**University of Barishal**

A logo of a book and a candle

AI-generated content may be incorrect.

**Course Title: EDGE: BU-CSE Digital Skills Training**

**Topic: MS Excell (If Formula, Sum IFS, Pivotable, Picture Group)**

**Submitted To:**

Md Mahbub E Noor

Assistant Professor

Department of Computer Science & Technology

University of Barishal

**Prepared By**

Israt Jahan Urmy

Roll : 10

Batch 67, Computer Fundamentals

Department of Accounting & Information Systems

Faculty of Business Studies

University of Barishal

**Date of Submission:**

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**Smart-Tech Electronics**

# Inventory Management System

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Item ID** | **Item Name** | **Category** | **Unit Price** | **Stock Quantity** | **Reorder Level** | **Total Value** | **Status** |
| 101 | Laptop | Electronics | 8,000৳ | 15 | 5 | 120,000৳ | In Stock |
| 102 | Smartphone | Electronics | 5,000৳ | 8 | 3 | 40,000৳ | In Stock |
| 103 | Printer | Electronics | 2,000৳ | 3 | 5 | 6,000৳ | Low Stock |
| 104 | Office Chair | Furniture | 1,500৳ | 12 | 4 | 18,000৳ | In Stock |
| 105 | Desk | Furniture | 3,000৳ | 5 | 2 | 15,000৳ | In Stock |
| 106 | Hard Drive | Accessories | 1,000৳ | 20 | 5 | 20,000৳ | In Stock |
| 107 | Monitor | Electronics | 2,500৳ | 7 | 3 | 17,500৳ | In Stock |
| 108 | Mouse | Accessories | 200৳ | 25 | 10 | 5,000৳ | In Stock |
| 109 | Keyboard | Accessories | 300৳ | 10 | 4 | 3,000৳ | In Stock |
| 110 | Router | Networking | 750৳ | 4 | 5 | 3,000৳ | Low Stock |
| Total Inventory Value | | |  |  |  | 247,500৳ |  |

## Formula

**IF:**

**To find out stock status:**

**=IF(E5<=F5,"Low Stock","In Stock")**

**Sum:**

**To calculate total inventory value:**

**=SUM(G5:G14)**

**Conditional formatting:**

**Use conditional formatting to highlight low stock**

|  |  |  |
| --- | --- | --- |
| Maximum stock quantity |  | 25 |
| Minimum stock quantity |  | 3 |
| No. of low stock item |  | 2 |
| Average Stock level |  | 11 |

## Formula:

=MAX(E5:E14)

=MIN(E5:E14)

=COUNTIF(H5:H14,"Low Stock")

=AVERAGE(E5:E14)

# Sales Information

|  |  |  |  |
| --- | --- | --- | --- |
| Sold Quantity | Total Sales | Discount | Net Sales |
| 10 | 80,000৳ | 4000 | 76,000৳ |
| 6 | 30,000৳ | 600 | 29,400৳ |
| 2 | 4,000৳ | 0 | 4,000৳ |
| 5 | 7,500৳ | 0 | 7,500৳ |
| 3 | 9,000৳ | 0 | 9,000৳ |
| 15 | 15,000৳ | 300 | 14,700৳ |
| 5 | 12,500৳ | 250 | 12,250৳ |
| 20 | 4,000৳ | 0 | 4,000৳ |
| 7 | 2,100৳ | 0 | 2,100৳ |
| 3 | 2,250৳ | 0 | 2,250৳ |
| Net Revenue | |  | 161,200৳ |

## Discount Rules:

1. 2% Discount for total sales over $10,000
2. 5% Discount for total sales over $50,000
3. No Discount if total sales ≤ $10,000

## Formula

**IF**

**To find out the amount of discount:**

=IF(J5>50000,J5\*5%,IF(J5>10000,J5\*2%,0))

# Chart

Select the Data

Click and drag to select your data, including column headers.

Insert a Column Chart

Go to the Insert tab in the Excel ribbon.

Click on the Column Chart icon in the Charts group.

Choose a chart type:

Clustered Column (default)

Stacked Column

100% Stacked Column

3D Column

Customize the Chart

Add Chart Title: Click on the chart title and type a new name.

Label Axes:

Go to Chart Design > Add Chart Element > Axis Titles.

Change Colors & Styles:

# Customer Data

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Gender** | **Age** | **Occupation** |
| Alice | Female | 28 | Engineer |
| Bob | Male | 35 | Teacher |
| Charlie | Male | 42 | Doctor |
| David | Male | 30 | Software Developer |
| Emma | Female | 25 | Graphic Designer |
| Frank | Male | 50 | Business Owner |
| Grace | Female | 38 | Lawyer |
| Henry | Male | 27 | Accountant |
| Isabella | Female | 31 | Marketing Manager |
| Jack | Male | 45 | Consultant |

## Formula:

**Use look up formula to find out occupation:**

=LOOKUP(A20,A7:A16,D7:D16)

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Product** | **Quantity** | **Price per Unit** |
| Alice | Laptop | 2 | $800 |
| Bob | Mouse | 5 | $15 |
| Charlie | Keyboard | 3 | $30 |
| David | Laptop | 1 | $800 |
| Emma | Monitor | 2 | $200 |
| Frank | Laptop | 4 | $800 |
| Grace | Keyboard | 2 | $30 |
| Henry | Mouse | 3 | $15 |
| Isabella | Monitor | 1 | $200 |
| Jack | Printer | 2 | $150 |
| Alice | Mouse | 4 | $15 |
| Charlie | Laptop | 3 | $800 |
| Emma | Keyboard | 1 | $30 |
| Frank | Printer | 2 | $150 |
| Grace | Monitor | 3 | $200 |

## Formula:

**Sumifs:**

To determine total quantity of laptop

=SUMIFS(C26:C40,B26:B40,B26)

**Countifs:**

=COUNTIFS(B26:B40,B27)

**Index:**

=INDEX(A26:D40,3,4)

# Pivotable

**Step To Do this**

Step 1: Insert a PivotTable

1. Select the entire dataset (including headers).
2. Go to Insert → Click PivotTable.
3. In the "Create PivotTable" window:
   1. Select New Worksheet for better organization.
   2. Click OK.

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Step 2: Build the PivotTable

1. In the PivotTable Fields Pane, drag fields into the areas:
   1. Rows: Drag Country
   2. Columns: Drag Department
   3. Values: Drag Salary (this will show total salary per country per department)
   4. Filters (Optional): Drag Product Category

Now, PivotTable is created based on Country and Department, summarizing Salary.

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Step 3: Insert a Slicer

1. Click inside the PivotTable.
2. Go to PivotTable Analyze → Click Insert Slicer.
3. Select the slicer fields (Country, Department, Product Category).
4. Click OK → The slicers will appear.
5. Move and resize the slicers as needed.

Now, clicking on slicer buttons will filter the PivotTable. (kramer, 2024)

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Step 4: Connect Slicer to Multiple PivotTables (Report Connections)

If you want the slicer to control multiple PivotTables:

1. Right-click on a slicer → Click Report Connections.
2. A window will appear listing all PivotTables.
3. Check all PivotTables where you want the slicer to apply filters.
4. Click OK.

Now, the slicer will filter all connected PivotTables simultaneously. (Urmy, 2025)

# Picture: Group with Shapes

# References

kramer, J. (2024). *pivotable.*

Urmy, I. J. (2025). *Pivotable.*