**Graphical Representation of Data**

1. 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 |

1. 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 |

1. 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 |

1. 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.
2. Prepare bar chart for gender, status and treatment for the data set pain\_medication.xlsx
3. Prepare pie diagrams for health status of males and females for the data set pain\_medication.xlsx

***Question 1*  
  
AIM:** To represent the given data ingraphical form on the basis of percentage. **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. Click the ‘Switch Rows and Columns’ button in the center of the dialogue box that appears, and click OK. **CALCULATION:**

|  |  |  |  |
| --- | --- | --- | --- |
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| Rent | 10 | 21 | 17 |
| Miscellaneous | 6 | 15 | 17 |

**CONCLUSION:**The given data has been represented ingraphical form on the basis of percentage.