

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR**  
**MCA I Year II Sem**

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**(17FHS201) ORGANIZATION STRUCTURE AND HUMAN RESOURCE MANAGEMENT**

**Objective:** The main aim of this course is to equip the student with the basic understanding about the concepts of Organizational design and Structure, Management, and the fundamental knowledge of Human Resource Management.

**UNIT- I: Organization Design and Structure:** Organisation- meaning- definition-Formal and Informal Organization- Organisation as a system and process- Concept of Organisational design and Structure- - types of organizational structures - Mechanistic and Organistic structures- Division of labour – Departmentation- Span of Management- Delegation of Authority- Centralisation and Decentralisation.

**UNIT-II: Introduction to Management:** Meaning-definition- importance- evolution of Management thought- Scientific Management-Henry Fayol’s Principles of Management  
-Functions of Management- Planning- Organising-Directing- Staffing- and Controlling

**UNIT-III: Human Resource Management:** Meaning - definition- functions- evolution of HRM - Human Resource Planning(HRP)-Meaning-definition-Steps in HRP- Job Analysis process and methods-Employee Recruitment –Meaning- definition- Sources of Recruitment-internal and external sources-Methods of Recruitment- Factors affecting recruitment-Selection-meaning- definition-process of selection-different tests used for selection- Employee Induction -Placement.

**UNIT-IV: Employee Training and Development:** Meaning- importance-need- objectives and policies-principles- training methods- On-the-job and Off-the-job training methods- Career planning- Definition, succession planning, elements of career development programmes -steps in career development system-advantages and limitations.

**UNIT-V: Performance Appraisal:** Meaning- need- purpose- methods of performance Appraisal-essentials of a good performance appraisal- Benefits of performance appraisal system- Wage and Salary Administration-Concept-Meaning- objectives- Principles.

**Learning outcome:** After completion of the course, the student will be able to understand various aspects of organizational structure, fundamental concepts of management and Human Resource Management.

**TEXT BOOKS:**

1. James A.F. Stoner, R.Edward Freeman and Daniel R.Gilbert, jr, Management PHI-India.
2. Subbarao.P, Human Resource Management HPH.

**REFERENCES:**

1. Prasad.L.M , Principles & Practice of Management , 7e, S.Chand.
2. Industrial Business Management, Martand T Telsang, S.Chand.
3. Human Resources Management, Dr L.M.Prasad, S.Chand.
4. Dynamic Personnel Administration, Rudrabasavaraj MN, Himalaya.
5. Personnel Management, Mamoria & Gankar, HPH, 2009.

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**(17F00201) DATA STRUCTURES**

**Course Objective**

- To develop skills to design and analyze linear and non linear data structures.
- Develop algorithms for manipulating linked lists, stacks, queues, trees and graphs.
- Develop recursive algorithms as they apply to trees and graphs.
- To get acquaintance with frequently used data structures in Software Engineering and Programming practices.
- To Strengthen the ability to identify and apply the suitable data structure for the given real world problem
- To develop a base for advanced computer science study.

**UNIT I**

**INTRODUCTION TO DATA STRUCTURES:** - Basic concepts Overview: System Life Cycle Pointers and Dynamic Memory Allocation. Pointers: Dynamic Memory Allocation, Pointers Can Be Dangerous. Algorithm Specification: Introduction, Recursive Algorithms, Data Abstraction. Performance Analysis: Space Complexity, Time Complexity, Asymptotic Notation. Practical Complexities: Performance Measurement, Clocking, Generating Test Data.

**UNIT II**

**ARRAYS:-**

The Abstract Data Type: Arrays in C, Dynamically Allocated Arrays: One-dimensional Arrays, Two-dimensional Arrays.

**STACKS & QUEUES:** Stacks: Stacks Using Dynamic Arrays.

**Queues:** Circular Queues Using Dynamic Arrays: A Mazing Problem, Evaluation of Expressions: Expressions, Evaluating Postfix Expressions, Multiple Stacks and Queues.

**UNIT III**

**LINKED LISTS:** Singly Linked Lists and Chains, Representing Chains in C Linked Stacks and Queues.

Polynomials: Polynomial Representation, Adding Polynomials, Erasing Polynomials, Circular List Representation of Polynomials.

Additional List Operations: Operations for Chains, Operations for Circularly Linked Lists, Equivalence Classes. Sparse Matrices: Sparse Matrix Representation, Sparse Matrix Input, Sparse Matrix Output, Erasing a Sparse Matrix, Doubly Linked Lists.

