**Member ID: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Time: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Rank: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**



**ADVANCED SPREADSHEET APPLICATIONS**

(235)

**REGIONAL 2024**

**PRODUCTION**

Job 1: Format Spreadsheet/Create Formulas \_\_\_\_\_\_\_\_\_\_ (100 points)

Job 2: Create and Format Chart \_\_\_\_\_\_\_\_\_\_ (75 points)

                        Job 3: Add Functions and Subtotal Data \_\_\_\_\_\_\_\_\_\_ (150 points)

**TOTAL POINTS \_\_\_\_\_\_\_\_\_\_ (325 points)**

**Test Time: 90 minutes**

**GENERAL GUIDELINES:**

*Failure to adhere to any of the following rules will result in disqualification:*

1. Member must hand in this test booklet and all printouts if any. Failure to do so will result in disqualification.
2. No equipment, supplies, or materials other than those specified for this event are allowed in the testing area. No previous BPA tests and/or sample tests (handwritten, photocopied, or keyed) are allowed in the testing area.
3. Electronic devices will be monitored according to ACT standards.

**EXAM GUIDELINES:**

1. Ensure this test booklet contains Jobs 1-3.
2. Key all jobs according to the instructions given.
3. Correct any and all formatting, spelling or grammar errors. Use the formatting guide in the *Style & Reference Manual***.**
4. Your name or initials should *not* appear on any work you submit. Use your Member ID in any occasion you would normally key your reference initials.
5. In the lower **right** hand corner of ALL work submitted (unless otherwise specified), key your Member ID and job number.
6. If you complete the event before the end of the time allotted, notify the proctor. Time may be considered a factor in determining a winner when there is a tie score.
7. Place your scoring sheet on top of your jobs. Jobs should be placed in numerical order.

|  |  |  |
| --- | --- | --- |
| **Job 1 (Format Spreadsheet/Create Formulas)** | **Points Possible** | **Points Earned** |
| Member Number and Job Number in right section of footer | 5 |  |
| Format Cells A4-F19 Light Yellow, Table Style Light 19. | 5 |  |
| Format Cell A1 with Heading 1 cell style, A2 with Heading 2. Merge and center. | 10 |  |
| Format table data in Accounting format, 0 decimals, no dollar sign, autofit column widths. | 10 |  |
| Formal in Cell F5 to sum quarterly data; formula copied to F6-F9. | 5 |  |
| Conditional Formatting in data, highlighting cells in red that rank in the Top 20% of sales. | 15 |  |
| Column heading Annual Bonus in G5, auto-fit column width. | 5 |  |
| IF Formula calculating 2% bonus on sales over $2,000,000 | 20 |  |
| Print data in landscape orientation | 5 |  |
| Fit to one page for printing | 5 |  |
| Print again showing formulas, hiding Columns B-E. | 10 |  |
| Formula printout shows IF Formula in entirety | 5 |  |
| **Subtotal** | **100** |  |

|  |  |  |
| --- | --- | --- |
| **Job 2 (Create and Format Chart)** | **Points Possible** | **Points Earned** |
| Create a Stacked Column chart using agent’s sales by quarter. | 15 |  |
| Resize chart to fit cells A1-A25. | 5 |  |
| Change chart title to AGENT SALES BY QUARTER | 5 |  |
| Rename legend labels to Qtr 1, Qtr 2, Qtr 3, Qtr 4 | 10 |  |
| Change chart style to Style 3 | 5 |  |
| Change color of chart columns to Monochromatic Palette 4. | 10 |  |
| Add axis titles to chart, Y being Sales and X being Agents | 10 |  |
| Add Member ID# and Job 2 in right footer | 5 |  |
| Print chart in landscape, centered vertically and horizontally on page | 10 |  |
| **Subtotal** | **75** |  |

|  |  |  |
| --- | --- | --- |
| **Job 3 (Add Functions and Subtotal Data)** | **Points Possible** | **Points Earned** |
| Member number and job number in right section of footer | 5 |  |
| Create Agent/Commission Rate sheet, entering all data accurately in Sheet 2 | 20 |  |
| Add light gray, background 2, darker 10% fill to cells A4-F4 in Sheet 1 | 5 |  |
| Insert VLOOKUP function in Cells G5-G35 in Sheet 1 to find commission percentage for each agent from Sheet 2. | 20 |  |
| Use absolute cell reference in VLOOKUP function. | 10 |  |
| Add column headings to cells G4 and H4 and format to match other headings. | 10 |  |
| Merge and center title and subtitle over columns A-H | 5 |  |
| Formula in Cell H5 to calculate commission on purchase price and copy to cells beneath | 10 |  |
| Sort data in table by Sales Agent, then by Client Last Name, both in ascending order | 10 |  |
| Create subtotal of each Sales Agent’s total commissions, including Grand Total below the data. | 20 |  |
| Bold subtotals and Grand total and change to Accounting format, 0 decimals | 10 |  |
| Auto-fit column A | 5 |  |
| Print worksheet with data in landscape orientation. | 5 |  |
| Hide Columns B-E and print formulas in landscape | 10 |  |
| Formula printout shows all functions/formulas in full (no truncation) | 5 |  |
| **Subtotal** | **150** |  |
| **TOTAL POINTS** | **325** |  |

