B. A. – III

Course Code: FC 201

Course Name: Computer Skills - II

Objectives:

The objective of this course is to enable students to develop skills of computer operations using Windows Operating System and application packages for Office Automation

Contents:

Unit – I   Introduction to Operating System :

Definition, Overview of various types of Operating Systems (Windows, Linux), Introduction to Windows XP, GUI, use of mouse, Icons, Arranging Icons, Desktop, My Computers, My Documents, Recycle Bin, Browser, Start Menu, Task Bar, Display Settings (Editing with Desktop picture, Screen Saver, Desktop Theme, Screen resolution setting etc.), Windows Explorer, Files and Folder management techniques, Different views of Files, Folders and its concern operations (Open, Cut, Copy, Paste, Move, Rename, Create Shortcut, Properties, Print, Delete), Searching of Files using wild characters (?, *), Extension name, File name, Size of File, Content of File, Date and Time

Unit –II   Introduction to Worksheet :

Basic Components of MS Excel worksheet, Workbook, Advantages of Worksheet, Overview of various types of data (Number, Text, Date & Time, Formula, Function), Creating, Viewing, Editing worksheet by change in columns width, Row height, Hiding, Deleting, Inserting rows and columns, Saving, Copying, Inserting, Searching and replacing data in worksheet, Editing, Copying, Deleting data in Worksheet, Merging and splitting of cells, Wrapping text, Cell references, inserting page break, Range name

Unit – III   Data Formatting and Worksheet :

Fonts (Font type, Font size, Bold, Italic, Underline, Text Color), Cell Color, Border Color, Horizontal and Vertical alignments, Bullets and Numbering, Text Wrapping, Different formats of number, Date and time, AutoCorrect, AutoSum, Sorting and Filtering

Unit – IV   Functions:

Adding formula and functions in formula bar as well in cell, Various types of Operators, Basic Properties, Editing Formula,
Types of Functions:
Statistical Functions: SUM(), AVG(), MIN(), MAX(), COUNT()
Mathematical Functions: ROUND(), ABS(), INT(), TRUNC()
Logical Function: IF(), OR(), AND()
Date Function: DATE(), DAY(), MONTH(), NOW(), YEAR(), WEEKDAY()
String Functions: LEFT(), RIGHT(), MID(), LOWER(), UPPER()
Overview of Charts, Types and Component of Charts, Creating, Editing, Deleting Charts, Formatting a Chart, Page Setup, Header and Footer, Margins, Print preview, Printing Options

Main Reference Book(s):

(i) Working With Personal Computer Software by R.P.Soni, Harshal Arolkar, Sonal Jain, Wiley India.

Suggested Additional Reading:

(i) Computer Fundamentals, Anita Goel, Pearson Education
(ii) Office 2010 in Simple Steps, Kogent Learning Solution Inc., Dreamtech Press
(iii) Microsoft Office Excel 2010 QuickSteps, John Cronan, Tata McGraw hill Publication
(iv) Computer Fundamental & Applications, Windows 7 & Office 2010 Step by Step, Sweta Bansal, Apex Publishing
(v) Microsoft Office 2003 The Complete Reference, Curt Simmons, Guy Hart-Davis, Jennifer Kettel, Tata McGraw hill Publication
(vi) Succesful Project in Excel, Heathcote, BPB Publication
(vii) Hand book of Computer Fundamental, Dr. G.N. Jani, S.M. Solanki, Vimal Pandya, Akshar Publication
(viii) Computer Application – I, Vimal Pandya, HK Arts College Publication

Accomplishments of the student after completing the Course:

Students would be able to use the user Interface and new features of MS Office package and students would be able to create and work with Excel Workbooks and Worksheets also use of formulas and functions in Excel.

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Practical Exercise using MS-Excel

Ex – 1   Create a worksheet as follows:

State Name	January	February	March
Gujarat	4655	6444	4574
M.P.	3458	3656	5436
U.P.	3454	3472	3453
Goa	5437	3440	6337
Rajasthan	4565	6535	9348

Apply the following formats:

- Heading should be center aligned Bold and background color to blue.

- Format all numbers with currency symbol to "Rs." And two decimal places.

- Insert a blank row at top, merge all cells and insert heading as "Average Income per Month", font must be "courier new" and font size 18. and center aligned

- Rename the worksheet to "Average Income".

- Make a copy of this sheet with all the formats.

- Save this workbook to "Exercise-1".

Ex – 2   Create following data with <u>automatic data fill facility</u> horizontally and vertically.

January	February	March	April	May	June	July	August
7/1/2001							
14/1/2001							

Apply the following formats:

- Apply Auto-format of your choice to table.

- Increase the width of column March and June to 13.

- Increase the height of all rows to 15 point.

- Align all the data horizontally and vertically in the center of the cell.

- Apply the outer border to the table.

- Save workbook with "Exercise-2".

