Objective:
To develop awareness of potentiality of Computer and familiarity with current trend in Information Technology.

UNIT I: INTRODUCTION TO COMPUTER
What is Computer? Overview of a computer system, Development and Type of computers. Characteristics of computer (Speed, storage, Accuracy, Versatility, Diligence, Reliability, Memory Capability), BASIC Applications of Computer systems (Business, Scientific, Medical, Engineering, Educational etc.) Components of Computer System: CPU, VDU, Keyboard, Mouse, Memory, etc. I-P-O Cycle (Input-Process-Output), Concept of Hardware and Softwares (Application and System), Classifications of Computers (PCs, Laptop, Mobile, PDA Digital Diary)
Storage Units (Bits and Bytes, KB, MB, GB, TB)
Introduction to Software and Computer Languages
Use of Short cut for various options in different software or packages.

UNIT II: WORD PROCESSOR -1
WORD PROCESSOR BASICS

TYPING AND EDITING
Introduction, Objectives, Action with mouse and through keyboard, Selecting text. Typing and Revising Text: Editing Text, Copying and Moving Text (Cut, Paste, Copy, Move), Typing Special Characters (Symbols).

UNIT III : WORD PROCESSOR - 2

FORMATTING TEXT
Introduction, Objectives, Document Templates. Font Formatting: Changing Font Type, Size and style, color, underline, other special effects. Formatting Paragraph: Centered, Right, Justified and Left Alignment, Indenting Text, Tab Stops, Line Spacing, Paragraph Spacing, Borders and Shading., Finding and Replacing: Finding and Replacing Text, Using the Go To Command Using the Spell Check, Grammar and Thesaurus.

PAGE DESIGN AND LAYOUT

OBJECT LINKING AND EMBEDDING
Introduction, Objectives, Inserting Objects from other Applications i.e. Clip Art, Spreadsheet.

MAIL MERGE
Introduction, Objectives, Data Sources & Main documents, Creating merged documents, Merging using ask variable, Starting & Editing the Main document, Printing, Creating merged Envelopes & Labels.

UNIT IV PRESENTATION PACKAGE
Introduction and Basic concepts, Objectives, Types of Business Graphics. How to make an effective presentation. Physical aspects of presentation.

INTRODUCING PRESENTATION PACKAGE
Introduction, Objective, Presentation Package Views, Starting and Quitting Presentation Package, The Presentation Package Window
CREATING A PRESENTATION

Introduction, Objectives, Creating / Opening a Presentation, Creating Tables, Making Organization Charts, Save and Close a Presentation, Add a New Slide, Change Slide Layout

CUSTOMIZING THE SLIDE SHOW

Introduction, Objectives, Create a Blank Presentation, Working with Text, Changing fonts size and color of text, Working with Graphic tools, Align Objects, Group or Ungroup the objects, Slide Show.
Working with Master document, different views
Working with Action Buttons.

MAIN REFERENCE BOOKS:


SUGGESTED ADDITIONAL READING:

1. Microsoft Office 2003 The Complete Reference by Curt Simmons, Guy Hart-Davis, Jennifer Kettell, Jennifer Kettell
2. MS Word Tutor, BPB Publications
3. MS Powerpoint Tutor, BPB Publications

ACCOMPLISHMENTS OF THE STUDENTS AFTER COMPLETING THE COURSE:

Student can create attractive document and presentation.

PRACTICAL - Word

1) Introduction to word & showing following Commands.
   1.1 How to start word?
   1.2 Information about various menus available on word likes File & Edit.
   1.3 Description of ruler Line, vertical & horizontal scrollbars.

2) Introductions to various types of Icons available on the word open document
Type one or two paragraph about 75 to 100 word. Show the paragraph markers & the use of Tab Paragraph, Indented Paragraph & Hanging Indent.

*Format the paragraph:*

- Changing character format, Changing the font size and style, Underline style, Adjust various alignments, Changing paragraphs spacing, Use of format painter.

3) Try to create the following paragraph using Left, Right & Hanging indents.

