

Shri Govind Guru University, Godhra(PMS).

B.A. Semester- 1 (Syllabus)

Computer Applications (EC-II)

Computer Fundamentals

- 1. Introduction to Computer:** (25%)
Introduction to computer system, uses, types, CPU, processor, Input and output devices (with connections and practical demo), keyboard, mouse, joystick, scanner, OCR, OMR, bar code reader, web camera, monitor, printer, plotter.
- 2. Memory and Computer Interface:** (25%)
Primary, secondary, auxiliary memory, RAM, ROM, cache memory, hard disks, optical disks, Types of software, Operating system as user interface, utility programs.
- 3. Data Representation:** (25%)
Number systems and character representation, binary arithmetic.
- 4. Overview of Emerging Technologies and Use of Computers in Education and Research:** (25%)
Bluetooth, cloud computing, big data, data mining, mobile computing and embedded systems. E-Library, Online web content search, E-mail and use of online applications.

Reference Books:

1. A. Goel, Computer Fundamentals, Pearson Education, 2010.
2. P. Aksoy, L. DeNardis, Introduction to Information Technology, Cengage Learning, 2006
3. P. K.Sinha, P. Sinha, Fundamentals of Computers, BPB Publishers, 2007

Practical :

The practical assignment must include connecting parts of a computer and assembling it to an extent, media formatting and installation of some software.

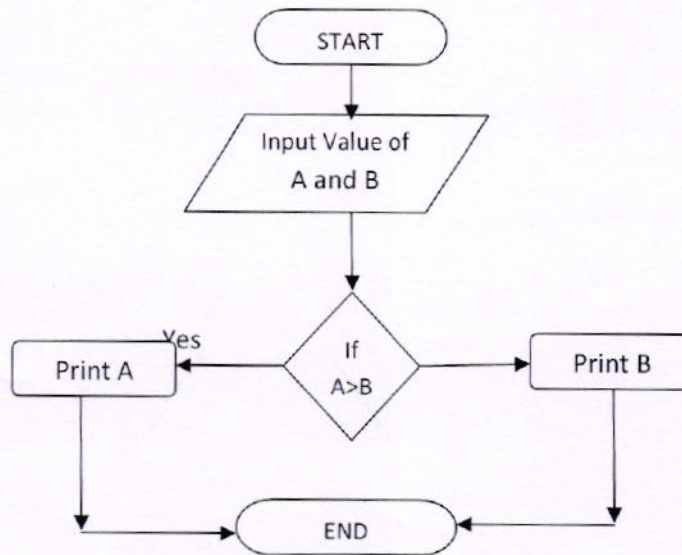
Practical exercises based on MS Office tools using document preparation.

Out of 100 marks 70 marks assigned for end semester examinations which includes 50% weightage(35 Marks) for end semester theory examinations and 50% weightage(35 Marks) for end semester practical examinations. Remaining 30 marks for internal evaluation examination.

Text Editor

1. Prepare a **grocery list** having four columns (Serial number, The name of Item, quantity and price) for the month of April, 15.
 - Font specifications for Title (Grocery List): 14-point Arial font in bold and italics.
 - The headings of the columns should be in 12-point and bold.
 - The rest of the document should be in 10-point Times New Roman.
 - Leave a gap of 12-points after the title.
2. Create a **telephone directory**.
 - The heading should be 16-point Arial Font in bold
 - The rest of the document should use 10-point font size
 - Other headings should use 10-point Courier New Font.
 - The footer should show the page number as well as the date last updated.
3. Design a **time-table form** for your college.
 - The first line should mention the name of the college in 16-point Arial Font and should be bold.
 - The second line should give the course name/teacher's name and the department in 14-point Arial.
 - Leave a gap of 12-points.
 - The rest of the document should use 10-point Times New Roman font.
 - The footer should contain your specifications as the designer and date of creation.
4. Create your Bio-Data. Insert your photo in Bio-data.

5. Draw the following flowchart.



6. Design a certificate in landscape orientation with a border around the document.
7. Create a document about Vision and Mission of your College.
8. Create the following documents:
A newsletter with a headline and 2 columns in portrait orientation, including at least one image surrounded by text.