**UNIT IV**

**TREES & GRAPHS:** - **TREES:** Introduction, Binary Trees: The Abstract Data Type, Properties of Binary Trees, Binary Tree Representations. Binary Tree Traversals, Additional Binary Tree Operations, Threaded Binary Trees, Heaps, Binary Search Trees, Selection Trees, Forests.

**GRAPHS:** The Graph Abstract Data Type, Introduction, Elementary Graph Operations, Minimum Cost Spanning Trees, Shortest Paths and Transitive Closure.

## UNIT V

**SORTING & SEARCHING:** Introduction, Insertion Sort, Quick Sort, Merge Sort, Heap Sort, Sorting on Several Keys, List and Table Sorts, External Sorting.

Searching: Linear Search, Binary Search, Interpolation Search, Fibonacci Search.

### Text Books :

1. “ Fundamentals of Data Structures in C”, Horowitz, Sahni & Anderson-Freed - University Press.
2. “Data Structures Using C”, Reema Thareja- Oxford Higher Education.

### REFERENCE BOOKS:

1. Data Structures and Algorithms Using C++ by Ananda Rao Akepogu and Radhika Raju Palagiri
2. Classic Data Structure by D. Samanta, Eastern Economy Edition.
3. Data Structures and Algorithms Made Easy by Narasimha Karumanchi, Second Edition, Written in C/C++, CareerMonk Publications, Hyderabad
4. ADTs, Data Structures and Problem Solving with C++, Larry Nyhoff, Pearson
5. Data Structures using C++, D.S.Malik, 2<sup>nd</sup> Edition, Cengage Learning
6. Data Structures through C++, Yashavant P.Kanetkar, BPB Publication
7. Data Structures using C and C++, Yedidyah Langsam.Moshe J.Augenstein Aaron M.Tenenbaum, 2<sup>nd</sup> Edition,PHI
8. Data Structures using C & C++, Rajesh K.Shukla, Wiley-India

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**(17F00202) COMPUTER ORGANIZATION**

**Course Objectives:**

- To understand how computers are constructed out of a set of functional units
- To understand how these functional units operate, interact and communicate
- To understand the factors and trade-offs that affect computer performance
- To understand concrete representation of data at the machine level
- To understand how computations are actually performed at the machine level
- To understand how problems expressed by humans are expressed as binary strings in a machine.
- Understand the system interconnection and the different I/O techniques
- Explain the functioning and programming of the INTEL-8086
- *Understand the design of processors, the structure and operation of memory and virtual memory, cache, storage, and pipelining, system integration, and peripherals*
- Identify the different architectural and organizational design issues that can affect the performance of a computer such as Instruction Sets design, Pipelining, RISC architecture, and Superscalar architecture.
- Design an interconnection networks and multiprocessors.

**UNIT I**

**NUMBER SYSTEMS AND COMPUTER ARITHMETIC**- Signed and unsigned numbers, Addition and subtraction, multiplication, division, Floating point representation, logical operation, Gray code, BCD codes, Error detecting codes, Boolean algebra, Simplification of Boolean expressions, K-Maps, Combinational and Sequential Circuits- decoders, Encoders, Multiplexers, Half and Full adders, Shift registers, Sequential circuits- flip-flops.

**UNIT II**

**MEMORY ORGANIZATION**-Memory hierarchy, Main memory-RAM, ROM chips, Memory address map, memory contention to CPU, Associative Memory-Hardware logic, match, read and write logic, Cache Memory-Associative mapping, Direct mapping, Set-associative mapping, hit and miss ratio.

**UNIT III**

**BASIC CPU ORGANIZATION**-Introduction to CPU, Instruction formats-INTEL-8086 CPU architecture-Addressing modes - generation of physical address- code segment registers, Zero, one, two, and three address instructions. INTEL 8086 ASSEMBLY LANGUAGE INSTRUCTIONS-Data transfer instructions-input- output instructions, address transfer, Flag transfer, arithmetic, logical, shift, and rotate instructions.conditional and unconditional transfer, iteration control, interrupts and process control instructions, assembler directives, Programming with assembly language instructions.

**UNIT IV**

**INPUT -OUTPUT ORGANIZATION**-Peripheral devices, input-output interface-I/O Bus and interface modules, I/O versus Memory bus, isolated versus memory mapped I/O, Modes of transfer-Programmed I/O, Interrupt-initiated I/O, priority interrupts-Daisy chaining, parallel priority, interrupt cycle, DMA-DMA control, DMA transfer, Input output processor-CPU-IOP communication.

**UNIT V**

**PIPELINE AND VECTOR PROCESSING** : Parallel Processing, Pipelining, Arithmetic Pipeline, Instruction Pipeline, RISC Pipeline, Vector Processing, Array Processors.

