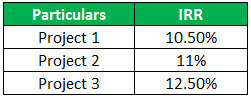
1. **Explain** how you can add columns and rows in Excel.  **[CO1]**
2. **Demonstrate** use conditional formatting in Excel to display 5 bottom values?
3. **Demonstrate** use of filter data in Excel. **Solve** filtering of data by using multiple criteria.

**[CO1, CO4]**

1. **Write** a formula which will return 10% of the largest number which are present in Cell A2 and A3. **[CO2]**
2. **Demonstrate** formula to get the average of the numbers which are present in cells A1, A3, A4 and A5 using *average()* function.
3. **Illustrate** use of conditional formatting in Excel. **Describe** an example of use of Conditional formatting.

**[CO1, CO2]**

1. **What is Ribbon and where does it appear? [CO1]**
2. **Demonstrate** the formula which will add numbers present in cells A1, A3, A4 and A5 using Sum() function. **[CO1]**
3. **Compare** and **contrast** the differences between “AND” and “OR” criteria of advanced filter. **[CO4]**
4. Global Incorporation is looking into three of the potential projects and will accept the project only if the IRR from the project is expected to be 12% or above. **Compose** a formula that shows whether to accept or reject the projects under consideration? **[CO3]**



1. **Compose** formula which will return larger number which are present in Cell A2 and A3. **[CO3]**
2. **Write** a formula which will return 20% of the largest number which are present in Cell A2 and B2.  **[CO2]**
3. **Demonstrate** how to use conditional formatting in Excel to display 5 top values. **[CO2]**
4. A giant electronics company is looking into the following potential products where they can earn at-least profits of 2200 . **Write** formula to show whether to accept or reject the products under consideration. **[CO4]**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **A** | **B** | **C** |
| **1** | **Products** | **Profit (Rs.)** | **Product to be considered** |
| 2 | Cube Printer | 3,718 |  |
| 3 | Micro-Cut Shredder | 2,401 |  |
| 4 | Canon image Advanced Copier | 18,480 |  |
| 5 | Monochrome Digital Laser Multifunction Copier | 1,996 |  |
| 6 | Personal Laser Copier | 2,303 |  |
| 7 | Electric Binding System | 1,973 |  |
| 8 | Manual ProClick Binding System | 2,740 |  |

1. **Demonstrate** the steps to transpose a data set. **[CO4]**
2. **Compare and contrast** advantages of advanced filter over normal filter. Demonstrate use of OR Criteria. **[CO3 CO4**]
3. **Explain** how you can include or exclude hidden rows when using *subtotal* function. **[CO4]**

*Refer the table below for following three questions*

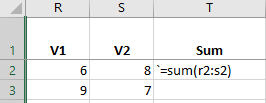
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **A** | **B** | **C** | **D** | **E** |
| **1** | **Product Name** | **Date of Sale** | **Sales Amount ($)** | **Region** | **% Sales** |
| 2 | Product A | 1/1/2022 | $500 | West |  |
| 3 | Product B | 1/2/2022 | $1,200 | East |  |
| 4 | Product C | 1/3/2022 | $750 | West |  |
| 5 | Product A | 1/4/2022 | $900 | North |  |
| 6 | Product B | 1/5/2022 | $1,800 | South |  |
| 7 | Product C | 1/6/2022 | $1,000 | East |  |
| 8 | Product A | 1/7/2022 | $1,200 | North |  |
| 9 | Product B | 1/8/2022 | $1,500 | West |  |
| 10 | Product C | 1/9/2022 | $1,000 | South |  |

1. **Write** a formula to get the total sales amount for each product? **[CO2]**
2. **Write** formula for the total sales amount for each region? You may create the necessary format on your answer sheet and write. **[CO4]**
3. **Write** the steps of locking the cells: A2:B12. **[CO3]**
4. **Write** formula to find out What was the percentage of sales for each product in relation to the total sales amount in Column E? **[CO4]**