<table>
<thead>
<tr>
<th>City Wide Computer Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volunteer List and Assignments.</td>
</tr>
<tr>
<td>Anita Obey</td>
</tr>
<tr>
<td>Make sure every young person is seated at a computer before the group instructor begins the first section of skill building.</td>
</tr>
<tr>
<td>Douglas Barton</td>
</tr>
<tr>
<td>Check the data show settings for maximum screen projection from the PC.</td>
</tr>
<tr>
<td>Bobby Beiiy</td>
</tr>
<tr>
<td>Check midi cable &amp; setting from Roland electronic keyboard to the multimedia PC.</td>
</tr>
</tbody>
</table>

Use ^T to prepare this application

4) Describe various TAB types i.e. left, right, decimal & center.
   (a) Also generate the application as under show Tab Leaders in following Application.

<table>
<thead>
<tr>
<th>United States of America</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Population and House Apportionment</td>
</tr>
<tr>
<td>Section .01 State</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Alaska</td>
</tr>
<tr>
<td>Arizona</td>
</tr>
<tr>
<td>Arkansas</td>
</tr>
<tr>
<td>California</td>
</tr>
<tr>
<td>Colorado</td>
</tr>
<tr>
<td>Connecticut</td>
</tr>
</tbody>
</table>

(b) Show how Bar Tab is used using following application.
Sem-3 Year 2018-19

ABC COMPUTER COMPANY
Personnel List
MICROSOFT CERTIFICATION

<table>
<thead>
<tr>
<th>LAST NAME</th>
<th>FIRST NAME</th>
<th>CERTIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hollowly</td>
<td>Mickey</td>
<td>Visual Basic</td>
</tr>
<tr>
<td>Osborne</td>
<td>Virginia</td>
<td>NT Workstation</td>
</tr>
<tr>
<td>Cartev</td>
<td>Tony</td>
<td>Visual Basics</td>
</tr>
<tr>
<td>Copper</td>
<td>Donna</td>
<td>Access</td>
</tr>
</tbody>
</table>

5) Create a document with atleast 3 or 4 pages.
Use Page layout to show that it is WYSIWYG ("what you see is what you get").
Use margins, page breaks, holders, footers, page numbering & graphics in the documents. Also find the difference using.

   **View -> Normal, Outline**
   Apply Bullets, Numbering & various types of bullets, if required.

6) Create at least one applications using word in appropriate format. i.e. Report, Letters, Faxes and Legal Pleadings.

7) Enter four or more pages of small size from any of your subject textbook. Make index of the important words from each page.

8) Create simple & various types of complex tables using Table - Insert table, Generate following application.

<table>
<thead>
<tr>
<th>Sales Person</th>
<th>EAST</th>
<th>WEST</th>
<th>NORTH</th>
<th>SOUTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dann</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Scheeler</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Wixted</td>
<td>300</td>
<td>300</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>Wright</td>
<td>400</td>
<td>400</td>
<td>400</td>
<td>400</td>
</tr>
</tbody>
</table>

- Use how to Insert, Delete Rows/Columns.
- Use how to copy information in table.
- Use Table Autoformat tool.
- Use how to Sum in table.

To do so, create one extra Row & Column showing the Total of East, West, North South & also the Total of each sales person.
9) Create Mail-merge applications for Sending Invitation letter to all yours relatives and Friends on your Birthday party.
   Insert the appropriate Object in the document from the Clip Art Gallery.

10) Write a macro that formats a document to have a line spacing of 1.5 lines. The font is “Courier New” and font size of 10 points. The document should have left, right and top margin as 2”

11) Create a document using newspaper Columns. Add a picture in between. Show how the 1st letter is Bigger than the other characters. E.g.

Also this is the application in
Which we would like to display the
Commands in this format

PRACTICAL - Powerpoint

1) Create slide of your choice.
   1. Add a new slide.
   2. Add title MSOffice
   3. Add following points in bulleted text
      Word
      Excel
      PowerPoint
   4. Increase the line spacing of the bulleted points to cover the whole slide.
   5. Apply a border around the title
   6. Using slide master, change the font of title to Arial.
   7. Place text L. D Arts College at bottom of left corner of master slide.
   8. Return to slide window
   9. Observe change in appearance of title of each slide and the entry L. D Arts College in all slides.
   10. Move to slide sorter view
   11. Shift the first slide to end
   12. Make a copy of second slide
   13. Return to slide view
   14. Move to slide one
   15. Apply flying effect to title
   16. Apply Type writer effect to sub-title
   17. Add a new slide
   18. Save the file by the name first.ppt
   19. Return to slide view
   20. Add a third slide
21. Choose chart layout
22. Insert appropriate chart and text of your choice
23. View the slide show
24. Rearrange slides.
25. Add a fourth slide, choose a blank layout
26. Using the drawing tools, prepare the slide as shown below & save the file.

