

VEER NARMAD SOUTH GUJARAT UNIVERSITY

B.C.A.

Semester - I

Paper – 101 Communication Skills **Effective From 2006**

1. Introduction

- 1.1 Spoken and Conversation fir Greetings, Requests, Invitation, Permission, Thanks, etc.
- 1.2 Basic sentence Patterns
- 1.3 Agreement between Subject and Verb
- 1.4 Basic rule of Composition
- 1.5 Paragraph Development
- 1.6 Vocabulary Development

2. Reading Skills

- 2.1 Model of Reading to learn –P.S.OR.
- 2.2 Reading Tactics and Strategies
- 2.3 Reading Purposes and Meaning
- 2.4 Reading outcomes structure of meaning techniques

3. Writing Skills

- 3.1 Guidelines for effective writing
- 3.2 Writing style for application
- 3.3 Personal Resume
- 3.4 Business Letter and Memo including Requests, Complains asking quotation etc.
- 3.5 Technical Report Writing
- 3.6 Writing paragraphs on a given topic
- 3.7 Developing story from given points

4. Listening Skills

- 4.1 Barriers to listening
- 4.2 Effective listing skills
- 4.3 Feedback skills
- 4.4 Attending Telephone calls
- 4.5 Note taking

5. Speaking and Discussion Skills

- 5.1 Components of Effective talk / Presentation
- 5.2 Planning of content of a talk / Presentation
- 5.3 Use of Visual aids
- 5.4 Effective speaking skills
- 5.5 Discussion skills

Reference Books:

1. Handbook of Practical communication skills – Chrisle W., JAICO
2. Basic Managerial Skills for all – S.J.McGrath – PHI
3. Reading to learn – Sheila Smith & Thomas M. – Methuen(London)
4. Communication Conversation Practice – Tata McGraw Hill
5. Communication in English-R P Bharnagar & RT Bell-Orient Longman
6. Good English – G.H.Vallins – Rups & Co.
7. Let's Talk English – M.I.Joshi
8. Essentials of Business Communications – Pat & Sons, S.Chand

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Semester - I

Paper – 102 Mathematics – I
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1. Set Theory

- 1.1 Introduction
- 1.2 Representation
- 1.3 Operations & its properties
- 1.4 Venn Diagram
- 1.5 Cartesian Product and Graph

2. Functions

- 2.1 Definition
- 2.2 Types – Domain and Range
- 2.3 Construction and functions
- 2.4 Even Analysis
- 2.5 Liner Quadratic & Higher degree Polynomial

3. Elements of Differential Calculus

- 3.1 Real numbers and functions
- 3.2 Limits and continuity
- 3.3 Differentiation
- 3.4 Derivatives of Trigonometric Functions

4. Matrices and Determinants

- 4.1 Matrices of Order $m \times n$
- 4.2 Row and Column Transformation
- 4.3 Addition, Subtraction, Multiplication of Matrices
- 4.4 Computation of Inverse
- 4.5 Cramer's Rule
- 4.6 Business Applications of Matrices.

5. Basics of CO-Ordinates Geometry

- 5.1 Line Quadrants and Co- Ordinates
- 5.2 Distance between two points
- 5.3 Area of Triangle
- 5.4 Straight Line and General equation of straight Line

Reference Books :

- 1. Co-ordinate Geometry – Shantinayakan
- 2. Liner Algebra – Sushoma Verma
- 3. Advanced Mathematics - B.S. Shah & Co.

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Semester - I

Paper – 103 Computer Organization Effective From 2006

1. Introduction

- 1.1 History of Development in Computers
- 1.2 Types of Computers
- 1.3 Microcomputers , Notebook computers , Paimtops , PDA
- 1.4 Hardware & Software

2. Basic Computer Architecture

- 2.1 Block Diagram & Functional Units
- 2.2 Various Hardware components : Mother board, Prpcessor , memory, ports, devices to be connected
- 2.3 Phases of machine cycle

3. Number systems

- 3.1 Various Numbers systems (Binary , Octal, Hex)
- 3.2 Conversion among various number systems
- 3.3 Binary & Hex arithmetic
- 3.4 Parity scheme
- 3.5 Character Codes : EBCDIC, ASCH,UNICODE

4. Memory

- 4.1 Memory organization
- 4.2 Addressing modes
- 4.3 Memory types : RAM, ROM , FLASH, PROM, EPROM, EEPROM
- 4.4 Concepts of virtual memory , Cache memory

