**Microsoft Excel**

**Section 1:- Input Data and Simple Calculation:-**

1. Open ms excel and input the following data in the sheet.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Em/code** | **Employee name** | **Address** | **City** | **Region** | **DOB** | **Basic** |
| Em/01 | JP Kumar | Andheri (W) | Mumbai | W | 25/04/69 | 12000 |
| Em/02 | Bharat Singh | Govindpuri | Delhi | N | 25/08/75 | 7500 |
| Em/03 | Priya Singh | Sector-7 | Noida | S | 07/04/89 | 13000 |
| Em/04 | Kunal Arora | Chandni Chowk | Bangalore | E | 04/05/86 | 16000 |
| Em/05 | Ravi  Gupta | Sector 3 | Cuttack | W | 03/06/78 | 6000 |
| Em/06 | Sumit Verma | Elgin Road | Delhi | W | 15/08/89 | 15000 |
| Em/07 | Kailash Chand | Mg Road | Delhi | N | 25/07/85 | 13000 |
| Em/08 | Ankit Chopra | Alipore | Mumbai | S | 06/05/86 | 18000 |
| Em/09 | Vinita Goyal | Natraj Road | Kolkata | E | 15/05/78 | 14000 |
| Em/10 | Sudhasnhu Verma | G.K 11 | Kolkata | N | 12/010/90 | 8000 |

1. Type total amount in the row below the last employee name and calculate the total basic amount.
2. Insert three columns next to basic column, as DA, HRA, and gross salary.
3. Calculate the DA, HRA, as 20% and 40% respectively for the entire employee than calculate the gross salary as (basic+DA+HRA).
4. Save the file with the name “**My Creation”** under your desktop folder.

**Session:-2 formatting features:-**

1. Insert one row before the first row (top of the row) than enter “**Employee Data** “in the cell A1.
2. Make the above data to appear in the centre of all the cell from A1-G1 (use merge cell) makes it bold, underline and font size”22”.
3. Apply the feature “Wrap **Text**” for all the columns heading and the “**Emp Name**” column.
4. Change the format of “EMP CODE” columns so that only by typing 1, 2 etc. will be converted automatically EM/01/ EM/02.
5. Rename the sheet 1, sheet 2 and sheet 3 as Data, North, and west and insert more sheets and name it as south, east and central. Delete the central sheet.
6. Change the width of date column to “12” and height of all the rows contain data to “22”.
7. Apply outline and inside border for all the data and shading option for only heading rows (Field heading also)
8. Apply formatting features on the basic amount as amount<=10000 Than Colour”BLUE” amount <=15000 than color “RED” and amount >15000 than color is “GREEN”.
9. Covert the entire amount cell Indian currency formats up to 1 decimals and digits grouping (comma) of three digits.
10. Change all the cells containing date to medium date (DD-MM-YYYY) save the file and close application.

**Section:-3 Logical Functions and Goal Seek, Scenario**

1. Open the file you have saved in last session delete the data from DA and HRA column. Enter 30% and 50% for DA and HRA in cell no. H13 and i15 respectively.
2. Calculate the DA and HRA based on the %entered above using mixed referencing (DA, HRA to be calculated using one formula and filled up to fill).
3. Insert three more filed as PF, P tax and net salary, after the column the gross salary:-calculate the Pf amount as 12% basic for all the employees.
4. Calculate the professional tax (P TAX) as per the following criteria.
5. Gross salary <5000 than P TAX is 0.
6. Gross salary >5000 and <7500 than P TAX is Rs.50 pm.
7. Gross salary >7500 and <10000 than P TAX is Rs 80 pm.
8. Gross salary >10000 and <12500 than P TAX is Rs.100 pm.
9. Gross salary >12500 and <15000 than P TAX is Rs.120 pm.
10. Gross salary >15000 than P TAX is Rs.150pm.
11. Calculate the net salary as (GROSS SALARY- PF- P TAX). Apply the currency formatting for all the amount cell fields with 2 decimals places.
12. Insert a new sheet and name its “DREAM TABLE” create a multiplication table for 2 to 25 (use mixed ref in formula).
13. Insert one more column before “GROSS SALARY” and name its bonus:- calculate the bonus as per the following criteria.
14. Basic <= 10000 than bonus 100%
15. Basic > 10000 and <=15000 than bonus 80%
16. Basic > 15000 than bonus is 75%
17. Enter the two more records of the employee (of your choice) using DATA- FORM.
18. The company is the one of the verge of increasing the DA% Mr. Bharat Singh (EM/02) interested to have DA of Rs. 2700/- calculate the DA% using goal seek which will full fill Mr. Bharat Singh.
19. Create the 3 different scenario based on the three different DA% such as 34%. 37% and 40 %.( the company wants to see the effect on the salary sheet and analyses.

**Section:-4 Sorting and Filtering:-**

1. Open the file you have saved in the last session arrange the database in the ascending order” NET SALARY” than by the “GROSS SALARY” and finally by the “EMP CODE”.
2. Rearrange the database in the ascending order of “EMP CODE” and then save the file.
3. Find out the employee from each region and copy the data to their respective sheet.
4. Find the employee in the data sheet that is from Delhi and having net salary more than 10000.
5. Find the employee whose name start with the letter “S” and then find the top there salary earner (net salary).
6. Find out the details in a new location in the same sheet for the employee who have more than 15000 net salaries and from north region.
7. Find out the details to a new sheet for those employees who have basic salary more than 15000 and from the east region.
8. Validation the region column so that it will accept only N, S, E, W as region. Put the error message for invalid data as “Please **Enter the Proper Region**” with the title as “**Invalid Data**”
9. Insert a new column” department” after the region column.
10. Fill the department column as your own wish.