2. Prepare a Slide show describing your college

3. Create a presentation slide, which contain one object that is point to any worksheet.

*****
OBJECTIVE:

1. Aware to use google products for instant messaging, sharing documents and data and calendar of activities in group using standard formats.
2. To enable students to design and develop publishing / printing media concepts.
3. To develop skill of computer operations using Windows Operating System and application packages for Office Automation.
4. Introduction to Worksheet, Rows, Columns, Cells, and Screen of Worksheet, Work Book, Advantages of Work sheet and how it is useful in Business. Creating, Saving, Importing, Exporting new worksheet, Deleting, and Protecting, Worksheet, Entering Text, Numbers and Formula, Relative and Absolute Referencing, Editing, Deleting, Copying, Moving a data and Formula, Create a custom list, Range names, Search and replace data, Re-arrange cell contents, Inserting, deleting row(s) and column(s), Inserting page break.

UNIT I : INTRODUCTION TO OPERATING SYSTEM
Overview of different Operating Systems (i.e. WINDOWS, LINUX, UNIX)

INTRODUCTION TO WINDOWS
The user interface, Icons, Use of Mouse Moving and Arranging Icons on Screen, Desktop: My Computer, My Documents, Recycle Bin, Browser.
Windows Explorer : Viewing of Files, Folders and its concern operations (Open, Copy, Move, Rename, Delete, Cut, Paste, Create Shortcut, Properties, Print), Searching for Files/Folders
Windows Control Panel: Mouse, Fonts, Date/Time, Display, Printer
Windows Accessories: Notepad, Word Pad, Paint Brush, Calculator

Unit 2: INTRODUCTION TO GOOGLE APPLICATIONS (GOOGLE APPS)
Getting started with Google Apps:
Choosing an Editing of Google Apps, Setting Up google Apps
Google Apps:
Docs, Calendar, Mail, Site, Cals etc.
Google Talk, Google Translator
Google Drive
The basics of setting up a Google Drive account, complete with personalized folders helpful apps, file conversion, sharing and even editing offline.

Google Forms
How to create forms, how to send and receive forms, Use forms for assessments, class votes, How to create, customize and send surveys and how and where to most efficiently collect and sort responses.

UNIT III : SPREADSHEET -1

INTRODUCTION TO WORKSHEET:
Introduction to Worksheet :Rows, Columns, Cells, and Screen of Worksheet, Work Book, Advantages of Work sheet and how it is useful in Business. Creating, Saving, Importing, Exporting new worksheet, Deleting, and Protecting, Worksheet, Entering Text, Numbers and Formula, Relative and Absolute Referencing, Editing, Deleting, Copying, Moving a data and Formula, Create a custom list, Range names, Search and replace data, Re-arrange cell contents, Inserting, deleting row(s) and column(s), Inserting page break.

GETTING STARTED WITH SPREADSHEET:
Getting started with SPREADSHEET: Basic concepts, creating / Opening, Finding a Workbook, Inserting, Deleting, Moving, Saving, Quitting Worksheet.

ENTERING AND EDITING DATA:
Range Names, Navigate Worksheet, Search and Replace Data, Inserting or Deleting Rows & Columns, Save and Protect Workbook.
Adding, Deleting, Moving, Copying Cell Contents, Calculations.

FORMATTING WORKSHEET:
Objectives, Page Set-up, Column Width and Row Height: Using Menu Commands, Using Mouse, Fonts, Alignments, Getting Worksheet Printed, AutoCorrect, AutoSum

UNIT IV : SPREADSHEET -2

CALCULATIONS IN WORKSHEET:
Types of Functions: Statistical Functions: \( AVG(), MIN(), MAX(), COUNT() \), Mathematical Functions: \( ROUND(), ABS(), FACT(), INT(), MOD(), SQRT() \), Lookup and Reference Functions: \( VLOOKUP(), HLOOKUP() \), Financial Functions: \( PMT(), IRR(), PV(), NPV() \), Logical Function: \( IF() \) & Nested \( IF() \), Date Function: \( DATE(), DAY(), DATEVALUE(), MONTH(), NOW(), YEAR(), WEEKDAY() \), String Functions:
LEFT(), CONCATENATE(), RIGHT(), LOWER(), UPPER(), EXACT(), FIND(), SUBSTITUTE().

