**Advance Excel Practical**

**Practical 1**

**1.** Prepare a worksheet containing the Name, amount, Interest Rate and Simple Interest earned for 1 year and 2 year.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **A** | **B** | **C** | **D** | **E** |
| **1** | **Name** | **Amount** | **Rate** | **For 1 year** | **For 2 years** |
| 2 | Kishor | 50000 | 9.5 |  |  |
| 3 | Lata | 40000 | 9 |  |  |
| 4 | Dilip | 25000 | 9.05 |  |  |
| 5 | amit | 20000 | 8.75 |  |  |
| 6 | Prerana | 17500 | 9.1 |  |  |

**Answer**

**Step 1:** Type the following formulas in cell D2 simple Interest for 1 year **=B2\*C2\*1/100**

**Step 2:** Type the following formulas in cell E2 simple Interest for 2 year **=B2\*C2\*2/100**

**2.** Prepare a worksheet containing the Name, amount, Interest Rate and Compound Interest earned for 1 year and 2 year.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **A** | **B** | **C** | **D** | **E** |
| **1** | **Name** | **Amount** | **Rate** | **Amount After 1 year** | **Compound Interest** |
| **2** | Kishor | 50000 | 9.5 |  |  |
| **3** | Lata | 40000 | 9 |  |  |
| **4** | Dilip | 25000 | 9.05 |  |  |
| **5** | amit | 20000 | 8.75 |  |  |
| **6** | Prerana | 17500 | 9.1 |  |  |
| **7** |  |  |  |  |  |
| **8** | Compunding Periods |  |  | 4 |  |
| **9** | Time |  |  | 2 |  |

**Answer**

**Step 1:** Type the following formulas in cell D2 Amount After 1 year **=B2\*(1+C2/(100\*D8))^(D8\*D9)**

**Step 2:** Type the following formulas in cell E2 Compound Interest **=D2-B2.**

**3.** A computer is purchased for 100000 its economic life is expected to be 5 years and its scrap value is 10000. Prepare a table for annual depreciation under straight line method. The rate of depreciation is 10%.

Formula is (value-scrapvalue)/n where n is no of years.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **A** | **B** | **C** | **D** | **E** | **F** |
| **1** | **value** | 100000 |  |  |  |  |  |
| **2** | **scrap value** | 10000 |  |  |  |  |  |
| **3** | **years** | 5 |  |  |  |  |  |
| **4** | **Dep Rate** | 10% |  |  |  |  |  |
| **5** |  |  |  |  |  |  |  |
| **6** | **Straight Line Method** |  |  |  |  |  |  |
| **7** | **Years** | 0 | 1 | 2 | 3 | 4 | 5 |
| **8** | **SLN** |  |  |  |  |  |  |
| **9** | **Reduced Values** |  |  |  |  |  |  |

**Answer**

**Step 1:** Type the following formulas in cell B8

Enter 0

**Step 2:** Type the following formulas in cell C8 **=(B1-B2)/B3**

**Step 3:** in cell B9 =**B1**

**Step 4:**  in cell C9 **=B9-C8**

**Practical 2:**

1)Calculation of DA, HRA, PF, Gross salary and Net salary using MS-Excel.

Prepare a worksheet containing Names and Basic salary of 5 employees as shown below.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Employee number | Names | Basic Salary | DA | HRA | PF | Gross Salary | Net Salary |
| 101 | Diana Fernandes | 30000 |  |  |  |  |  |
| 102 | Gautam Shah | 27500 |  |  |  |  |  |
| 106 | Prachi Mehta | 28000 |  |  |  |  |  |
| 107 | Himanshu Mehta | 31000 |  |  |  |  |  |
| 108 | Prerana S | 30000 |  |  |  |  |  |
| 109 | Varun Kumar | 19000 |  |  |  |  |  |

We will calculate the DA, HRA and PF using the following formulae:

DA=20% of basic salary

HRA=If basic salary>=30000, HRA is 35% of basic salary. If basic salary>=20000 but less than 30000, HRA is 25% of basic salary. If basic salary<20000, HRA is 20% of basic salry.

