20/05/25

**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 **GDP vs. Population**. (**1** Point)
3. Apply the following to the whole current sheet: Times New Roman, 12, column width 20, row height 20. Lastly, switch off all Bold, Italic and Underline text. (**3** Points)
4. Insert 4 rows above the first row. (**2** Points)
5. Label A3 as **Year**, B3 as **Country**, C3 as **GDP (in USD)**, D3 as **Population**, E3 as **GDP Per Capita (in USD)** and F3 as **GDP Per Capita % Change**. Wrap text / merge cells A3 / A4. Do the same for B3 / B4, C3 / C4, D3 / D4, E3 / E4 and F3 / F4. Lastly, make A3:F4 range Bold, Middle Align with Light Green Fill) (**5** Points)
6. Create a copy of GDP vs. Population worksheet (after Sheet1). Name it **Statistics**. (**2** Points)
7. Insert a sheet between GDP vs. Population and Statistics. Rename it as **Chart**. (**2** Points)

Go back to GDP vs. Population Worksheet:

1. Label A1 as **Country’s / Region’s Comparative GDP Per Capita**. Merge and center A1 on A1:F1 range (Bold, 18, Light Blue Fill). (**3** Points)
2. Center C5:E48 range. Format the range as whole number with 1000 separator. (**2** Points)
3. GDP Per Capita is calculated as GDP divided by Population. Fill E5:E48 appropriately. Format your answer to 2 decimal places. (**3** Points)
4. GDP Per Capita % Change (for year 2016) is calculated as (GDP Per Capita2016 – GDP Per Capita2015) / (GDP Per Capita2015). Fill **2016** GDP Per Capita for each country / region as a percentage with 1 decimal (Centered, Orange Fill). (**3** Points)
5. Label B50 as **Average**, B51 as **Standard Deviation**, B52 as **Median** and B53 as **Range** (i.e., difference between Maximum and Minimum values). Format B50:B53 as bold, italic and right aligned. (**2** Points)
6. Calculate the average, standard deviation, median and range for C5:F48 appropriately (*consider only* ***2016*** *figures*). Format the answers as bold centered. Format C50:E53 range as a whole number (use 1000 separator), while F50:F53 range as a percentage with 2 decimals. (**6** Points)
7. Zoom the worksheet to 96 %. (**1** Point)
8. Label A55 a **Number of Countries / Regions where GDP per Capita % Change is greater than 0 % (2016)** (underline, merge and center on A55:E55 range). (**2** Points)
9. Use an appropriate formula and calculate the answer in cell F55. Format F55 as Bold, Centered with blue color. (**4** Points)
10. Change Column G width to 5. Change Column H width to 30. (**2** Points)
11. Label H3 as **Population >= 35 million?** (Bold, centered, wrap text / merge cells H3 / H4, Middle Align). Consider D5:D48 range. Apply an appropriate function that turns **YES** if the population is *greater than or equal to 35 million* and **NO** *otherwise*. Fill appropriately H5:H48 range. Center the range, make it bold and apply light blue color fill to it. (**6** Points)
12. Format A3:F48 range with thin lines from the inside and a thicker line as a border. Do the same thing for A1:F1; B50:F53 as well as H3:H48 ranges. (**3** Points)
13. Consider Arab World / Europe & Central Asia / Tunisia / Turkiye and World along with their 2016 GDP Per Capita. Prepare a 3-D Clustered Bar Chart. Label appropriately the x-axis, y-axis and prepare an *appropriate* title for the chart. Fill regions (including World) with Purple Fill while countries with Red Fill. Rescale chart so that x-axis displays values between 3,000 and 23,000. Finally, move the prepared chart to Chart worksheet. Resize the line chart as to fit entirely B2:O24 range. (**8** Points)
14. In G22 (GDP vs. Population worksheet), create a line sparkline (Red) for D5:D48 range. (**2** Points)

Now consider Statistics sheet.

1. Delete Rows 1 and 2. Delete all 2015 row entries. Label E1 as **Portion of GDP (World)**. Wrap text / merge cells E1 / E2 (Bold, Light Green Fill, Middle Align) (**3** Points)
2. Create a table for the range A1:E24. As the second row becomes empty, delete it. Change the table name to **GDP** (**3** Points)

v) Portion of GDP (World) is calculated by **dividing** GDP of each region / country by World GDP. Could you fill E3:E24 accordingly. Format the very range a percentage with 2 decimal places. Center the range and make it bold. (**4** Points)

1. Change table style to Gold, Table Style Medium 5. (**2** Points)
2. Sort table by Portion of GDP (World) in an ascending order (i.e., from smallest to largest). (**4** Points)
3. Consider **Population** column. By adding a Row Total, use an appropriate function to calculate the Standard Deviation of the Population (Number rounded to the whole number (use 1,000 separator), Verdana Pro Cond, Bold, right aligned, Green, 16). (**5** Points)
4. Apply conditional formatting on **Country** column so that cells including T letter are marked as Bold, Blue outline and Red Fill. (**5** Points)
5. Consider **GDP vs. Population** sheet. Select A1:H55 as your print area. Go to print preview, change the orientation to landscape. Make sure to have Rows 1:4 appear equally in the second printable page. Decrease all margins to the extent possible and adjust size as to fit to 1 page wide by 2 pages tall. Center the range horizontally. Insert the header: **CTIS 186 Final Exam** and the footer: **Page 1** (Both centered). (**4** Points)
6. Consider **Chart** sheet. Select B2:O24 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 page wide by 1 page tall. Center the range horizontally and vertically. Insert the header: **CTIS 186 Final Exam** and the footer: **Page 2** (Both Right aligned). (**3** Points)
7. Consider **Statistics** sheet. Select A1:E24 as your print area. Decrease all margins to the extent possible and adjust size as to fit to 1 page wide by 1 page tall. Center the range horizontally and vertically. Insert the header: **CTIS 186 Final Exam** and the footer: **Page 3** (Both Left aligned). (**3** Points)
8. Save your Excel file and submit it as indicated by your Senior Lecturer. (**1** Point)

**GOOD LUCK!**