PRINTING WORKSHEET DATA:
Printing Features: Print Preview, Page setup, Page, Margin, Header /footer Tab.

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MAIN REFERENCE BOOKS:

2. Hand Book – Computer fundamental, Windows, Ms-word, Ms-excel and Ms-power point, Dr. G.N. Jani, Vimal N. Pandya Akshar Publications, Ahmedabad
   Ms-Office 2000 for everyone by Sanjay Saxena (Vikas Publication House Pvt. Ltd.)
3. Successful Project in Excel, BPB Publications
4. Microsoft Excel functions & formula, BPB Publications

SUGGESTED ADDITIONAL READING:

1. Microsoft Office 2003 The Complete Reference by Curt Simmons, Guy Hart-Davis, Jennifer Kettell, Jennifer Kettell
2. MS Excel Tutor, BPB Publications

ACCOMPLISHMENTS OF THE STUDENTS AFTER COMPLETING THE COURSE:
Student can work with data. He/She can insert/delete/modify data. Student can filter the data with the condition. He/She can format the data and can take printouts. With help of available functions, he/she can perform no. of tasks without doing programming. Can create Variable reports and charts. Can solve financial problems with the help of functions.

PRACTICAL - Spreadsheet

1) Describe starting & saving of workbook. How to format the worksheet. Working with formulas, sorting the entered data & previewing & Printing.
   The data is as under:

<table>
<thead>
<tr>
<th>State</th>
<th>January</th>
<th>February</th>
<th>March</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA</td>
<td>$ 465.00</td>
<td>$ 644.00</td>
<td>$ 457.00</td>
</tr>
<tr>
<td>MJ</td>
<td>$ 345.00</td>
<td>$ 365.00</td>
<td>$ 543.00</td>
</tr>
<tr>
<td>NY</td>
<td>$ 345.00</td>
<td>$ 347.00</td>
<td>$ 345.00</td>
</tr>
<tr>
<td>CT</td>
<td>$ 543.00</td>
<td>$ 344.00</td>
<td>$ 633.00</td>
</tr>
<tr>
<td>DE</td>
<td>$ 456.00</td>
<td>$ 653.00</td>
<td>$ 934.00</td>
</tr>
</tbody>
</table>
2) How to select cells & Create worksheet also try to find out how Data Entry is possible. Then edit the cell. Also rearrange worksheet. Perform spell check. Create following data entries with automatic data fill facility.

<table>
<thead>
<tr>
<th></th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1/7/97</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>1/14/97</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3) Create following worksheet. Also try to show how AutoText can be entered into the worksheet.

<table>
<thead>
<tr>
<th></th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Use Autoformat to format the type of table you require. Enter the values in cell as indicated:
- In A7 find the total of A2 to A6. Use conditional formatting, alter when our total sales goes below 12000 to red.

4) Create following worksheet.

**MARKSHEET**

<table>
<thead>
<tr>
<th>ROL_NO</th>
<th>NAME</th>
<th>SUB1</th>
<th>SUB2</th>
<th>SUB3</th>
<th>TOTAL</th>
<th>PERC</th>
</tr>
</thead>
<tbody>
<tr>
<td>103</td>
<td>SONIA</td>
<td>67</td>
<td>77</td>
<td>88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>105</td>
<td>ARTI</td>
<td>56</td>
<td>64</td>
<td>45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>107</td>
<td>PUJA</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>111</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

101
1. Type the entries and apply formatting as shown.
   Title in Arial, 14, bold, italic.
   Remaining text in Times New Roman, 12.
   Heading in bold, italic and fill with Gray color.
   All numbers with 2 decimal places.
   Roll no should be center aligned.
   Apply border to all entries.
2. Calculate total and percentage using appropriate formula.
3. Calculate minimum, maximum and average marks of each subject
4. Save worksheet by MARKS.XLS.
5. Using data- fill give rank to each student.

