Practical File
DIGITAL PRODUCTIVITY AND MODERN WORKSPACES
(PBC 102)

BCA First Semester
Session 2023-2026

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THIS IS TO CERTIFY THAT MR. HIMANSHU CHAUHAN HAS SATISFACTORILY COMPLETED ALL THE EXPERIMENTS IN THE LABORATORY OF THIS COLLEGE. THE COURSE OF THE EXPERIMENTS / TERM WORK _____ IN PARTIAL FULLFILLMENT OF THE REQUIREMENT IN _____SEMESTER OF BCA DEGREEE COURSE PRESCRIBED BY THE GRAPHIC ERA HILL UNIVERSITY BHIMTAL DURING THE YEAR 2023-2026.

CONCERNED FACULTY   **HEAD OF DEPARTMENT**

NAME OF EXAMINER:

SIGNATURE OF EXAMINER:

INDEX

Exp. No.	Date	Experiment	Page No.	Remarks

MS Word Exercises

Question 1. Create and Design Admission/Enquiry Forms etc.

To create this kind of form, you need to use shapes, text boxes, colors, formatting options, tables, and horizontal lines in MS Word. This is a very good exercise to practice because it will give you an idea of how to use such options practically on various official documents that we use in our daily official life.
Example is shown on the next slide.

Reference Link:

to create a **forms** in ms word

CHRISTMAS PARTY
ENQUIRY FORM

Name:

Phone Number:

Email address:

Company:

Please tick all which apply:

☐   Restaurant Table Lunch

☐   Restaurant Table Dinner

☐   Private Dining Lunch

☐   Private Dining Dinner

☐   Drinks Party Day

☐   Drinks Party Evening

☐   Other

Expected numbers:

Preferred date(s):

Please return this form to a member of staff and one of the events team will be in touch as soon as possible

Question 2.
Create Business Cards using different Shapes, text, and colors in ms word.

Reference link:

<u>Click here</u> to see how to create a business card using different shapes ,text,and colors in ms word
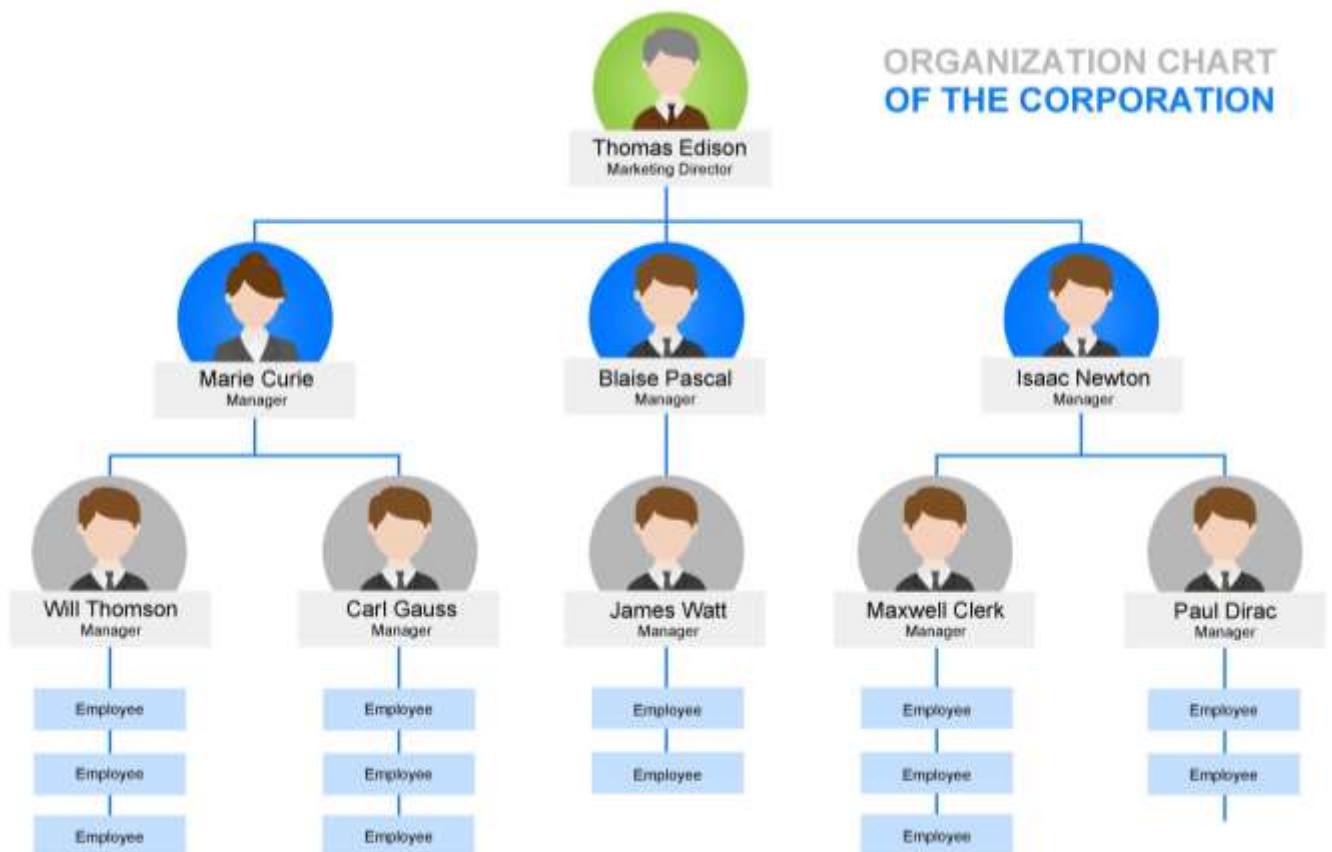
EXAMPLE:

