent possible. Adjust to 160 % of normal size. Center the range vertically. Insert the header: **CTIS 186 Final Exam** and the footer: **Page 3** (Both Left aligned). (**2** Points)
10. Save your Excel file and submit it as indicated by your Senior Lecturer. (**1** Point)

**GOOD LUCK!**