Soft Skill-I

Unit-I

Introduction to Communication: - Definition and importance of communication. - Communication processes and models. - Types of communication: verbal, non-verbal, written, and visual. **Listening and Feedback: -** The significance of active listening. - Barriers to effective listening. - Feedback: types, importance, and effective feedback strategies.

Unit-II

Emotional Intelligence and Adaptability: - Understanding one's Emotions: Self-awareness and self-regulation. - Interpersonal Skills: Building relationships and understanding others. – The Role of Empathy: Connecting with colleagues and superiors. - **Adaptability in the Workplace: -** Embracing change and learning agility.

Unit-III

Non-verbal Communication: - Types of non-verbal communication: body language, facial expressions, gestures. - Importance of tone and voice. - Cultural variations in non-verbal communication. **Interpersonal Communication: -** Nature and importance. - Strategies for effective interpersonal communication. - Barriers and overcoming barriers. Group **Communication and Team Dynamics: -** Role of communication in group settings. - Group norms and dynamics. - Strategies for effective group communication.

Unit-IV

Introduction to Quantitative and Logical Reasoning: - Importance and real-world applications. - Differences between quantitative and logical reasoning. Number Systems - Whole numbers, decimals, fractions. - Prime numbers, factors, and multiples. - Arithmetic operations and properties.

Unit-V

Modern Communication Technologies: - Introduction to digital communication. Social media and its impact on communication. - Electronic communication tools and their appropriate use. **Crisis Communication and Conflict Resolution: -** Role of communication during crises. - Strategies for crisis communication. - Communication in conflict resolution and negotiation.

Text Book:
1. Soft Skills: Know Yourself And Know The World By Dr. K. Alex, S Chand Publishing
2. A Modern Approach to Logical Reasoning by RS Aggarwal

References:
1. [Emotional Intelligence (EQ) - Mind Tools](#)
2. [Adaptability in the Workplace - SHRM](#)
3. [Cultural Variations in Non-Verbal Communication](#)
4. [Improving Interpersonal Communication](#)
5. [Khan Academy - Math](#)
6. [How Technology Has Changed Communication](#)

Soft Skills-II

Unit-I

Presentation Skills: - Structure of effective presentations. - Visual aids in presentations. - Tips for engaging and impactful presentations. **Introduction to Business Communication: -** Overview and importance of business communication. - Differences between business communication and general communication. - The flow of communication within an organization.

Unit-II

Arithmetic and Algebraic Reasoning: - Ratios, proportions, and percentages. - Averages, medians, modes. - Basic algebra: equations, inequalities, and functions. Geometry and Spatial Reasoning - Basic geometric shapes and their properties. - Area, volume, and perimeter calculations. - Coordinate geometry. - Spatial visualization.

Unit-III

Business Writing Skills: - The importance of clarity and conciseness. - Writing effective emails and memos. - Report and proposal writing. - Proofreading and editing. **Visual Communication in Business: -** Importance of visual communication. - Infographics, charts, and data visualization. - Principles of design in business documents and presentations.

Unit-IV

Data Interpretation: - Graphs: bar graphs, pie charts, line graphs. - Tables and case lets, making decisions based on data insights. Probability and Statistics - Basic concepts of probability. - Combinatory: permutations and combinations. – Descriptive statistics: mean, median, mode, standard deviation. Logical Sequencing - Ordering and ranking. - Sequencing events. - Time-based puzzles.

Unit-V

Professionalism: - Vertical Career Planning: Understanding the growth trajectory in a chosen career. - Goal Setting: Crafting achievable and measurable professional goals. - Employer's Expectations: What employers look for in potential employees - Domain Specific Soft Skills: -Tailoring soft skills to specific industries and roles - Professional Grooming: Presenting oneself in a professional and appropriate manner.

Text Book:
1. Personality Development And Soft Skills By Barun K. Mitra, Oxford University Press
2. Data Interpretation & Data Sufficiency – Arihant Expert

References:
1. [Khan Academy - Arithmetic and Pre-Algebra](#)
2. [Geometry Help on Math Is Fun](#)
3. [Venngage Infographics Guide](#)
4. [Data Interpretation on IndiaBIX](#)
5. [GMAT Club](#)

Soft Skills-III

Unit-I

Curriculum Vitae: - Importance of Building a Curriculum Vitae: Why a CV is a crucial professional document. - Elements of Curriculum Vitae: Key components to include in a CV. - Model Curriculum Vitae: Analysing exemplary CVs. - Common Errors: Identifying and avoiding frequent mistakes. - Designing a Personalized Curriculum Vitae: Tailoring a CV to individual strengths and experiences.