Question 3.
Use smart art and create organizational charts and showcase relations:

Smart Art is one of the favorite options in Microsoft Word. Smart art is used to draw diagrams that are used to showcase the content visually that will be easy to understand and manage. As you see below the smart art image Hierarchy Diagram is used to create an organizational chart or structure of the Telecom company.

Reference link :
How to create Organisational Charts in Ms word

ORGANIZATION CHART
OF THE CORPORATION

Thomas Edison
Marketing Director

Marie Curie — Manager
Blaise Pascal — Manager
Isaac Newton — Manager

Will Thomson — Manager
Carl Gauss — Manager
James Watt — Manager
Maxwell Clerk — Manager
Paul Dirac — Manager

Employee
Employee
Employee

Question 4.
Make book content page or index page ?

This is another idea in which you need to create an index or content page of the book. In this process, you will learn about the first-line indent, hanging indent, and the perfect use of the ruler bar in Microsoft Word.
And also about a page number, and a hyperlink (if it is an eBook).

EXAMPLE IS ALSO GIVEN ON THE NEXT SLIDE.

Reference link:
Click here to see how you can create a book content page or index page in ms word

CONTENTS

*) The table of contents comes between your abstract and your introduction. It should be written in the same font and size as the rest of your text (usually 12pt Times New Roman). At the top of the page, write **Contents**, centered and in bold. In APA Style, you can use up to five levels of heading, each with its own formatting style. In the table of contents, you should include all level 1 and 2 headings, left-aligned and formatted as plain text. Level 2 headings are indented. Including lower-level headings in the table of contents is optional. Add an additional indent for each level. If you have a lot of headings in your text, you may not be able to include them all—your table of contents should not be more than two pages long in total.

Quesition 5.

Practice hyperlinking and creating links between Word document texts to D: /, Play songs from Microsoft Word text, and create links between internal and external files?

This is the most important option in Microsoft Word. Most of the processes on the internet contain links. The hyperlink is the starting point in which you learn how things are connected with each other.
Reference link to create a <u>Hyperlink</u> in ms word..

Example:

Question 6.
Add a macro to your ms word file.Also add a watermark named "GEHU" in your document .

Reference link:
For macro:
link 1
For watermark:
link 1

Question 7.
Create a chart and show the product price comparison between years:

The chart option is very important in Microsoft Word and Excel. However, the use of the chart option and any other option in MS Word depends on the demand for a certain content type.

