HEMCHANDRACHARYA NORTH GUJARAT UNIVERSITY, PATAN
Faculty of Arts

B. A. Semester – I [Computer] Core Elective

Sub. Code	Subject Name	Teaching Scheme (Per week)		Teaching Scheme (Per semester)		Examination Scheme					
						INT		EXT		TOTAL	
		Th. (hours)	Pr. (hours)	Total Hours	Credit	Th. (marks)	Pr. (marks)	Th. (marks)	Pr. (marks)	Th. (marks)	Pr. (marks)
Paper-I	Computer Basics & IT Tools	4	--	40	4	30	--	70	--	100	--
Paper-II	Practical Based On Computer Basics & IT Tools	--	4	40	4	--	30	--	70	--	100

HEMCHANDRACHARYA NORTH GUJARAT UNIVERSITY, PATAN
B.A. Semester – I [Computer]
Paper-I : Computer Basics & IT Tools

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4	--	40	4	30	--	70	--	100	--

Unit – 1   [18 Marks]

Computer basics
Digital & Analog systems, Logic levels and pulse wave forms, digital computer
Major parts of computer:
> Hardware
> Software - Application software and System Software

Classifications of Computers
Palmtop PC, Laptop PC, Personal Computer, Workstations, Mainframe, Supercomputer.

Operating System
Dos (DOS Commands), Windows Family

Introduction to Computer Parts:
Input Devices (Only Principles)
> Keyboard, Mouse, Light pen, Joystick, Scanner, Voice input system, Touch screen

Output devices (Only Principles)
> **Monitor** - CRT terminals (Monitor / VDU),
> Non – CRT terminals, LCD monitor, Plasma display, LED monitor
> **Printer** - Dot matrix printer, Ink jet printer, Laser printer, Line printer, Plotter.

Storage devices (Only Principles & Types)
> **Magnetic memory** - Magnetic disk, Hard disk, Floppy disk
> **Semiconductor memory** - RAM, ROM, Flash memory.
> **Optical memory** - CD, CD-ROM, DVD, DVD-ROM, Cache memory,

Unit – 2   [17 Marks]

Number system - Binary, decimal, octal, hexadecimal

Conversion - Binary to decimal, Binary to Octal, Binary to Hexadecimal, Decimal to Binary, Decimal to Octal, Decimal to Hexadecimal, Octal to Binary, Octal to Decimal, Octal to Hexadecimal, Hexadecimal to Binary, Hexadecimal to Octal, Hexadecimal to Decimal.

Binary arithmetic – Addition, subtraction (simple method)

Unit - 3   **[18 Marks]**

MS Word Basics: Introduction to MS Office; Introduction to MSWord; Features & area of use; Working with MS Word. - Menus & Commands, Toolbars & Buttons, Shortcut Menus, Wizards & Templates;

Creating a New Document; Different Page Views and layouts; applying various Text Enhancements;

Working with - Styles, Text Attributes; Paragraph and Page Formatting; Text Editing using various features– Bullets, Numbering, Auto formatting, Printing & various print options.

Advanced Features of MS-Word: Using bookmarks; Spell Check and Thesaurus; Find & Replace; Headers & Footers ; Inserting – Page Numbers, Pictures, Files, Auto texts, Symbols ; Working with Columns, Tabs & Indents; Creation & Working with Tables ; Margins & Space management in Document; Mail Merge.

MS Excel: Introduction and area of use; Working with MS Excel.; concepts of Workbook & Worksheets; Using different features with Data, Cell and Texts; Inserting, Removing & Resizing of Columns & Rows; Working with Data & Ranges; Different Views of Worksheets;

Column Freezing, Labels, Hiding, Splitting etc.; Using different features with Data and Text; Use of Formulas, Calculations & Functions; Cell Formatting including Borders & Shading; Working with Different Chart Types; Printing of Workbook & Worksheets with various options.

Unit – 4   **[17 Marks]**

MS Access
Introduction of Database, Creating database, table, fields & its properties; Adding primary key into table; Relationship; Adding/Editing data;

Data type - Text, Number, Auto number, Currency, Boolean, Date/Time, Memo
Object – Table, Query, Forms, Reports, Controls use in form and report

MS PowerPoint: Introduction & area of use; Working with MS PowerPoint; Creating a New Presentation; Working with Presentation; Using Wizards; Slides & it's different views; Inserting, Deleting and Copying of Slides; Working with Notes, Handouts, Columns & Lists; Adding Graphics, Sounds and Movies to a Slide; Working with PowerPoint Objects; Designing & Presentation of a Slide Show; Printing Presentations, Notes, Handouts with print options.