PF is 20% of basic salary.

Solution:

1. To find DA
2. Select the cell D2
3. Type the formula =C2\*20/100
4. Drag up to D7.
5. To find HRA
6. Select the cell E2
7. Type the formula =if(C2>=30000,C2\*35/100,if(C2>=20000,C2\*25/100,C2\*20/100))
8. Drag up to E7.
9. To find PF
10. Select the cell F2
11. Type the formula =C2\*12/100
12. Drag up to F7.
13. To find Gross Salary
14. Select the cell G2
15. Type the formula =C2+D2+E2
16. Drag up to G7.
17. To find Net Salary
18. Select the cell H2
19. Type the formula =G2-F2
20. Drag up to H7.

**Practical 3**

1) Prepare a worksheet containing the Name and taxable income in columns A and B respectively from rows 1 to 26, the first row contains the headings and the remaining rows contain the data. Use your own data.

Carry out the following operations on this worksheet .

1. Save the worksheet under your name followed by your roll no, question no. e. g.MONA1232

2. Obtain the income tax in column C using the following income tax slab.

|  |  |
| --- | --- |
| Taxable income(Rs) | Rate |
| First 1,00,000 | Nil |
| Next 60,000 | 10% |
| Next 70,000 | 20% |
| Excess | 30% |

3. Obtain the surcharge in column D, where surcharge is 3% of the income tax for those whose taxable income is above Rs 5,00,000.

4. Obtain the total tax in column E, as the sum of income tax and surcharge.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Taxable Income | Income Tax | Surcharge | Total Tax |
| Amit | 98000 |  |  |  |
| Priya | 158000 |  |  |  |
| Menakshi | 193000 |  |  |  |
| Mumtaz | 245000 |  |  |  |
| Dipti | 540000 |  |  |  |

**Solution:**

1. **To Obtain the income tax in column C**
2. Select the cell C2
3. Type the formula =if(B2<=100000,0,if(B2<=160000,(B2-100000)\*10%,if(B2<=230000,60000\*10%+(B2-160000)\*20%,60000\*10%+70000\*20%+(B2-230000)\*30%)))
4. Drag up to C6.
5. **To Obtain the surcharge**
6. Select the cell D2
7. Type the formula =if(B2>500000,C2\*3%,0)
8. Drag up to D6.
9. **Obtain the total tax**
10. Select the cell E2
11. Type the formula =C2+D2
12. Drag up to E6.

**Practical 4:**

Prepare a worksheet containing the names and marks in three subjects in columns A,B,C and D respectively from rows 1 to 31.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Names** | **Subject 1** | **Subject 2** | **Subject 3** | **Total Marks** |
| Amit | 56 | 67 | 65 |  |
| Priya | 67 | 61 | 59 |  |
| Meenakshi | 69 | 71 | 83 |  |
| Mumtaz | 82 | 81 | 86 |  |

1. Obtain total marks for each student in column D.
2. Construct the 3D pie chart for the totals.
3. Construct a line for Subject 1 and Subject 3.
4. Display Only those students details who have total marks exceeding 180.
5. Display Only Those Students details whose names begin with ‘R’.

**Solution:**

1. **To Obtain total marks.**
2. Select the cell E2
3. Type the formula =B2+C2+D2
4. Drag up to D7.

**2. To Construct the 3D pie chart for the totals.**

i) Select the range **A1 to A5** and **E1 to E5** -🡪

ii) Select **Insert** tab in the charts group click **Pie**

1. Choose 3D Pie Chart 🡪 Pie in 3-D

**3.Construct a line for Subject 1 and Subject 3.**

i) Select the range **B1 to B5** and **D1 to D5** -🡪

ii) Select **Insert** tab in the charts group click **Line**

iii)Choose 2D Line Chart 🡪 line in 2-D.