5) Create following worksheet:

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sales Rep.</td>
<td>Territory</td>
<td>29900</td>
<td>% of Total</td>
</tr>
<tr>
<td>2</td>
<td>McMohan, Susan</td>
<td>Southern</td>
<td>30200</td>
<td>Calculated value of Total</td>
</tr>
<tr>
<td>3</td>
<td>Lipari, Angle</td>
<td>Western</td>
<td>40000</td>
<td>#DIV/0!</td>
</tr>
<tr>
<td>4</td>
<td>Miserino, Carl</td>
<td>Eastern</td>
<td>34700</td>
<td>#DIV/0!</td>
</tr>
<tr>
<td>5</td>
<td>Powers, Jessica</td>
<td>Northern</td>
<td>34000</td>
<td>#DIV/0!</td>
</tr>
<tr>
<td>6</td>
<td>Total</td>
<td>Mid-West</td>
<td>23000</td>
<td>#DIV/0!</td>
</tr>
</tbody>
</table>

In cell D3 to D6, it shows an error. Why it shows an error. Find it & Display corrected formula.
Note: - Use absolute copy instead of relative copy.

6) Create following worksheet:

<table>
<thead>
<tr>
<th>EMP NAME</th>
<th>HRA</th>
<th>TA</th>
<th>DA</th>
<th>GROSS SALARY</th>
<th>PF</th>
<th>TAX</th>
<th>DED.</th>
<th>NET SALARY</th>
<th>% SALARY</th>
</tr>
</thead>
</table>

Give the commands for the following (Indicate cell address for commands)
E.g. cell E4: @SUM (B4..D4)

6.1 Centre align the Labels HRA, TA, DA, SALARY
6.2 Specify command(s) to draw a line in Row 3 as shown.
6.3 Increase the column width of the first column to 18
6.4 Display all the amount figures with a two place decimal point (X.XX)
6.5 Insert a blank column DEDU. And NET.
6.6 Using calculation commands and copy commands, find out.
   6.6.1 GROSS SALARY as the sum of BASIC, TA, DA
   6.6.2 DEDU. As the sum if PF and TAX.
   6.6.3 NET SALARY as the difference between GROSS SALARY and
       DEDU.
   6.6.4 TOTAL is the total of all respective columns.
   6.6.5 % SALARY is achieved by dividing individual NET SALARY
       with TOTAL NET SALARY.
   6.6.6 TAX is calculated using following criteria. (Use Hlookup and
       Vlookup)

<table>
<thead>
<tr>
<th>Salary Range</th>
<th>Tax Amt.(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1000</td>
<td>NIL</td>
</tr>
<tr>
<td>&gt;=1000 and &lt;2000</td>
<td>10</td>
</tr>
<tr>
<td>&gt;=2000 and &lt;3000</td>
<td>20</td>
</tr>
<tr>
<td>&gt;=3000 and &lt;4000</td>
<td>30</td>
</tr>
<tr>
<td>Otherwise</td>
<td>40</td>
</tr>
</tbody>
</table>

7) You are saving Rs. 200 every month in a deposit scheme for a period of 6 years. Fixed
   rate of interest is 12% what amount will you receive after 6 years? Find this using your
   own formula & also using available function. Compare both the values.

8) A customer is given a loan of Rs. 80,00,000 for a period of ten years with a fixed interest
   rate of 12.5%. What will be his monthly installment payment? (Hint: Use Goal Seek and
   Financial Function PMT() )

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

   **ROI**
   ◆ 0.175
   ◆ 0.185
   ◆ 0.195

   **Loan Amount**
   ◆ 225000
   ◆ 200000
   ◆ 185000

   Change the years from 10 to 5 and see the effect.
   Find this using your own formula (Absolute and Mixed)
10) Create following worksheet.