Ex – 3   . Create the following worksheet

Roll No.	Name	Sub-1	Sub-2	Sub-3	Total Marks	Percentage
	Raj Sinha	45	34	36		
	Komal Bhatia	22	33	27		
	Kiran Shah	35	44	42		
	Urvesh Rana	28	25	27		
	Arpana Gohel	32	41	35		

Note: Marks are out of 70.
- Enter Roll No. with auto-fill facility from 101 to 105.
- Find total marks and percentage using formula of "Raj Sinha" and copy formulas for remaining students.
- Copy the entire table below this table in the same sheet using mouse only.
- Sort the table percentage wise from highest to lowest.
- Change color of percentage to red if percentage is below 70 using conditional formatting.
- Save workbook to "Exercise-3".

Ex – 4   Create following worksheet:

Sr. No.	Sales Rep.	Sales (in Units)	% of Sales	Grade
1	Raj malhotra	70200		
2	Ram Varma	40000		
3	Mukesh Ghoel	35700		
4	Paresh Goenka	10000		
5	Pulin Shah	20000		

- Find out the percentage of sales for each sales representative. (Use absolute cell address).
- Find out the grade using following conditions (Use If() Function)

       If sales is   up to 10000 → A4

                  10001 to 20000 → A3

                  20001 to 50000 → A2

                  More than 50000 → A1.

- Keep Left and Right Margin 1.5" and Top and Bottom Margin 2.0".
- Insert Header as "Sales Report" and "Page No: #" as footer.
- See the print preview and check all options.
  Save workbook as "Exercise-4".

Ex – 5   Create following worksheet:

EMP No.	Baic	HRA	TA	DA	GROSS SALARY	PF	Tax in %	TAX (in Rs.)	DED.	NET SALARY
1	5500									
2	6500									
3	8000									
4	12000									
5	4000									

- Find out as per following criteria

    o   HRA = 20% of Basic

    o   TA = 8% of Basic

    o   DA = 65% of Basic

    o   PF = 10% of Basic

    o   TAX is as per following condition: (Use Hlookup() or Vlookup())

    o   If basic salary is up to Rs. 5000 →   Tax is Nil

    Rs. 5001 to 7000 → 5% of Basic

    Rs. 7001 to 10000 → 10% of Baic

    Above 10000 → 15% of Basic

- Find out Gross Salary as well as Net Salary using formula.

    Gross Salary = Basic + HRA + TA + DA.

    DED. = PF + TAX

    Net salary = Gross Salary – DED.

- Apply your own formats to make the sheet decent in looking.

- Save this workbook as "Exercise-5".

Ex – 6   Create a data table to calculate and display monthly installment values for the following rates of interest and loan amounts for 10 years.

Rate of Interest

♦   10.0%

♦   11.5%

♦   13.00%

Loan Amount

♦   350000

♦   500000

♦   800000

Change the years from 10 to 5 and see the effect.

Find this using your own formula (Absolute and Mixed). Save workbook with "Exercise – 8".

Ex – 7   Open "Exercise – 3. Create a Chart as follows:

- Create a column chart.
- X – Axis = Roll No. and Y – Axis = Sub.-1,Sub.-2 and Sub.-3
- Legend should be at right side of chart.
- Chart title = "Marks Statement", X Axis Title = "Roll No.", Y Axis Title = "Subjects" .
- Gridlines = Minor, Set Data Label = Actual Marks and you should show data table also.
- Save it to separate sheet and format different objects as your own.
- Copy it and put this chart as object in sheet1.
- Change the size of chart and convert it into 3 Dimension.
- Save this as "Exercise – 9".

Ex – 8   Create a worksheet as follows:

Name of Employee	Department	Designation	Salary
Rahul Vyas	Accounts	Accountant	15000
Rajesh Prajapati	Computer	Programmer	35000
Gautam Patel	Exam	Clerk	13500
Ganesh Jani	Exam	Assistant	20000
Vijay Bhoi	Computer	Programmer	30000
Amar Upadhyay	Accounts	Accountant	17000
Jay Mehta	Computer	Lecturer	65000
Vinay Gohel	Computer	Lecturer	70000

- Sort the table on Name of Employee in Ascending Order.
- Sort the table on Salary in Descending Order.
- Sort the table on Department and Name of Employee in Ascending Order.
- Use Data form for the following:
  - Make 7th record as a current.
  - Make 2nd record as current.
  - Add one more record as follows:
    - Name = "Pragnesh Prajapati"
    - Department = "Computer"
    - Designation = "Lectyrer"
    - Salary = 73000
  - Delete the record for "Jay Mehta"
  - Change the salary of "Gautam Patel" to 16500
  - Find out the records where Designation = "Programmer".
- Set Auto filter to all the columns and perform the following jobs:
  - Filter for Department = "Exam".
  - Filter for Department = "Computer" and Designation = "Lecturer".
  - Filter for Department = "Account" and Department = "Exam".
- Using subtotal facility find out the gross salary paid to different departments.
- Save this worksheet as "Exercise – 10".

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