1. **Display Only those students details who have total marks exceeding 180.**
2. Select the range A1:E5
3. Click **Data**🡪 **Sort and Filter**. Drop down arrow appear next to each column title.
4. On the drop down arrow near **Total Marks**, Select **Number Filters** and then select **Greater Than**…. And Type **180**.
5. Display Only Those Students details whose names begin with ‘R’.
6. Display Only Those Students details whose names begin with ‘R’.
7. Select the range A1:E5
8. Click **Data**🡪 **Sort and Filter**. Drop down arrow appear next to each column title.
9. On the drop down arrow near **Name**, Select **Text Filters** and then select **Begin with**…. And Type **R**.

**Practical 5 A:**

The following worksheet contain names of currencies, countries and cities as shown below. User the currency name in cell B11, and the VLOOKUP function will be used to display the corresponding country name and city name in cell B8 and B9 respectively.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **A** | | **B** | **C** |
| **1** | **Currency** | | **Country** | **City** |
| 2 | Dollar | | USA | Washington |
| 3 | Yen | | Japan | Tokyo |
| 4 | Pound | | UK | London |
| 5 | Rupee | | India | New Delhi |
| 6 | Dinar | | Bahrain | Manama |
| 7 |  | |  |  |
| 8 | Country | | India |  |
| 9 | City | | New Delhi |  |
| 10 |  | |  |  |
| 11 | Currency | | rupee |  |
| For country | | In cell B8 , type the formula =VLOOKUP(B11,A2:C6,2,FALSE) | | | |
| For City | | In cell B9 , type the formula =VLOOKUP(B11,A2:C6,3,FALSE) | | | |

**Practical 5 B**

The following worksheet contain names of currencies, countries and cities as shown below. User can enter the currency in cell B9 and the Hlookup function will be used to display the corresponding country name and city name in Cell B6 and B7 respectively.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **A** | **B** | **C** | **D** | **E** | **F** |
| **1** | **Currency** | Dollar | Yen | Pound | Rupee | Dinar |
| 2 | **Country** | USA | Japan | UK | India | Bahrain |
| 3 | **City** | Washington | Tokyo | London | New Delhi | Manama |
| 4 |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |
| 6 | Country |  |  |  |  |  |
| 7 | City |  |  |  |  |  |
| 8 |  |  |  |  |  |  |
| 9 | Currency |  |  |  |  |  |

**Solution:**

|  |  |
| --- | --- |
| For country | In cell B6 , type the formula =HLOOKUP(B9,B1:F3,2,FALSE) |
| For City | In cell B9 , type the formula =HLOOKUP(B9,B1:F3,3,FALSE) |

**Practical 6**

Prepare a worksheet containing the Name, Age, Department and Bonus amount in Column A, B,C and D respectively from rows 1 to 10, the first row contains heading and the remaining rows contain data.

Carry out the following operation on this worksheet.

1. Sort the data in the ascending order of department.

2. Obtain subtotal of Bonus for each department.

3. Explain the use of 1 and 2 row level symbol.

4. Remove these subtotal and return the worksheet to its previous state.

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Age** | **Department** | **Bonus** |
| Amit | 30 | Sales | 3300 |
| Anil | 25 | Production | 2500 |
| Ashwini | 27 | Production | 3200 |
| Dipali | 31 | Marketing | 4100 |
| Geeta | 25 | Finance | 2500 |
| Hansika | 28 | Sales | 3000 |
| Kalpna | 29 | Marketing | 3900 |
| Kalpna | 28 | Production | 2600 |
| Monica | 27 | Finance | 3000 |
| Mumtaz | 27 | sales | 3600 |

**Answer**

**1. Sort the data in the ascending order of department.**

1. select entire data (Cell A2:D11).

2. Click on **Data** -> **Sort**

3. Select **Sort By** -> **Department**

**2. Obtain subtotal of Bonus for each department.**

1. select entire data (Cell A2:D11).