**EMPLOYEE INFORMATION**

<table>
<thead>
<tr>
<th>EMPNO</th>
<th>NAME</th>
<th>DEPT</th>
<th>BASIC</th>
<th>HRA</th>
<th>PF</th>
<th>NET</th>
</tr>
</thead>
<tbody>
<tr>
<td>101</td>
<td>BINA</td>
<td>ACTS</td>
<td>7700</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>103</td>
<td>AYESHA</td>
<td>EDP</td>
<td>6400</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>105</td>
<td>PUNIT</td>
<td>ACTS</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>107</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>111</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Apply formatting of your choice.
2. Calculate HRA = 30% of basic.
3. Calculate PF = 10% of basic.
4. Calculate NET = BASIC + HRA – PF.
5. Calculate TOTAL for each column.
6. Sort the list in alphabetic order by name.
7. Apply filter to show only records where BASIC>5000.
8. Apply filter for showing records of only EDP department.
9. Sort the list department wise.
10. Calculate dept wise subtotals.
11. Remove subtotals.
12. Save the sheet by EMP.XLS.

11) Perform the following task

1. Open the sheet MARKS.XLS.
2. Generate bar chart of name v/s. Percentage.
4. Save the chart in other sheet.
5. Change the chart type to pie chart.
6. Fill it with different patterns and colors.
7. Save the chart.
8. Generate another 3D-column chart of Rollno v/s. Total marks.
9. Using the data of exercise no. 4 Plot Line, Bar, Stack-bar charts to compare marks in all the subjects. Save all this charts with different name and take printout all charts.
10. Specify titles, Axes, Legend and Gridlines.
11. Apply data labels with value.
12. Save it as object in current sheet.
13. Rotate chart and observe the change.
13. Apply different color and patterns in 3D-column.

12) Perform the following task

1. Open the sheet EMP.XLS
2. Protect it using password
3. Insert one column grade
4. Fill it using following criteria
   
   **Basic grade.**
   
   >=10000 m1
   >=6000 and <10000 m2
   >=3000 and <6000 m3

5. Save the sheet.
6. Open the MARKS.XLS.
7. Insert one column grade in the sheet MARK.XLS and use following criteria:
   
   **Perc. grade**
   
   >=70 dist.
   >=60 and >70 first
   >=50 and >60 second
   >=40 and <50 third
   Otherwise fail

13) Create the following data in the first worksheet starting from the cell A1.

<table>
<thead>
<tr>
<th>Cars</th>
<th>TOM</th>
<th>JAMES</th>
<th>DONNA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honda City</td>
<td>48</td>
<td>70</td>
<td>105</td>
</tr>
<tr>
<td>Cielo</td>
<td>26</td>
<td>35</td>
<td>55</td>
</tr>
<tr>
<td>Palio</td>
<td>15</td>
<td>20</td>
<td>28</td>
</tr>
</tbody>
</table>

Create this chart as an object in the

![Bar Chart](image)
1. Create a pie chart for the car Cielo.
2. Shade all the slices with different patterns Colors.
3. Explode the slice of Cielo produce.
4. Take printout of Graph.

*****
OBJECTIVE:
1. To develop awareness of Mind Mapping and familiarity with current trend in Information Technology.

UNIT I: INTRODUCTION TO MINDMAP
(A) Creating a Mind map: Dos and Don’ts
Introduction, Ordering a mind map, Visual attraction, Adding different types of nodes, Usage of icons, Exact text, Boundaries and branches, Writing sufficient information, Adding necessary notes.
(B) Writing a Mind Map : Using the Right words
Introduction, keywords, Representing the subject matter, Connecting words and lines, Length of lines and words, Writing noun phrases after listening to MP3 files, Uploading the mind map to wikispaces.com, Developing a radiant hierarchy through word sizes, Associating ideas through words and icons.

UNIT II: PICTURING A MIND MAP :
(A) Using Visual Thinking
Introduction, inserting an image, developing a graphic technique, Working with bitmaps, Designing SVG for mind maps, Photographic mind map, Sizing an image, Inserting an external object from Flickr, Using time icons.
(B) Adding Hyperlinks and Linking The Mind Map :
Introduction, Linking to an e-mail address, Inserting and removing a hyperlink from a text field, Adding a graphical link to nodes and changing its color, Adding a local hyperlink, Importing folders and subfolders, Following a link to fold or unfold the tree.

UNIT III: MIND MAPPING SOFTWARE & ADVANCED STRATEGIES FOR MIND MAPPING:
(B) Advanced Strategies for Mind Mapping: Mind Mapping reading Techniques, Learning and preparing for exams with mind mapping, Project management with mind mapping, mind mapping for creativity.

