

I Semester BDA Degree Examination,

DecemberJanuary - 2025/26

SpreadSheet (SEP)

SECTION – A

Answer any Five Question

(5*2=10)

1(a) What is a Spreadsheet?

A spreadsheet is a computer application used to organize, calculate, and analyze data in rows and columns. It allows users to perform mathematical calculations using formulas and functions. Spreadsheets are commonly used for accounting, budgeting, and data analysis.

Example: Microsoft Excel.

1(b) Write the syntax of ROUND Function ?

Syntax: =ROUND(number, num_digits)

Example: =ROUND(45.678,2)

Result = 45.68

It rounds a number to the specified number of decimal places.

1(c) What is the use of COUNTIF function?

COUNTIF function is used to count the number of cells that satisfy a given condition.

Syntax:

=COUNTIF(range,criteria)

Syntax:

=COUNTIF(A1:A10,"Pass")

Counts number of students who passed.

1(d) What does Show Formula command do?

Show Formula command displays all formulas in a worksheet instead of showing results. It helps users check formulas and correct mistakes.

Shortcut key: Ctrl + ~

1(e) Write any two uses of Macros

Uses of Macros:

1. Automates repeated tasks.
2. Saves time by performing multiple steps automatically.

Example:

Formatting reports automatically.

1(f) What is the purpose of Sorting Data

Sorting is used to arrange data in a specific order such as ascending or descending. It helps in easy analysis and finding information quickly.

Example:

Sorting student marks from highest to lowest.

1(g) What is meant by Merging Cells?

Merging cells means combining two or more cells into one single cell. It is used to create headings and improve formatting.

Example:

Merging cells A1 to D1 for a title.

1(h) Difference between Moving and Copying

Moving

Data is transferred to new location

Original data is removed

Shortcut: Ctrl + X

Copying

Data is duplicated

Original data remains

Shortcut: Ctrl +

SECTION – B

Answer Any Four Question

(4*5=20)

2. Explain the process of creating and formatting a table in Excel

Steps to create a table:

1. Enter data in rows and columns.
2. Select the data range.
3. Click Insert Tab → Table.
4. Click OK.
5. Table is created.

Formatting Steps:

1. Select the table.
2. Go to Table Design.
3. Choose Table Style.
4. Adjust column width.
5. Apply borders and colors.

Advantages:

- Easy data management
- Automatic filtering
- Automatic formulas
- Better appearance

3. What are the different ways to import data into Excel?

Methods to import data:

1. From Text File

- Data Tab → Get Data → Text File
- Select file → Import

2. From Database

- Data Tab → Get Data → Database
- Connect database

3. From Web

- Data Tab → Get Data → From Web
- Enter website link

4. Copy and Paste

- Copy data from another program
- Paste in Excel

Advantages:

- Saves time
- Reduces manual work
- Accurate data entry

4. Difference between Sorting and Filtering

Sorting

Filtering

Arranges data in order Shows selected data only

Changes order of data Does not change order

Example: Sort marks Example: Show marks > 50

Sorting Types:

- Ascending
- Descending

Filtering Types:

- Text Filter
- Number Filter
- Date Filter

5. Difference between Recording and Running a Macro

Recording Macro **Running Macro**

Creating macro Executing macro

Steps are saved Steps are performed

Done once Used many times

Steps to Record Macro:

1. View Tab → Macros

2. Record Macro
3. Perform actions
4. Stop Recording

Steps to Run Macro:

1. View Tab → Macros
2. Select Macro
3. Click Run

Advantages:

- Saves time
- Reduces work
- Increases productivity

SECTION – C

Answer any three Question

(3*15=45)

6. Explain Data Menu options in Excel

Data Menu contains tools used for analyzing data.

Main Options:

1. Sort

Arranges data in ascending or descending order.

Example:

Sort marks highest to lowest.

2. Filter

Displays only required data.

Example:

Show students scoring above 60.

3. Data Validation

Controls data entry.

Example:

Allow only numbers between 1–100.

4. Remove Duplicates

Deletes repeated values.

Example:

Remove duplicate customer names.

5. Text to Columns

Splits text into columns.

Example:

Split "Ravi Kumar" into two columns.

6. What-if Analysis

Helps in prediction.

Types:

- Goal Seek
- Scenario Manager

Example:

Calculate profit changes.

7. Consolidate

Combines data from multiple sheets.

Example:

Monthly sales → Yearly sales.

8. Data Tools

Includes:

- Flash Fill
- Data Validation
- Remove Duplicates

Advantages:

- Better analysis
- Saves time
- Accurate results

7. Introduction to VBA Programming

VBA stands for Visual Basic for Applications.

It is a programming language used to automate tasks in Excel.

Features:

1. Automates work
2. Saves time
3. Reduces errors
4. Performs complex calculations

Components:

1. Module
2. Macro
3. Procedure

Example:

```
Sub Hello()  
MsgBox "Welcome to Excel"  
End Sub
```

Applications:

1. Automatic report generation
2. Data processing
3. Formatting worksheets
4. Creating buttons

5. Calculations automation

Advantages:

- Saves time
- Easy to use
- Improves productivity

8. Importance and Applications of Spreadsheets

Spreadsheet is used to store and analyze data.

Importance:

1. Easy calculations
2. Data storage
3. Data analysis
4. Graph creation
5. Financial planning
6. Budget preparation
7. Business reports

Applications in Business:

1. Accounting
2. Payroll
3. Sales report
4. Inventory management
5. Budget planning

Applications in Education:

1. Student marks
2. Attendance
3. Results calculation
4. Research data

Advantages:

1. Saves time
2. Accurate calculations
3. Easy editing
4. Automatic formulas

9. Categories of Functions in Excel

Excel functions are used to perform calculations automatically.

1. Mathematical Functions

Used for calculations.

Examples:

- SUM()
- AVERAGE()
- ROUND()

Example: =SUM(A1:A10)

2. Logical Functions

Used for decision making.

Examples:

- IF()
- AND()
- OR()

Example: =IF(A1>50,"Pass","Fail")

3. Statistical Functions

Used for data analysis.

Examples:

- COUNT()

- MAX()
- MIN()

Example: =COUNT(A1:A10)

4. Financial Functions

Used for financial calculations.

Examples:

- PMT()
- FV()
- PV()

Example:

Loan calculation.

5. Lookup Functions

Used to search data.

Examples:

- VLOOKUP()
- HLOOKUP()

Example:

=VLOOKUP(A2,A1:B10,2,FALSE)

SECTION – D

13. How to Create a Basic Calculator with VBA in Excel

A basic calculator in Excel using VBA is used to perform simple calculations such as addition, subtraction, multiplication, and division automatically.

Steps to Create a Basic Calculator:

Step 1: Open VBA Editor

1. Open MS Excel.
2. Press Alt + F11 to open VBA Editor.

Step 2: Insert a Module

1. Click Insert Menu
2. Select Module
3. A new module window will open.

Step 3: Write VBA Code

```
Sub Calculator()
```

```
Dim A As Double
```

```
Dim B As Double
```

```
Dim Result As Double
```

```
A = InputBox("Enter First Number")
```

```
B = InputBox("Enter Second Number")
```

```
Result = A + B
```

```
MsgBox "Result = " & Result
```

```
End Sub
```

Step 4: Run the Program

1. Press **F5**
2. Enter first number
3. Enter second number
4. Result will be displayed.