Unit-II

Communication Skills: - Elements of Effective Communication. - Verbal and Non-verbal Communication. - Barriers to Effective Communication. - Presentation Skills. - Overcoming the Fear of Presentation. - Conversation Etiquette. - Art of Small Talk. **Building Communication Skills: -** Oral Communication. - Active Listening. - Engaging Speaking Skills. - Barriers to Communication. - Non-verbal Communication.

Unit-III

Group Discussion: - Need for and Importance of Group Discussion. - Skills Required for Effective GDs. - Do's and Don'ts of GDs. - Types of GDs Topics: - Domain Specific. - Abstract. -

Current Affairs. - Social Issues. - Techniques to Generate Points in a Group Discussion: Strategies to contribute effectively. - Roles in Group Discussion.

Unit-IV

Attitude Building: - Understanding the core concept of attitude. - Difference between Attitude and Behaviour. -Importance of Attitude in an Interview. -Personality Traits an Engineer Should Have. - Matching Profession to Your Personality:. **Personal and Social Branding: -** Introduction to Self-branding. - Resume Building. -Video CV and Profiles. - Creating an Impressive Elevator Pitch. - Platforms for Branding. - Using Social Media Platforms Constructively.

Unit-V

Interview Techniques and Mock Interviews: - Common Interview Questions.- STAR Technique. -Mock Interviews: Simulated interviews to practice and receive feedback. - Follow-up Etiquette: Sending thank you notes and inquiries post-interview.
Networking and Mentorship: - Importance of Networking: Building professional relationships for growth. - Networking Platforms and Events: Finding opportunities to connect with professionals. - Seeking Mentorship: Identifying potential mentors and building a mentor-menteerelationship. - Giving Back: Becoming a mentor to others and sharing knowledge.

Text Book:
1. The Ace Of Soft Skills: Attitude, Communication And Etiquette For Success By Gopalaswamy Ramesh And Mahadevan Ramesh, Pearson
2. The Elements of Resume Style: Essential Rules for Writing Resumes and Cover Letters That Work" by Scott Bennett

References:
1. Mind Tools - Communication Skills
2. Forbes - Personal Branding
3. Elevator Pitch Guide
4. Interview Questions and Answers
5. STAR Technique

Soft Skills-IV

Unit-I

Introduction to Computational Thinking: -What is Computational Thinking? - The four pillars of Computational Thinking: Decomposition, Pattern Recognition, Abstraction, and Algorithm Design. - Real-world examples and applications.

Introduction to C++ Programming & Development Environment: - History and significance of C++. - Overview of the C++ development environment. - Installing and setting up a C++ compiler (e.gGCC). - Writing, compiling, and running your first C++ program.

Unit-II

Basic Syntax and Data Types: - Structure of a C++ program.c- Variables and data types (int, float, char, etc.). - Constants and enumerations. - Basic input and output using `cin` and `cout`. **Control Structures: -** Conditional statements (`if`, `else-if`, `else`). - Switch case. - Loops (`for`, `while`, `do-while`). - Break, continue, and goto.

Unit-III

Functions and Modularity: - Introduction to functions. - Defining and calling functions.
- Function parameters and return types. - Scope and lifetime of variables. - Recursive functions.
Data Structures Arrays and Strings: - Introduction to arrays: declaration, initialization, and accessing. - Multidimensional arrays. - Introduction to C++ strings and string library functions.
- Introduction to vectors (briefly, as an advanced array type). **Pointers and Dynamic Memory:** - Basics of pointers: declaration, initialization, and dereferencing. - Pointers with arrays and functions. - Dynamic memory allocation (`new` and `delete`).

Unit-IV

Object-Oriented Programming (OOP) Basics: - Introduction to OOP and its principles.
- Classes and objects. - Constructors and destructors. - Member functions and encapsulation. - Introduction to inheritance. **File Handling:** - Basics of file input and output. - Reading from and writing to text and binary files.

Unit-V

Aptitude Refresher: - Must do questions. - Advance Problem Solving. - Most asked questions in placements round. - Important Tips and Tricks to remember. - Review of important topics.

Text Book:
1. Let Us C++ by Yashavant Kanetkar
2. Computational Thinking for the Modern Problem Solver" by David D. Riley

References:
1. C++ tutorials
2. GeeksforGeeks article on dynamic memory allocation
3. For practice problems and coding challenges