For example, you're writing a book or making notes about something in which you have to write and explain the price comparison between 3-4 years. Then you can use the chart for visualizations to analyze the data.
Reference link:
Charts in MS word
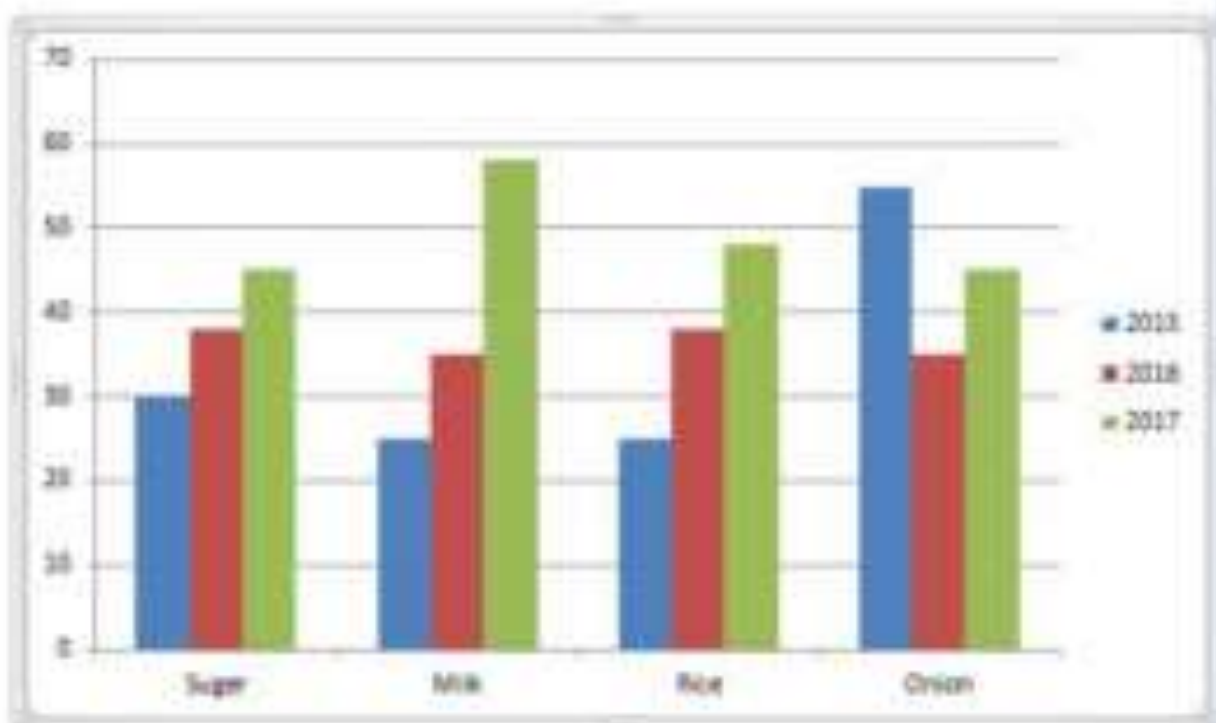
Question 8.

Take a double-column book or newspaper and design or create a similar paragraph style in the Word document.

find the newspaper similarly as you see below and create or type the text as you're seeing in the newspaper. And if you're having a problem, ask your teachers. So, when your teachers teach you how to do that thing or this thing, it will be great for your knowledge.

Reference links:

Link 1

Link 2

Question 10:

Insert Images and Practice on Format Menu and Image Options.

You can use image options and style to decorate, retouch, and adjustment of colors and brightness in MS Word. As you can see, I have created various styles and image effects. These are easy to create.

Exercise - Mail Merge (Letters)

1. Open your word processing application and type the following letter on a new blank page.

Gehu,bhimtal
Uttarakhand

Dear Participant
As you may be aware we have been running a variety of courses at the college
ranging from 1 week to 12 weeks. We are now happy to inform you that we are
introducing a number of 2-day courses, which will be held both at weekends and
mid-week to suit the varying needs of potential students.
Please find enclosed an application form and a program schedule. We look forward
to your participation.
Yours truly,
M C lohani
Course Director

2. Save the letter as Course Letter.
3. Open a new blank document and create the table below.

TITLE	FIRST NAME	SURNAME	ADDRESS 1	ADDRESS 2	CITY
Mrs	Mary	Collins	10 Bally Rd	Bondi	Sydney
Mr	Tom	Thompson	15 Bondi Rd	Coogee	Sydney
Ms	Roberta	Reynolds	85 Oxford Street	Maroubra	Sydney
Mr	Scott	Brooke	45 Scott Rd	Randwick	Sydney
Ms	George	Stephens	34 George Street	Bondi	Sydney
Mr	Frank	Hunter	23 Mullins Rd	Tamworth	NSW
Mrs	Shiela	Goddins	45 Llandaff Rd	Rushcutters Bay	Sydney