*Refer The table below for following three questions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date** | **Region** | **Product** | **Units Sold** | **Revenue (Rs.)** |
| 01-01-2021 | West | A | 150 | 3000 |
| 01-01-2021 | East | B | 250 | 5000 |
| 01-01-2021 | South | C | 175 | 3500 |
| 01-01-2021 | North | D | 200 | 4000 |
| 01-02-2021 | West | B | 175 | 3500 |
| 01-02-2021 | East | C | 200 | 4000 |
| 01-02-2021 | South | D | 150 | 3000 |
| 01-02-2021 | North | A | 225 | 4500 |
| 01-03-2021 | West | C | 200 | 4000 |
| 01-03-2021 | East | D | 150 | 3000 |
| 01-03-2021 | South | A | 225 | 4500 |
| 01-03-2021 | North | B | 175 | 3500 |
| 01-04-2021 | West | D | 175 | 3500 |
| 01-04-2021 | East | A | 225 | 4500 |
| 01-04-2021 | South | B | 200 | 4000 |
| 01-04-2021 | North | C | 150 | 3000 |

1. **Write** a formula to get the total sales amount for each product? [CO4]
2. **Write** formula to find out, what was the average daily sales amount for the month of January. [CO4]
3. **Create** a formula to find out the highest quantity sold in Feb month. [CO4]
4. **Explain** Relative Cell Addresses using the following data view: [CO3]



*Refer the table below for following three questions*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Name** | **Age** | **Gender** | **Occupation** | **Salary (Rs.)** | **Bonus** |
| John | 35 | Male | Engineer | 80,000 |  |
| Sarah | 28 | Female | Sales | 60,000 |  |
| Tom | 42 | Male | Manager | 100,000 |  |
| Jane | 26 | Female | Marketing | 50,000 |  |

1. **Write** steps to give name to your table.
2. Consider above data, use VLOOKUP and **Write** formula to calculate Bonus using following criteria:

Salary < $ 50000, Bonus = 5% of Salary

Salary $50000 to < $75000, Bonus= 10% of Salary

Salary $75000 to < $ 100000, Bonus=20% Salary

>=$100000, Bonus = 25% of Salary

1. **Construct** table to setup problem to be solved by using VLOOKUP.

*Refer the table below for following three questions*

Consider following table product, which has details of products. You need to use this table for vlookup.

Table: product

|  |  |  |
| --- | --- | --- |
| ID | Product | Price |
| 101 | Apple | 80 |
| 102 | Orange | 50 |
| 103 | Banana | 45 |
| 104 | Mango | 120 |
| 105 | Pear | 70 |

In the following table **write** formula to find out each value as per column heading in empty cells:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | A | B | C | D | E |
| 10 | ID | Quantity | Product | Price | Total Price |
| 11 | 101 | 10 |  |  |  |
| 12 | 103 | 20 |  |  |  |
| 13 | 105 | 15 |  |  |  |
| 14 | 102 | 30 |  |  |  |
| 16 | 104 | 25 |  |  |  |

1. Product name [CO1,CO4]
2. Product Price [CO1,CO4]
3. Total price [CO1,CO4]

Based on the table *product* and using ids.

1. **Explain** how do you create Pivot Tables. Explain what will happen if you add a data column, say *City*, in the *Column* field for pivot table. [CO4]

*Refer the table below for following three questions*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Student Name | Phy | Che | Bio | Gender |
| Jan | 50 | 61 | 52 | M |
| Feb | 79 | 84 | 97 | F |
| Mar | 81 | 45 | 30 | F |
| Apr | 48 | 40 | 83 | F |
| May | 97 | 89 | 83 | M |
| Jun | 31 | 55 | 67 | M |
| Jul | 67 | 31 | 70 | F |
| Aug | 59 | 36 | 78 | M |

1. **Explain** how will a PivotTables looks for above data be used to filter data based on Gender?
2. **Explain** how do you change the value field to show some other result other than the Sum?
3. **Write** a formula to get the count of students scoring more than 90 marks in *Phy*?