5. Storage devices

- 5.1 Floppy Disks : structure , reading/ writing , formatting
- 5.2 Hard disk & Disk architecture
- 5.3 CD- ROM, DVDROM
- 5.4 Bake up devices

6 I/D devices

- 6.1 Printers :Line printer , DOT Matrix , Laser , Inkject
- 6.2 Pletters Scanners OCK, OMR
- 6.3 Keyboard , Mouse
- 6.4 Other devices : Joysticks , Touch pads , pens etc
- 6.5 Monitors (CRT, Flat Screen)

Reference Books :

- 1. How computers work : Ron white - Tech Media
- 2. Introduction to computers : 4th Edition – Peter Norton
- 3. Fundamentals of Computers : V Rajaraman

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Semester - I

Paper – 104 Computer Programming and Programming Methodology Effective From 2006

1. Algorithm & Flowcharting
2. Programming Languages & Structured Programming
 - 2.1 Structured Programming
 - 2.2 Levels of Programming languages
 - 2.3 Concepts of Compiler / Interpreter, Editor
 - 2.4 Problem Analysis
3. Constants & Variables
 - 3.1 Character Set
 - 3.2 Constants – needs & definition
 - 3.3 Variables – needs & definition
4. Expression & Operators
 - 4.1 Operators
 - 4.2 Expression
 - 4.3 Evaluation & Assignment of Expression
5. Input & Output Statements
6. Jumping, Branching & Looping Statements
7. Built – in functions : Mathematical and String Functions.
8. Concepts of Arrays
 - 8.1 One dimensional array
 - 8.2 Simple sort using one dimension array.
 - 8.3 Concept of Two dimension array
 - 8.4 Addition subtraction using two dimension arrays
9. Concepts of Debugging
 - 9.1 Concepts of Dry Run
 - 9.2 Concepts of some common bugs

Reference Books :

1. Structured Programming Language – La Budde – McGraw Hill
2. Programming experience in BASIC – Kenetkar – BPB
3. Programming with BASIC – Gottfried – TMH
4. Programming in BASIC – Balaguruswamy – TMH

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Semester - I

Paper – 105 PC Software – I Effective From 2006

1. Introduction

- 1.1 Concept of Window, Icon, Menu
- 1.2 Desktop
- 1.3 Creating Folder and Shortcuts
- 1.4 Finding Files and Folders
- 1.5 Creating Copying, moving and deleting files
- 1.6 Adding in and deleting from start menu
- 1.7 Window explorer
- 1.8 Elementary commands

2. Word Processing Package

- 2.1 Typing, editing, proofing & reviewing
- 2.2 Formatting text & paragraphs
- 2.3 Automatic formatting and styles
- 2.4 Working with Tables
- 2.5 Graphics and Frames
- 2.6 Mail Merge
- 2.7 Automating your work & printing documents

3. Spreadsheet Package

- 3.1 Concept of worksheet
- 3.2 Working & editing in work books
- 3.3 Creating formats & links
- 3.4 Protecting and hiding data
- 3.5 Built-in functions
- 3.6 Formatting a worksheet and creating graphic objects
- 3.7 Creating charts (graphs), formatting and analyzing data
- 3.8 Organizing data in a list (data management)
- 3.9 Sharing & importing data
- 3.10 Printing
- 3.11 Macros

4. Presentation package

- 4.1 Creating and editing slides
- 4.2 Creating and editing objects in the slide
- 4.3 Animatin and slide transition effects
- 4.4 Creating and running slide show
- 4.5 Templates
- 4.6 Interface with other packages

5 Internet

- 5.1 Coucepts
- 5.2 Working
- 5.3 Malling & surfing tools

Reference Books :

1. Word 6 for Windows Quick & easy reference – Mansfield – BPB
2. Mastering Word 6 for Windows – Manfield – BPB
3. Mastering Excel 4 for Windows – Townsend – BPB
4. Mastering Excel 4 for Windows – Chester – BPB
5. Excel 5 for Windows Quick & Easy – Jones – Tech
6. Mastering Windows- 95 - Cowart – BPB
7. Mastering Microsoft Office 97 – L.Moseley, D.Boody – BPB
8. Internet : An introduction Cisiems - Tata Mac , D. Boody - BPE
9. Internet 6 in 1 – Joe Krayuak & Habraken , PHI
10. Internet access essentials - Tittel & M Robbins , AP professional

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Paper – 106 Practical
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Practicals Papers 104 and 105.