**Session:-5 Financial Functions:-**

1. Mr. Sudhanshu verma purchased a pulsar 220 for Rs.85000 by taking a loan from ICICI bank repayable in the 3 years by the monthly installment with interest @8.5% p.a calculate the EMI for the loan ( use PMT).
2. Mr. Sudhasnhu verma want s to know the breakup of the principle amount in the EMI payable for the 1st month. (Use PPMT).
3. Mr. Sudhasnhu verma want s to know the breakup of the principle amount in the EMI payable for the 1st month. (Use PPMT).
4. Mrs. Poonam has a fixed deposit of Rs 25000/- in SBI bank for 5 years on which interest is given by the bank is 8.25%.calculate the maturity value for the Poonam (use FV).
5. Mr. Imran Khan is having the option of going for RD in which amount payable per month is 1200 interest @7.5% and the period of deposits will be 5 years he asked you to calculate the maturity value for this option (FV).
6. Mr. JP wants to invest in a plan where he will pay RS.1476 quarterly for the 10 years to get a maturity value of Rs. 80000. He wants to know to calculate the rate of interest he will earn on this plan of investment (use RATE).
7. Before opting the plan with the rate calculate above and for the same period & maturity value Mr.JP wants to know the present value of the investment plan (use PV).
8. Mrs. Kalpana wants to go RD scheme in Canara bank with an about of Rs. 1520 per month where the interest is payable @7.5% per annum she needs your help in finding the no of installment she has to pay (also calculate the no year) to get a maturity value of Rs. 50000/-(use NPER).

**Section 6:- Lookup Functions and Validations**:-

1. Insert a new sheet and name it’s as **“My Lookup”** type the heading in the 1st row as E code, name, city and DOB.
2. Define names to employee codes (from A3:A12) in the Data sheet as code and whole the data base in the same sheet as “DB”.
3. Create a pop up list in the leave sheet from A2:A11 which will base on the employee codes of data sheet with the input message as select from the drop down and error messages please select from the list using stop sign.
4. Randomly fill the cells from A2 to A11 by selecting the value from the pop up.
5. Now fill up the respective column of names and city for the employee using **VLOOKUP.**
6. Copy the entire database of data sheet and paste these in the transpose to any new location in the respective sheet.
7. Define name to horizontal database in the DATA sheet “as DBH”.
8. Then fill up the values of DOB row (from horizontal) of leave details sheet using HLOOKUP.
9. Copy the values of DOJ row (from horizontal) to DOJ column (vertical database) insert one more field after DOJ column and it’s as leave details.

**Session 7:- Consolidate and Graphs:-**

1. Insert a new sheet and name it’s as region report. Enter the details as given below:-

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S.A PVT LTD** | | | | | |
| **For the year ending 31-10-12** | | | | | |
| ***Sector 16 opposite Nehru college*** | | | | | |
| **Product** | **Quarter 1** | **Quarter 2** | **Quarter 3** | **Quarter 4** | **Total** |
| DVD writer | 50 | 350 |  |  |  |
| CD writer | 8 | 10 |  |  |  |
| 1 GB Ram | 6 | 15 |  |  |  |
| Mouse | 7 | 10 |  |  |  |
| Keyboard | 2 | 30 |  |  |  |
| **Total** |  |  |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S.A PVT LTD** | | | | | |
| **For the year ending 31-10-12** | | | | | |
| ***Sector 16 opposite Nehru college*** | | | | | |
| **Product** | **Quarter 1** | **Quarter 2** | **Quarter 3** | **Quarter 4** | **Total** |
| DVD writer | 50 | 350 |  |  |  |
| CD writer | 10 | 20 |  |  |  |
| 1 GB Ram | 8 | 10 |  |  |  |
| Mouse | 5 | 25 |  |  |  |
| Keyboard | 7 | 10 |  |  |  |
| **Total** |  |  |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **FINAL REPORT** | | | | | |
| **For the year ending 31-10-12** | | | | | |
|  | | | | | |
| ***Sector 16 opposite Nehru college*** | | | | | |
| **Product** | **Quarter 1** | **Quarter 2** | **Quarter 3** | **Quarter 4** | **Total** |
| DVD writer | 50 | 350 |  |  |  |
| CD writer | 10 | 20 |  |  |  |
| 1 GB Ram | 8 | 10 |  |  |  |
| Mouse | 5 | 25 |  |  |  |
| Keyboard | 7 | 10 |  |  |  |
| **Total** |  |  |  |  |  |

There is an expected increase of 10% for the 1st region and 12% for the 2nd region respectively for the coming two quarters according to calculate the figures for the qtr 4 both the region.

1. Calculate the product-wise and quarter wise total for the two regions
2. Calculate the consolidate values in the datasheet from the two region figures using consolidate features.
3. Create two columnar charts based on the first region –wise data of all the products will proper title and axes for both regions respectively.
4. Modify the above graph to show the values in the vertical (90 degree manner).
5. Create a new bar chart based on the 2nd region wise data with proper title.
6. Create another pie chart based on the consolidate data with proper title.
7. Apply some formatting features to the above pie chart and show the values in the perchantage.
8. Now change the location of the pie chart to a new sheet and save the file.
9. What Are Save As Workspace And Freeze Panes Consult Your Faculty.
10. How We Can Protect Our Worksheet And Workbook.