4. Save the file as Course_Participant_Data.
5. Close the document.
6. Using the current document Course Letter as a form letter and the
Course_Participants_Data as the data source merge the two documents and
insert the merged fields Title, First_Name, Surname, Address and City fields
above Dear Participant in the letter, as shown below.

<<Title>> <<First_Name>> <<Surname>>

<<Address_1>>

<<Address_2>>

<<City>>

Dear Participant

7. Save the mail merge document as Course2014.doc.
8. Save and close all open documents.

MS EXCEL

EXERCISES

Exercise 1

Objectives:
- Introduction to MS Excel files, Workbooks, Worksheets, Columns and Rows.
- Formatting Worksheets.
- AutoFill, Numeric formats, previewing worksheets.

	A	B	C	D	E	F	G
1			Payroll				
2	Date:	1/1/2011					
3	EMPL Number	EMPL Name	Hourly Rate	Hours Worked	Gross Pay	S.S Tax	Net Pay
4	E00001	Ford	7.5	35	?	?	?
5	E00002	Mino	8	30	?	?	?
6	?	Bell	6.5	25	?	?	?
7	?	Davis	9	40	?	?	?
8	?	Turro	10	39	?	?	?

Questions:

1. Open a new workbook and save the file with the name "Payroll".
2. Enter the labels and values in the exact cells locations as desired.
3. Use AutoFill to put the Employee Numbers into cells A6:A8.
4. Set the columns width and rows height appropriately.
5. Set labels alignment appropriately.
6. Use warp text and merge cells as desired.
7. Apply borders, gridlines and shading to the table as desired.
8. Format cell B2 to Short Date format.
9. Format cells E4:G8 to include dollar sign with two decimal places. 10. Calculate the Gross Pay for employee; enter a formula in cell E4 to multiply Hourly Rate by Hours Worked.
11. Calculate the Social Security Tax (S.S Tax), which is 6% of the Gross Pay; enter a formula in cell F4 to multiply Gross Pay by 6%.
12. Calculate the Net Pay; enter a formula in cell G4 to subtract Social Security Tax from Gross Pay.
13. Set the work sheet vertically and horizontally on the page.
14. Save your work.

Exercise 2

OBJECTIVES:
- Using Formulas.
- Header and Footers.

	A	B	C	D	E
1		London Team Call Statistics			
2					
3	**Name**	**No. calls**	**Hours worked**	**Calls per Hour**	**Bonus**
4	Adam	42	5	?	?
5	Jhon	6	4		
6	Jamse	39	6		
7	Alex	15	6		
8	Emma	2	7		
9					
10	**TOTAL**	?	?	?	?
11					
12	**Bonus Rate**	25%			

QUESTIONS:

1. Open a new workbook and save the file with the name "Call Statistics".
2. Delete Sheet 2 & 3, and rename Sheet 1 to (Call Statistics).
3. Enter the labels and values in the exact cells locations as desired.
4. Set the row height of rows 1 & 3 to size 30; and rows 4 until 10 to size 20.
5. Set labels alignment appropriately.
6. Use Warp Text, Orientation and merge cells as desired.
7. Apply border, gridlines and shading to the table as desired.
8. Format column E to include euro (€) sign with two decimal places.
9. Format cell B12 to include % sign with 0 Decimal places.
10. Calculate the Calls per Hour, enter a formula in cell D4 to divide numbers of calls by Hours worked. Using AutoFill, copy the formula to the remaining cells.
11. Calculate the Bonus. Enter a formula in cell E4 to multiply 'Calls per Hours' by the fixed Bonus Rate in cell B12. Using AutoFill, copy the formula to the remaining cells.
12. Calculate the 'TOTAL'.
13. Set the worksheet vertically and horizontally on the page.
14. Create a header that includes your name in the left section, and your ID number in the right section. Create the footer that includes the current Date in the center.