Reference Books:

Unit 1 & 2
    1. Fundamentals of computers – By. V. Rajaraman PHI Publication
    2. Fundamentals of computers – By. Anand Kumar PHI Publication
    3. Fundamentals of computers – By. B. Ram
    4. O-Level (Information Technology) - By V.K.Jain (Module- M1.1)
    5. Computer Architecture – By K M Hebbar MacMillan Publication
Unit 3 & 4
    6. Ms - Office 2000 – No Experience required – Gini Courter and Annette Marquis.
    7. Straight to the Point – MS Office 2003 By Dinesh Maidasani Publisher:firewall
    8. Master Visually Microsoft Office 2003 By Michael S. Toot Publisher:visual

Question Paper Scheme:

University Examination Duration: 3 Hours.

Q.1 - Unit-I   (18 Marks)
       A. Objective/ Short Questions.
       B. Descriptive/ Long questions.

Q.2 - Unit-II   (17 Marks)
       A. Objective/ Short Questions.
       B. Descriptive/ Long questions.

Q.3 - Unit-III   (18 Marks)
       A. Objective/ Short Questions.
       B. Descriptive/ Long questions.

Q.4 - Unit-IV   (17 Marks)
       A. Objective/ Short Questions.
       B. Descriptive/ Long questions.

Note: All Objective/ Short Questions are compulsory, no option will be given.

B.A. Semester – I [Computer]
Paper-II : Practical Based On Computer Basics & IT Tools

Teaching Scheme (Per week)		Teaching Scheme (Per semester)		Examination Scheme					
				INT		EXT		TOTAL	
Th. (hours)	Pr. (hours)	Total Hours	Credit	Th. (marks)	Pr. (marks)	Th. (marks)	Pr. (marks)	Th. (marks)	Pr. (marks)
--	4	40	4	--	30	--	70	--	100

University Examination Duration: 3 Hours (Per Batch)

(Practical List)

MS Word

1. Write a word document with not at least 150 words consisting of 10 spelling mistakes and grammar mistakes. Then correct those mistakes using spell check and grammar check.
2. Write a word document to make the heading of the paragraph as center aligned, underlined and in red colored.
3. Write a word document to insert table consisting of fields like Roll no, Name, City, and contact no. of student and give heading of that table.
4. Write a word document to designed table and apply center aligned text, border and shading.
5. Write a word document to insert header and footer, word art, clip art, shapes, images and charts.
6. Write a word document to place watermark in the document.
7. Write a word document to create ordered list and unordered list.
8. Create a letter head in MS.Word for your college with the following specification
   (a) Name of the college use times new roman font and size 20
   (b) For address of the college use courier font and size 10
   (c) Insert logo from clip art.
   (d) Write a macro to display date and place.
9. Write a letter on separate document and perform mail merge operation on the letter with at least five records.
10. Write a word document to create your bio data consisting of your photo, one table, ordered list and unordered list.

MS Excel

1. Identify the below parts from Excel and define them with one or two line.

Title Bar	Menu Bar	Standard Tool Bar
Formatting Tool Bar	Formula Bar	Status Bar
Scroll Bar	Workspace Area	Cell
Active Cell	Row	Column
Sheet Tab	Work Sheet	Work Book

2. Prepare worksheet as shown below. (Apply necessary formulas)

ABC ENTERPRISE				
			DATE	
			TIME	
INDEX	*ITEM NAME*	*PRICE*	*QUANTITY*	*AMOUNT*
1				
2				
3				
			TOTAL AMOUNT	

(Apply all types of Cell Formatting, Date & Time Formulas)

(Apply Printing, Inserting, Deleting, Copying, Renaming and Moving worksheet.)

3. Prepare Mark sheet as shown below. (Apply necessary formulas)

XYZ COLLEGE								
INDEX	STUDENT NAME	SUB-1	SUB-2	SUB-3	TOTAL	PERCENTAGE	CLASS	RESULT
1								
2								
3								

For Class: Distinction   if percentage >=70
              First   if percentage >=60
              Second   if percentage >=50
              Pass   if percentage >=40
For Result: Pass   if more than 40% in each subject, otherwise Fail.

