**Assignment Number 2 –** GRAPHICAL REP. OF DATA

Register Number: 1740256

**Date:** 25/06/2017

1. **Aim** - The following table shows monthly expenditure of three families. Represent the data by a suitable diagram on percentage basis.

|  |  |  |  |
| --- | --- | --- | --- |
| Item of expenditure | Family A | Family B | Family C |
| Food | 43 | 83 | 120 |
| Clothing | 8 | 17 | 25 |
| Recreation | 3 | 10 | 12 |
| Education | 5 | 9 | 15 |
| Rent | 10 | 21 | 17 |
| Miscellaneous | 6 | 15 | 17 |

**Procedure** –

1. Select the data in its entirety after inserting it into an excel sheet.  
2. Go to the ‘Insert’ menu, and click on ‘Column’ under the ‘Charts’ heading**.**3. In the options that appear, choose ‘100% Stacked Column’.  
4. In the chart that appears, right click on the key to the right of the chart, i.e. the list of families.  
5. Choose the ‘Select Data’ option from the drop-down menu that appears.  
6. Choose ‘Switch Rows and Columns’ button the dialogue box that appears, and click OK.

**Calculations –**

**Conclusion** –

The calculations show the monthly expenditure of three families and the data is represented by a suitable diagram on percentage basis.

1. **Aim** - Draw a multiple bar diagram for the following data

|  |  |  |  |
| --- | --- | --- | --- |
| Year | Sales (‘000) | Gross profit (‘000) | Net Profit (‘000) |
| 2000 | 100 | 30 | 10 |
| 2001 | 120 | 40 | 15 |
| 2002 | 130 | 45 | 25 |
| 2003 | 150 | 50 | 25 |

**Procedure** –

1. Select the data in its entirety after inserting it into an excel sheet.  
2. Go to the ‘Insert’ menu, and click on ‘Bar’ under the ‘Charts’ heading**.**3. In the options that appear, choose ‘100% Stacked Bar’.

**Calculations –**

**Conclusion** –

The calculations show the sales, gross profit, & net profit with their corresponding years represented by a suitable multiple bar diagram on percentage basis.

1. **Aim** - Prepare a pie diagram for the following data relating to the cost of production of a commodity in 2005.

|  |  |
| --- | --- |
| Items | Cost |
| Raw material | 4200 |
| Labour | 2100 |
| Factory overheads | 1400 |
| Office overheads | 700 |
| No. of units produced | 700 |

**Procedure** –

1.Select the data in its entirety after inserting it into an excel sheet.  
2. Go to the ‘Insert’ menu, and click on ‘Pie’ under the ‘Charts’ heading**.**3. In the options that appear, choose ‘3-D Pie’.

**Calculations –**

**Conclusion** –

The calculations show the cost of production of a commodity in 2005 represented by a suitable pie chart on percentage basis.

1. **Aim** - From the data set pain\_medication.xlsx prepare a pivot table for gender and health status and then plot a multiple bar diagram and a subdivided bar diagram.

**Procedure** –

* + - 1. Select the given data and go insert menu.
      2. Choose the pivot table option making sure that the input range contains the entire data set.
      3. In the resultant pivot table, drag the gender option to the row labels box.
      4. Drag the gender caption to the values box.
      5. Click on the gender tab in the values box, go to value field settings and choose count.
      6. In the resultant pivot table, drag the health caption to the row labels box.
      7. Drag the health caption to the values box.
      8. Click on the health tab in the values box, go to value field settings and choose count.
      9. For a multiple bar diagram, select the table completely and go to insert menu.
      10. Choose clustered bar under the bar tag in the charts heading.
      11. For a subdivided bar, choose the stacked menu option.