9. Convert following text to a table, using comma as delimiter
Type the following as shown (do not bold).

Color, Style, Item
 Blue, A980, Van
 Red, X023, Car
 Green, YL724, Truck
 Name, Age, Sex
 Biren, 23, M
 Leela, 46, F
 Tarun, 29, M

9. Enter the following data into a table given on the next page.

Item	Quantity	Cost	Amount
Mouse	8	255	2040
Key board	5	650	3250
Printer	10	4560	45600
Pendrive	15	275	4125
Web Camara	11	1250	13750
Scanner	2	3070	6140

10. Wrapping of text around the image.
11. Create a document using bullet and numbering.
12. Create a mail merge.

13. Following features of menu option must be covered.

File	Complete Menu
Edit	Complete Menu
View	Complete Menu
Insert	Complete Menu
Format	Complete Menu
Table	Complete Menu
Window	Complete Menu
Help	Complete Menu
Tools	All options except online collaboration, Tools on macro, Templates

Jaymanta,
07/27/2021, 12:12

Selected.

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Shri Govind Guru University, Godhra(PMS).
B.A. Semester- 2 (Syllabus)
Computer Applications (EC-II)
Database Management System

Database: Introduction to database, relational data model, DBMS architecture, data independence, DBA, database users, end users, front end tools (20%)

Microsoft Access: Introduction to Microsoft Access, Tables, Relationships, Form Fundamentals, Sub forms (40%)

Getting started Excel : Spreadsheet terminology, Exploring the Excel window , Getting help , Navigating workbooks Entering and editing data , Entering and editing text and values , Entering and editing formulas , Working with pictures , Saving and updating workbooks Modifying a worksheet , Moving and copying data , Moving and copying formulas , Absolute and relative references , Inserting and deleting ranges, rows, and columns Using functions ,Entering functions , AutoSum , Other useful functions Formatting worksheets , Formatting text , Formatting rows and columns , Formatting numbers ,Conditional formatting , Copying formats and applying table formats Printing , Preparing to print ,Page Setup options , Printing worksheets Creating charts , Chart basics , Modifying charts , Printing charts Managing large workbooks , Viewing large worksheets , Printing large worksheets , Using multiple worksheets, Macros and custom functions , Running and recording a macro , Working with VBA code, Creating functions (40%)

Reference Books:

1. P. Rob, C. Coronel, Database System Concepts by, Cengage Learning India, 2008
2. R. Elmasri,S. Navathe Fundamentals of Database Systems, Pearson Education, Fifth Edition, 2007
3. Microsoft Office 2010 (Book in gujarati) , Computer World Publication

Practical List (Using M S Access)

Out of 100 marks 70 marks assigned for end semester examinations which includes 50% weightage(35 Marks) for end semester theory examinations and 50% weightage(35 Marks) for end semester practical examinations. Remaining 30 marks for internal evaluation examination.

1) Create a database having two tables with the specified fields, to computerize a library system of a University College.

LibraryBooks (Accession number, Title, Author, Department, PurchaseDate, Price)

IssuedBooks (Accession number, Borrower)

- a) Identify primary and foreign keys. Create the tables and insert at least 5 records in each table.
- b) Delete the record of book titled "Database System Concepts".
- c) Change the Department of the book titled "Discrete Maths" to "CS".
- d) List all books that belong to "CS" department.
- e) List all books that belong to "CS" department and are written by author "Navathe".
- f) List all computer (Department="CS") that have been issued.
- g) List all books which have a price less than 500 or purchased between "01/01/1999" and "01/01/2004".

- 2) Create a form for taking input for above said database.
- 3) Create a form to search particular records from above said database.

Spreadsheet

1. Enter the Following data in Excel Sheet

REGIONAL SALES PROJECTION						
State	Qtr1	Qtr2	Qtr3	QTR4	Qtr Total	Rate Amount
Delhi	2020	2400	2100	3000		15
Punjab	1100	1300	1500	1400		20
U.P.	3000	3200	2600	2800		17
Harayana	1800	2000	2200	2700		15
Rajasthan	2100	2000	1800	2200		20

TOTAL AVERAGE

- (a) Apply Formatting as follow:
 - i. Title in TIMES NEW ROMAN
 - ii. Font Size - 14
 - iii. Remaining text - ARIAL, Font Size -10
 - iv. State names and Qtr. Heading Bold, Italic with Gray Fill Color.
 - v. Numbers in two decimal places.
 - vi. Qtr. Heading in center Alignment.
 - vii. Apply Border to whole data.
- (b) Calculate State and Qtr. Total
- (c) Calculate Average for each quarter
- (d) Calculate Amount = Rate * Total.