(Apply Ascending/descending on STUDENT NAME and TOTAL)
(Apply Protection facility to worksheet)

4. Prepare Salary sheet employees of ABC Company. (Apply necessary formulas)

ABC COMPANY												
SALARY BILL												
											Date	System Date
INDEX	NAME	BASIC	D.P.	BASIC+DP	DA	HRA	MA	GROSS TOTAL	PF	PT	TOTAL DED.	NET SALARY
1												
2												
3												
4												
5												
TOTALS OF ALL COLUMNS												

D.P	= Dearness Pay	50% of Basic
DA	= Dearness Allowance	150% of Basic+DP
HRA	= House Rent Allowance	7.5% of Basic+DP
MA	= Medical Allowance	Fix 150Rs.
GROSS TOTAL	= Total of Basic+DP+DA+HRA+MA	
PF	= Provident Fund	12% of Basic+DP+DA
PT	= Professional Tax	200 Rs. If gross >=20000Rs, Otherwise 100Rs.
TOTAL DED.	= Total Deduction	PF+PT
NET SALARY	= GROSS TOTAL – TOTAL DEDUCTION	

5. Prepare worksheet as shown below.

ABC ENTERPRISE				
SELLING REPORT				
INDEX	ITEM NAME	JANUARY	FEBRUARY	MARCH
1	BOOKS	10000	8000	12000
2	NOTEBOOKS	5000	6000	8000
3	PENCILS	7000	6500	9000
		TOTAL AMOUNT		

(a) Prepare a column chart with Month on X-axis and Quantity on Y-axis.
(b) Convert Column Chart into Line Chart.
(c) Create pie chart for January month where each slice in the form of percentage.
(d) Create Bar chart and 3-d Column chart.

6. Prepare worksheet as shown below and create pivot table which shows the total SALE AMOUNT for each of the three SALES REPRESENTATIVES.

ABC ENTERPRISE			
SELLING REPORT			
INDEX	SALES REPRESENTATIVE	SELL AMOUNT	MONTH
1	SURESH	10000	JANUARY
2	NILESH	5000	JANUARY
3	MAHESH	7000	JANUARY
4	NILESH	7500	FEBRUARY
5	SURESH	9000	FEBRUARY
6	MAHESH	8000	FEBRUARY
7	SURESH	12000	MARCH
8	NILESH	8000	MARCH
9	MAHESH	11000	MARCH

7. Create one simple macro program.

MS Power Point

1. Create a Power point presentation with four slides in which first slide introduces your college, second shows subjects in first year, third shows subjects in second year, and forth shows subjects in third year.
   (a) Delete any one slide and recreate again.
   (b) Format text written in each slide. (Size, color etc...)
   (c) Insert clip art in slides.
   (d) Present with slide show.

2. Create a Power Point presentation with four slides in which first slide introduces Computer Hardware subject, second shows Input devices, Third shows Output devices, and forth shows storage devices.
   (a) Change the Layout of presentation.
   (b) Insert images as the slide. (e.g. printer image in third slide)
   (c) Apply various slide transition effects.
3. Create a Power Point presentation with four to five slides which introduces your city.
   (a) Add table which shows name of colleges in your city.
   (b) Apply various slide transition effects.
   (c) Apply various Animation effects.
   (d) Apply various transition sounds.
4. Create a Power Point presentation with four to five slides which introduces your electronics company.
   (a) Insert sound from file.
   (b) Insert movie from file
   (c) Insert chart in one slide.
   (d) Insert date and time, slide number and header/footer.

MS Access

1. Create a teachers table in MS.Access with the following fields for 10 records.

NO	NAME	DEPARTMENT	DEPARTMENTNAME	LOCATION	SALARY
	S				

   Solve the following query:
   (a) Display Records of Department where salary less than 4000
   (b) List record where location is 'patan'.
   (c) List records whose name is begin with letter 'g'.

2. Create a course table form in MS.Access with the fields like

   Roll No, Name, Course, Institute, Fees.

   Solve the following Query:
   (a) Insert 5 records
   (b) Display the course with least fees along with the courses.
   (c) Display the course with highest fees along with the courses

3. Create an employee table in MS.Access with following fields.

EMPNO	EMPNAME	BASIC	DA	TA	HRA	PF	GROSSSALARY	NETSALARY

   Calculate Da @ 20%, HRA @ 15% , Ta fix rate 200 ,PF @ 10%

4. Create a student table in MS.Access With the following field for 10 records.

ROLLNO	NAME	CLASS	SUB1	SUB2	SUB3	TOTAL	AVERAGE	RESULT

   Generate The Form and Report using wizard or designed view.
5. Create a relationship between Course table and student table.

University Practical Exam Scheme: (3 Hours)

Program	Output	Viva	Journal	Total
25 Marks	15 Marks	20 Marks	10 Marks	70 Marks