Exercise 3

OBJECTIVES:

❖ Number, Commas and Decimal numeric formats.
❖ Working with Formulas (Maximum, Minimum, Average, Count and Sum).
❖ Percentage Numeric Formats.

	A	B	C	D	E	F
1			Panda EST			
2			Monthly Sales Report - July			
3						
4	Emp. No.	Name	Salary	Sales Amount	Comission	Total Salary
5	S101	Ahmed	1600	2500	?	?
6	S105	Hassan	1800	3000		
7	S112	Ali	1500	2200		
8	S107	Waleed	2000	4500		
9	S110	Mohammed	1700	3500		
10	S103	Samir	1600	2500		
11						
12		Totals	?	?	?	?
13		Average	?	?	?	?
14		Highest	?	?	?	?
15		Lowest	?	?	?	?
16		Count	?			

QUESTIONS:

1. Create the worksheet shown above.
2. Set the column widths as follows: Column A: 8, Column B: 14, Columns C & D: 15, Columns E & F: 14.
3. Enter the formula to find COMMISSION for the first employee. The commission rate is 2% of sales, COMMISSION = SALES * 2% Copy the formula to the remaining employees.
4. Enter the formula to find TOTAL SALARY for the first employee where:
   TOTAL SALARY = SALARY + COMMISSION
   Copy the formula to the remaining employees.
5. Enter formula to find TOTALS, AVERAGE, HIGHEST, LOWEST, and COUNT values.
   Copy the formula to each column.
6. Format numeric data to include commas and two decimal places.
7. Align all column title labels horizontally and vertically at the center.
8. Create a Header that includes your name in the left section, page number in the
center section, and your ID number in the right section.
9. Create footer with DATE in the left section and TIME in the right section.
10. Save the file with name Exercise 3

Exercise 4

OBJECTIVES:

- Working with the IF Statement.

	ITEM NO.	NO. OF ITEMS	ITEM PRICE	TAX	TOTAL PRICE BEFORE TAX	TOTAL PRICE AFTER TAX	RATE
2	100	115	30				
3	101	256	12				
4		49	56				
5		23	150				
6		840	5				
7		200	56				
8		294	300				
9		4	90				
10							
11	Count of items	?					
12	Average of tax	?					
13	Min ITEM PRICE	?					
14	Max ITEM PRICE	?					

QUESTIONS:

For the above table find the following:

1. TAX (If ITEM PRICE is less than 100, TAX is 50, otherwise it should be 100).
2. TOTAL PRICE BEFORE TAX =NO. OF ITEMS * ITEM PRICE.
3. TOTAL PRICE AFTER TAX = TOTAL PRICE BEFORE TAX + TAX.
4. RATE (If TOTAL PRICE AFTER TAX > 3500 then the rate is "HIGH", otherwise it is REASONABLE.
5. Find Count of Items, Average of Taxes, Min Item PRICE and Max Item PRICE.
6. Save file as Exercise 4.

Exercise 5

OBJECTIVES:
✓ Working with Sum IF and Count IF statements.