**Calculations –**

|  |  |  |
| --- | --- | --- |
| **Row Labels** | **Count of gender** | **Count of health** |
| **0** |  |  |
| 1 | 9 | 9 |
| 2 | 44 | 44 |
| 3 | 46 | 46 |
| **0 Total** | **99** | **99** |
| **1** |  |  |
| 1 | 19 | 19 |
| 2 | 37 | 37 |
| 3 | 45 | 45 |
| **1 Total** | **101** | **101** |
| **Grand Total** | **200** | **200** |

**Conclusion** –

The calculations show a pivot table for gender and health status and then a multiple bar diagram and a subdivided bar diagram.

1. **Aim** – Prepare a bar chart for gender, status and treatment for the data set pain\_medication.xlsx

**Procedure** –

1. Select the given data and go insert menu.
2. Choose the pivot table option making sure that the input range contains the entire data set.
3. In the resultant pivot table, drag the gender option to the row labels box.
4. Drag the gender caption to the values box.
5. Click on the gender tab in the values box, go to value field settings and choose count.
6. In the resultant pivot table, drag the status caption to the row labels box.
7. Drag the status caption to the values box.
8. Click on the status tab in the values box, go to value field settings and choose count.
9. In the resultant pivot table, drag the treatment caption to the row labels box.
10. Drag the treatment caption to the values box.
11. Click on the treatment tab in the values box, go to value field settings and choose count.
12. For a multiple bar diagram, select the table completely and go to insert menu.
13. Choose clustered bar under the bar tag in the charts heading.

**Calculations –**

|  |  |  |  |
| --- | --- | --- | --- |
| **Row Labels** | **Count of gender** | **Count of treatment** | **Count of status** |
| **0** |  |  |  |
| **0** |  |  |  |
| 0 | 11 | 11 | 11 |
| 1 | 43 | 43 | 43 |
| **0 Total** | **54** | **54** | **54** |
| **1** |  |  |  |
| 0 | 10 | 10 | 10 |
| 1 | 35 | 35 | 35 |
| **1 Total** | **45** | **45** | **45** |
| **0 Total** | **99** | **99** | **99** |
| **1** |  |  |  |
| **0** |  |  |  |
| 0 | 14 | 14 | 14 |
| 1 | 36 | 36 | 36 |
| **0 Total** | **50** | **50** | **50** |
| **1** |  |  |  |
| 0 | 12 | 12 | 12 |
| 1 | 39 | 39 | 39 |
| **1 Total** | **51** | **51** | **51** |
| **1 Total** | **101** | **101** | **101** |
| **Grand Total** | **200** | **200** | **200** |

**Conclusion** –

The calculations show a bar chart for gender, status and treatment for the data set pain\_medication.xlsx

1. **Aim** – Prepare pie diagrams for health status of males and females for the data set pain\_medication.xlsx

**Procedure** –

1. Select the given data in its entirety, go to the ‘Insert’ menu and choose the ‘Pivot Table’ option.  
2. Drag ‘Gender’ to the ‘Values’ box.  
3. Drag ‘Health’ to the ‘Row Label’ box as well as the ‘Values’ box.  
4. Click on the ‘Health’ tab in the ‘Values’ box, go to ‘Value Field Settings’, and choose ‘Count’.  
5. Select the resultant data, go to the ‘Insert’ menu, and choose ‘Pie’ under the ‘Pie’ option in the ‘Charts’ heading.  
6. To obtain separate graphs for male and female, click on the ‘Gender’ tab in the chart obtained after step 5. (Assuming ‘0’ is ‘Male’ and ‘1’ is ‘Female’).  
7. Filter the graph by un-ticking the ‘Select All’ option, and ticking either of the genders

**Calculations –**

|  |  |
| --- | --- |
| **Row Labels** | **Count of health** |
| **1** |  |
| 1 | 19 |
| 2 | 37 |
| 3 | 45 |
| **1 Total** | **101** |
| **Grand Total** | **101** |

**Conclusion** –

The calculations show Prepare pie diagrams for health status of males and females for the data set pain\_medication.xlsx