UNIT IV SHARING A MIND MAP: USING THE BEST OF MOBILE AND WEB FEATURES:
Introduction, Exporting a branch as a new map or HTML, Exporting the mind map to bitmaps or vector graphics, Uploading the mind map on Flickr and sharing it, Exporting
the mind map as HTML, Exporting the mind map as XHTML, Exporting the mind map as Flash, Exporting the mind map as an OpenOffice Writer document and uploading to Google Docs, Viewing an interactive mind map in a web browser.

MAIN REFERENCE BOOKS:

SUGGESTED ADDITIONAL READING:
1.

ACCOMPLISHMENTS OF THE STUDENTS AFTER COMPLETING THE COURSE:

Student can develop their own creativity with the help of mind mapping.

PRACTICAL

1. Arranging a shopping list as a Mind Map
2. Putting together a packing list for your next holiday or business trip. You can see my personal packing list for business trips.
3. Taking notes on a longish magazine article
4. Taking notes on a TV documentary or while watching the news
5. Creating a Mind Map of your ‘to do’ list.
6. Minuting your next meeting with a colleague as a Mind Map

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GUJARAT UNIVERSITY  
COMPUTER SYLLABUS FOR BA  

BA  

SEMESTER VI  

CORE COURSE CODE : CC 316  
COURSE NAME : MULTIMEDIA TECHNOLOGY (AUDIO & VIDEO)  

OBJECTIVE:

The student will be able to understand
1. Sound Processing, Formats & Setting, Sound Files.
2. Concept of audio compression
3. Understanding Digital Audio-Video & Editing
4. Basics of Video Compression

UNIT I : SOUND PROCESSING, AUDIO COMPRESSION
Recording Sound for Multimedia Application-Sound Formats and Settings, Monophonic Recording & Stereo Recording, Comparative Analysis of sound file size, Saving Sound Files, File Types-Digital Audio Files & MIDI Files, Dif. File formats.

Compression Techniques-Byte Size Sampling, GSM full rate and Half rate encoding, Psycho-acoustic model, MPEG and MP3 revolution etc.

UNIT II: DIGITAL AUDIO, AUDIO EDITING
Understanding Digital Data, Digital Audio, The Sound Card- 6 Basic composition and Anatomy of a sound card, functions and features of sound card. Employing sounds in Multimedia applications-Content & Ambient sound

UNIT III : INTRODUCTION DIGITAL VIDEO, VIDEO COMPRESSION

Characteristics of video-Interlacing and progressive scanning, Digital video-sampling, Quantization, Luminance and Chrominance, Colour Models, Colour Depth

Rational for compression, Compression Basics-Redundancy, Lossy and Lossless compression, Simple Compression Techniques- Truncation, Run Length Encoding, Interpolative, Predictive, Interframe Compression, Transform Coding Techniques, Discrete Cosine Transform. CODECs, Video compression standards-MPEG1, MPEG2, MPEG4

UNIT IV : DIGITAL VIDEO PRODUCTION

Video Production for Multimedia-Pre-production, Production & Post - Production, Employing Video in Multimedia Applications- Content Video & Incidental Video, Basics of Video Recording- Video Shooting equipment, Camera, Camera movement, lighting and backgrounds, shooting tips etc.

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MAIN REFERENCE BOOKS:
1. Multimedia – Sound & Video, Author : Jose Lozano, Publisher : Prentice Hall, 1998
4. Multimedia making it work, Author: Tay Baughan, Publisher: Tata Mcgraw-Hill

SUGGESTED ADDITIONAL READING:
1. Multimedia in Practice - Technology & Applications, Author : Judith Jeffcoate, Publisher: Prentice Hall, 1995
2. Multimedia Basics, Author : Andress Holzinsen, Publisher: Willey India

ACCOMPLISHMENTS OF THE STUDENTS AFTER COMPLETING THE COURSE:
Student can work with Audio-Video. He/She can prepare digital audio video file.

PRACTICAL - MULTIMEDIA TECHNOLOGY : AUDIO - VIDEO
1. Create 3 minute audio-video file of department of computer.
2. Create 3 minute digital audio-video file of your institution.
3. Create 5 minute video file of heritage Ahmedabad.
4. Create 5 minute audio-video file of glimpses of Computer History.

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