2. Click on **Data** -> **Subtotal**

3. The subtotal dialog Box appear , In the Subtotal Dialog Box make selection following

At each Change -> Select **Department**

Use Function -> Select **Sum**

Add Subtotal to -> Select **Bonus**

Replace Current subtotal -> Enable

Summary below data -> Enable

4. Click on **Ok** Button

**3. Explain the use of 1 and 2 row level symbol.**

**1.** Click on outline **s**ymbols.

**4. Remove these subtotal and return the worksheet to its previous state.**

1. select cell A1..

2. Click on **Data** -> **Subtotal**

3. The subtotal dialog Box appear , In the Subtotal Dialog Box click on **Remove All button**

**Practical 7**

Prepare a worksheet containing the Name, Join Date , Department and Salary in Column A, B,C and D respectively from rows 1 to 10, the first row contains heading and the remaining rows contain data.

Carry out the following operation on this worksheet.

1. Prepare another Pivot Table on the same data taking Department in the row area and

Average salary and Maximum Salary in the data area.

2. Prepare a Pivot Table Report containing Join Date in the row area and sum salary

and Minimum Salary in the data area.

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Join Date** | **Department** | **Salary** |
| Geeta | 29/3/2008 | Finance | 25000 |
| Monica | 3/9/2006 | Finance | 30000 |
| Dipali | 12/4/2007 | Finance | 37000 |
| Kalpna | 3/9/2006 | Finance | 40000 |
| Anil | 12/4/2007 | marketing | 41000 |
| Ashwini | 15/8/2008 | marketing | 39000 |
| Kalpna | 3/9/2006 | Production | 25000 |
| Amit | 3/9/2006 | Production | 32000 |
| Hansika | 29/3/2008 | Production | 26000 |
| Mumtaz | 3/9/2006 | Production | 33000 |

**Answer**

1. Prepare another Pivot Table on the same data taking Department in the row area and

Average salary and Maximum Salary in the data area.

1. select entire data (Cell A2:D11).

2. Click on **Insert** -> **Pivot Table -> Pivot Table**

**3.** The **Pivot Table** dialog Box appear , In the **Pivot Table** Dialog Box make 1. In Select a table or range -> type **A1: D11**

**2.** Select **New Worksheet**

**3.** Click on **Ok** Button

4. Excel shows window on right of the screen.

5. In **Pivot Table Field List ->** Click on **Department ->**it is displayed in **Row Labels**

**6.** In **Pivot Table Field List ->** Click on **Salary ->**it is displayed in **Values.**

**7.** Click on **Values -> Value Field Settings ->** Select **Average**

**8.** Click on **Ok** Button

9. In **Pivot Table Field List ->** drag **Salary ->again** it is displayed in **Values.**

**10.** Click on **Values -> Value Field Settings ->** Select **Max**

**11.** Click on **Ok** Button

2. Prepare a Pivot Table Report containing Join Date in the row area and

sum salary and Minimum Salary in the data area.

1. select entire data (Cell A2:D11).

2. Click on **Insert** -> **Pivot Table -> Pivot Table**

**3.** The **Pivot Table** dialog Box appear , In the **Pivot Table** Dialog Box make 1. In Select a table or range -> type **A1: D11**

**2.** Select **New Worksheet**

**3.** Click on **Ok** Button

4. Excel shows window on right of the screen.

5. In **Pivot Table Field List ->** Click on **Join Date ->**it is displayed in **Row Labels**

**6.** In **Pivot Table Field List ->** Click on **Salary ->**it is displayed in **Values.**

**7.** Click on **Values -> Value Field Settings ->** Select **Sum**

**8.** Click on **Ok** Button

9. In **Pivot Table Field List ->** drag **Salary ->again** it is displayed in **Values.**

**10.** Click on **Values -> Value Field Settings ->** Select **Min.**

**11.** Click on **Ok** Button