2. Given the following worksheet

	A	B	C	D
1	Roll No.	Name	Marks	Grade
2	1001	Sachin	99	
3	1002	Sehwag	65	
4	1003	Rahul	41	
5	1004	Sourav	89	
6	1005	Har Bhajan	56	

Calculate the grade of these students on the basis of following guidelines:

If Marks	Then Grade
≥ 80	A+
$\geq 60 < 80$	A
$\geq 50 < 60$	B
< 50	F

3. Given the following worksheet

	A	B	C	D	E	F	G	
1	Salesman		Sales in (Rs.)					
2	No.	Qtr1	Qtr2	Qtr3	Qtr4	Total	Commission	
3	S001	5000	8500	12000	9000			
4	S002	7000	4000	7500	11000			
5	S003	4000	9000	6500	8200			
6	S004	5500	6900	4500	10500			
7	S005	7400	8500	9200	8300			
8	S006	5300	7600	9800	6100			

Calculate the commission earned by the salesmen on the basis of following Candidates:

If Total Sales	Commission
< 20000	0% of sales
> 20000 and < 25000	4% of sales
> 25000 and < 30000	5.5% of sales
> 30000 and < 35000	8% of sales
>= 35000	11% of sales

The total sales is sum of sales of all the four quarters.

4. A company XYZ Ltd. pays a monthly salary to its employees which consists of basic salary, allowances & deductions. The details of allowances and deductions are as follows:

Allowances

- HRA Dependent on Basic
 - 30% of Basic if Basic ≤ 1000
 - 25% of Basic if Basic > 1000 & Basic ≤ 3000
 - 20% of Basic if Basic > 3000
- DA Fixed for all employees, 30% of Basic
- Conveyance Allowance Rs. 50/- if Basic is ≤ 1000
Rs. 75/- if Basic > 1000 & Basic ≤ 2000
Rs. 100 if Basic > 2000
- Entertainment Allowance NIL if Basic is ≤ 1000 Rs. 100/- if Basic > 1000

Deductions

- Provident Fund 6% of Basic
- Group Insurance Premium Rs. 40/- if Basic is ≤ 1500
Rs. 60/- if Basic > 1500 & Basic ≤ 3000
Rs. 80/- if Basic > 3000

Gross Salary = Basic + HRA + DA + Conveyance + Entertainment

Total deduction = Provident Fund + Group Insurance Premium

Net Salary = Gross Salary – Total Deduction

5. Create Payment Table for a fixed Principal amount, variable rate of interests and time in the format below:

No. of Instalments	5%	6%	7%	8%	9%
3	XX	XX	XX	XX	XX
4	XX	XX	XX	XX	XX
5	XX	XX	XX	XX	XX
6	XX	XX	XX	XX	XX

6. Use an array formula to calculate Simple Interest for given principal amounts given the rate of Interest and time

Rate of Interest	8%
Time	5 Years
Principal	Simple Interest
1000	?
18000	?
5200	?

7. The following table gives year wise sale figure of five salesmen in Rs.

Salesman	2000	2001	2002	2003
S1	10000	12000	20000	50000
S2	15000	18000	50000	60000
S3	20000	22000	70000	70000
S4	30000	30000	100000	80000
S5	40000	45000	125000	90000

- Calculate total sale year wise.
- Calculate the net sale made by each salesman
- Calculate the maximum sale made by the salesman
- Calculate the commission for each salesman under the condition.
 - If total sales $>4,00,000$ give 5% commission on total sale made by the salesman.
 - Otherwise give 2% commission.
- Draw a bar graph representing the sale made by each salesman.
- Draw a pie graph representing the sale made by salesman in 2000.

Deepest
(Bote) 11.427

Darman R.M.
2017 2018 2019