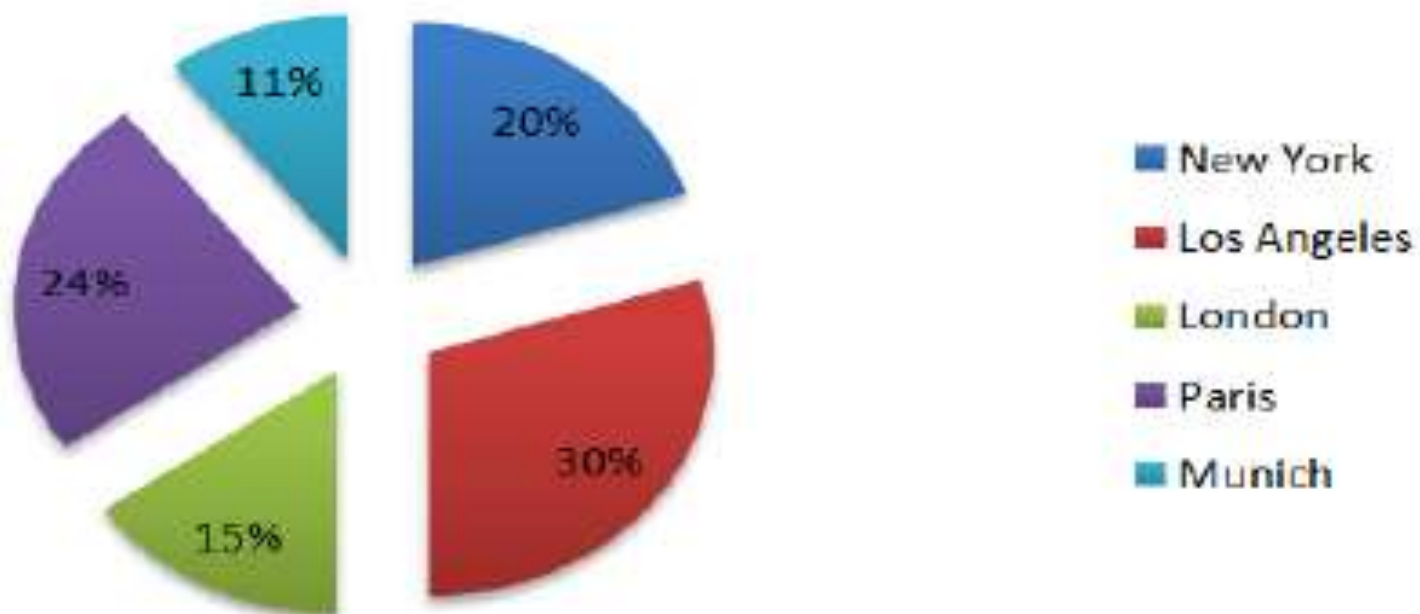|	A	B	C	D	E	F	G
1		Sales and Profit Report - First Quarter 2012					
2	No	City	Jan	Feb	Mar	Average	Maximum
3	C001	New York	$22,000.00	$29,000.00	$19,000.00	?	?
4	C002	Los Angeles	$42,000.00	$39,000.00	$43,000.00	?	?
5	?	London	$18,000.00	$20,000.00	$22,000.00	?	?
6	?	Paris	$35,000.00	$26,000.00	$31,000.00	?	?
7	?	Munich	$12,000.00	$15,000.00	$13,000.00	?	?
8		Total Sales	?	?	?		
9		Cost	$83,000.00	$84,000.00	$43,000.00		
10		Profit	?	?	?		
11		10% Bonus	?	?	?		
12							
13		Total Sales greater than 30,000	?	?	?		
14		No Sales greater than 30,000	?	?	?		

Sales and Profit
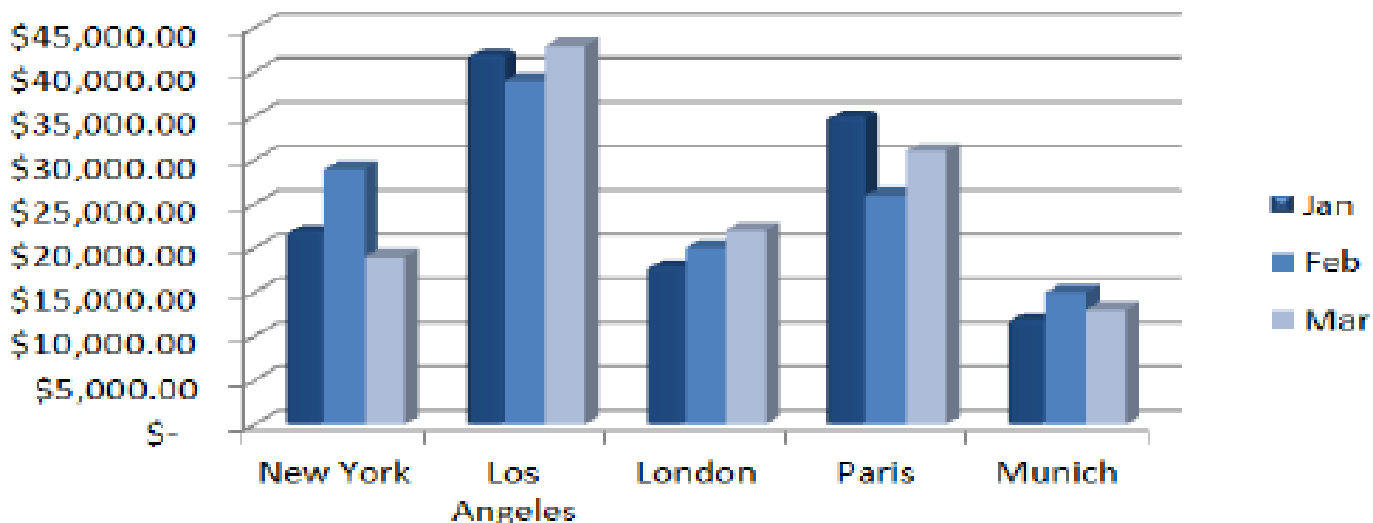
QUESTIONS:

1. Create the worksheet shown above.
2. Set the Text alignment, Columns width and high appropriately.
3. Use AutoFill to put the Series Numbers into cells A5:A7.
4. Format cells C3:G7, C8:E11, C13:E13 to include dollar sign with two decimal places.
5. Find the Average Sales and Maximum Sales for each City.
6. Find the Total Sales for each Month.
7. Calculate the Profit for each month , where profit = Total Sales – Cost
8. Calculate the 10% Bonus, which is 10% of the Profit.
9. Find the Total Sales for each Month; only for sales greater than 30,000.
10. Find the No of Sales for each Month; only for sales greater than 30,000.
11. Create the following Charts:

Maximum Sales in each city

EXAMPLE OF A MS EXCEL SOLUTION

Sales And Profit Report - First Quarter 2012

No	City	Jan	Feb	Mai	Average	Maximum
C001	New york	$22,000.00	$29,000.00	$19,000.00	$23,333.33	$29,000.000
C002	Los angeles	$42,000.00	$39,000.00	$43,000.00	$41,333.33	$43,000.000
C003	London	$18,000.00	$20,000.00	$22,000.00	$20,000.00	$22,000.000
C004	Parts	$35,000.00	$26,000.00	$31,000.00	$30,666.67	$35,000.000
C005	Munich	$12,000.00	$15,000.00	$15,000.00	$14,000.00	$15,000.000
	Total sales	$1,29,000.00	$1,29,000.00	$1,30,000.000		
	Cost	$83,000.00	$84,000.00	$43,000.00		
	Profit	$46,000.00	$45,000.00	$87,000.00		
	10% Bonus	$4,600.00	$4,500.00	$8,700.00		

Total sales	77000	39000	74000	
greater than	2	1	2	

Formulas

1 - Average =Average(cell starting point:cell ending point)
Ex - Average of new york =AVERAGE(C3:E3)

2 - Maximum =MAX(cell starting point:cell ending point)
Ex - MAXof new york =MAX(C3:E3)

3 - Total sales = SUM(cell starting point:cell ending point)
Ex - Total sales of jan =SUM(C3:C7)
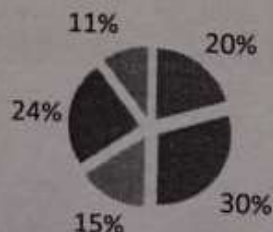
4- Profit = Total sales - cost
Ex - Profit of january =C8-C9

5 - Bonus =Profit* 10/100
Ex = January bonus =C10*10/100

Maximum sales in each city

■ New york   ■ Los angeles

11%
20%
24%
30%
15%

Question:

Create a powerpoint presentation of *any one topic* using different slide layouts,Inserting text ,Word art,Formatting text,bullets and Numbering ,Auto Shapes ,Lines and arrows ,Hyperlinks.
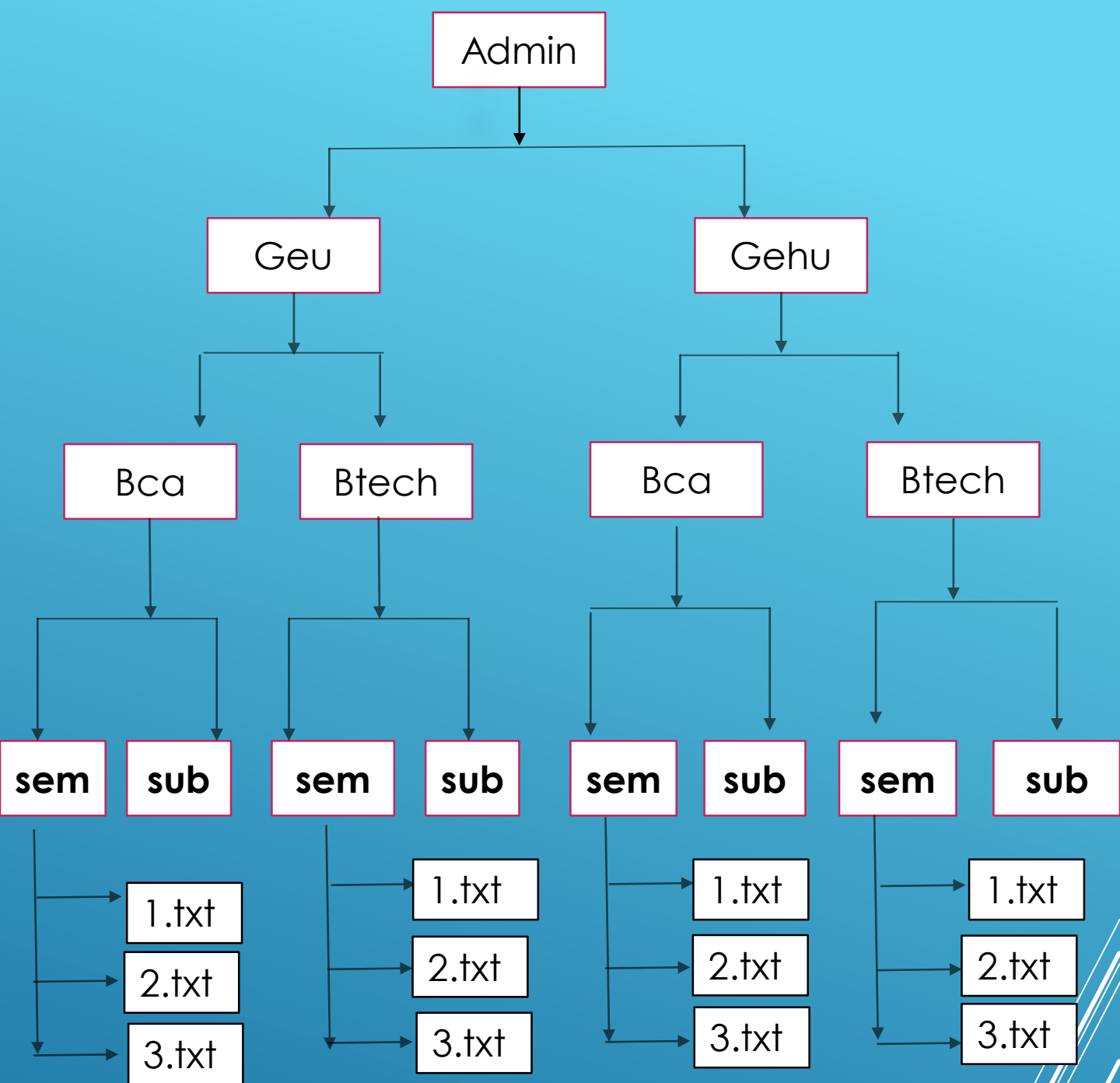Inserting –Images,Clip art,Audio,Video,Objects etc

1. Introduction to computers and Basic computer Organisation
2. Roles of input /output devices in a computer system
3. Computer storage and Software
4. Operating System
5. Programming Languages

Dos

Exercises

MS DOS

Questions:

1. Create the tree structure of the folders using Dos commands
2. On Admin/ geu/ bca/sub create three new files named fit.txt,fcp.txt,math.txt
3. Move 1.txt from Admin/ geu/bca/sem to Admin/ gehu/btech/sub
4. Move 1.txt from Admin/gehu/bca/sem to Admin/ geu/bca/sem
5.Copy 2.txt from Admin/gehu/btech/sem to Admin/ gehu/ btech/sub folder
6.Delete all the files from Admin/gehu/btech/sem
7.Hide all the files from Admin/geu/btech/sem
8.Rename folder Admin With your name
9.Print current date in command prompt
10.Add text "I am a BCA student" to the file 2.txt Of Admin/gehu/bca/sem

Thank
You