**As an employee of Precision Realty Company, you have been asked to format and analyze data for the business.**

**JOB 1:** **Format Spreadsheet/Create Formulas**

1. Open Job1Data file.
2. Format cells A4-F19 with Light Yellow, Table Style Light 19.

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1. Format Cell A1 with Heading 1 cell style, and Cell A2 with Heading 2. Merge and center A1 and A2 across Columns A-G.
2. Format the data in the table with the Accounting number format, 0 decimals, no dollar sign, and autofit column widths of Columns A-G.
3. Insert a formula in cell F5 to sum the data from each quarter to an annual total. Copy formula to cells F6-F19.
4. Add Conditional Formatting to Columns B-E of the table, highlighting cells that rank in the Top 20% of sales with a Light Red Fill with Dark Red Text.
5. In cell G5, insert the column heading **Annual Bonus.** Auto-fit column width.
6. In cells G5-G19, insert an IF formula that calculates a bonus of 2% on all sales OVER $2,000,000, otherwise 0 is given.
7. Add your Member ID# and Job 1 in right footer.

1. Print spreadsheet in landscape orientation showing data. Then print spreadsheet showing formulas, in landscape orientation, hiding Columns B-E and expanding Column G to ensure the entire IF formula is visible on the printout.

**JOB 2: Create and Format Chart**

1. Using the spreadsheet from Job 1, create a Stacked Column chart using the agents’ sales by quarter, and move it to a separate sheet as an embedded chart. Rename Sheet2 “Chart.” Resize chart to fit cells A1-K25 on the Chart sheet.
2. Change the chart title to AGENT SALES BY QUARTER.
3. Rename the legend labels to Qtr 1, Qtr 2, Qtr 3 and Qtr 4.
4. Change the chart style to Style 3, and the color to Monochromatic Palette 4.
5. Add Axis Titles to the chart, with the Y axis title being “Sales” and the X axis title being “Agents.”
6. Add your Member ID# and Job 1 in right footer.
7. Print the chart in landscape orientation, centering it vertically and horizontally on the page.

**JOB 3: Add Functions and Subtotal Data**

1. Open Job3Data worksheet that has been provided to you.
2. In Sheet2 of the Job3Data file, create the following table:

|  |  |
| --- | --- |
| **Agent** | **Commission Rate** |
| Alvarez | 5% |
| Boone | 3% |
| Crenshaw | 5% |
| Ford | 4% |
| Grady | 4% |
| Locklear | 5% |
| Miller | 5% |
| Nguyen | 4% |
| Ogea | 3% |
| Patel | 3% |
| Robinson | 3% |
| Smith | 5% |
| Vermeer | 5% |
| Williams | 4% |
| Wu | 5% |

1. In Sheet 1, add a light gray, background 2, darker 10% fill to the column headings in cells A4-F4.
2. In Sheet 1, Cell G5, insert a VLOOKUP function to find the commission percentage for Boone from the Sheet2 table you created in step 2 above. Be sure to use an absolute cell reference in your function arguments. Copy the function to Cells G6-G35.
3. Add column headings to Cells G4 (Commission %) and H4 (Commission on Sale) and format to match other column headings.
4. Recenter title and subtitle over columns A-H.
5. Create formula in Cell H5 to calculate commission on purchase price based on the commission percentage, and copy the formula to all other cells in column H.
6. Sort data in worksheet by Sales Agent, and then by Client Last Name, both in ascending order.
7. Select Cells F4 through H35 and use the outline group to create a subtotal of each Sales Agent’s total commissions, including a summary below the data.
8. Change the subtotals (i.e., Alvarez in Cell H10) and the Grand Total to Accounting number format, include dollar sign, 0 decimal places, bold.
9. Add Member ID and Job 3 in right footer.
10. Print worksheet in landscape orientation.
11. Hide Columns B through E and print spreadsheet again, this time showing formulas, in landscape, fit columns to one page, extending columns if necessary to make sure complete formulas are visible.