**MULTI PROCESSORS** : Characteristics or Multiprocessors, Interconnection Structures, Interprocessor Arbitration, InterProcessor Communication and Synchronization Cache Coherence, Shared Memory Multiprocessors.

**TEXT BOOKS:**

1. Computer System Architecture, M. Morris Mano , 3rd Edition, Pearson Education,2008.
2. Microprocessors and Interfacing, Douglas Hall, Tata McGraw-Hill.

**REFERENCE BOOKS:**

1. Computer Organization, Carl Hamacher, Zvonko Vranesic, Safwat Zaky, Vth Edition, McGraw Hill.
2. Fundamentals of Computer Organization and Design, Sivarama P.Dandamudi ,Springer Int. Edition.
3. Computer Organization and Architecture, William Stallings, 8<sup>th</sup> Edition, Pearson,2007.
4. Digital Design, M. Morris Mano, Pearson Education .
5. Computer Organization and Design ,D.A.Paterson and John L.Hennessy,Elsevier.  
Computer Architecture and Organization,M.Murdocca andV.Heuring,Wiley Inda.

University Updates

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**(17F00203) OPERATIONS RESEARCH**

**Course Objectives:**

- To introduce the methods of Operations Research.
- Emphasize the mathematical procedures of non linear programming search techniques.
- Introduce advanced topics such as Probabilistic models and dynamic programming.

**Prerequisites:**

- Probability and Statistics

**UNIT I**

OR Models, LP & applications, Simplex Method, M-Method, 2- Phase Method, Special cases in Simplex Method, Sensitivity Analysis

**UNIT II**

**Transportation Model:** Definition of the Transportation Model, Nontraditional Transportation Models, The Transportation Algorithm, The Assignment Model, The Transshipment Mode.

**Network Model:** Scope and Definition of Network Models, Minimal Spanning Tree Algorithm, Shortest-Route Problem, Maximal flow model, CPM and PERT.

**UNIT III**

**Advanced Linear Programming:** Simplex Method Fundamentals, Revised Simplex Method, Bounded-Variables Algorithm, Parametric Linear Programming.

**Integer Linear Programming:** Illustrative Applications, Integer Programming Algorithms - Branch-and-Bound (B&B) Algorithm, Cutting-Plane Algorithm, Computational Considerations in ILP.

**UNIT IV**

Heuristic Programming – Greedy Heuristic, Meta Heuristic – Tabu Search Algorithm, Simulated Annealing Algorithm, Genetic Algorithm, Application of Metaheuristics to Integer Linear Programs, Constraint Programming.

**UNIT V**

**Travelling Salesperson Problem:** Example Application Of TSP, TSP Mathematical Model, Exact TSP Algorithms.

**Deterministic Dynamic Programming:** Recursive Nature of Computations in DP, Forward and Backward Recursion, Selected DP Applications, Problem of Dimensionality.

**TEXT BOOKS :**

1. Operations Research An Introduction, By Hamdy A.Taha, Pearson 9<sup>th</sup> Edition.

## REFERENCE BOOKS:

1. Pradeep Prabhakar Pai, Operations Research – principles and Practice, Oxford University Press, 2012.
2. A.M. Natarajan, P. Balasubramani, A. Tamilarasi, “Operations Research”, Pearson Education.
3. P Sankara Iyer, ”Operations Research”, Tata McGraw-Hill, 2008.
4. N.V.S. Raju, “Operations Research”, HI-TECH, 2002.
5. Col. D. S. Cheema, “Operations Research”, Laxmi Publications Ltd., 2005.
6. F.S. Hillier, G.J. Lieberman, “Introduction to Operations Research – 8ed”, TMH.
7. H.S. Kasana & K.D. Kumar, “Introductory Operations Research – Theory and applications”, Springer, 2003, rp2005.
8. Billy E. Gillett, “Introduction to Operations Research – A Computer-Oriented Algorithmic Approach”, Tata McGraw-Hill, 1979, rp2004.
9. A.B.Rao, Operations Research, Jaico .
10. Ravindran,Phillips,Solberg, Operations Research, 2<sup>nd</sup> edition,Wiley India.
11. W.L.Winston, Operations Research, 4<sup>th</sup> edition,Cengage Learning.
12. R. Panneerselvam, “Operations Research”, PHI-2e, 2006, rp2008.
13. ANITHA H S, “Operations Research”, EXEL books, 2011.

University Updates

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**(17F00204) JAVA PROGRAMMING**

**Course Objectives:**

- Study the syntax, semantics and features of Java Programming Language
- Study the Object Oriented Programming Concepts of Java Programming language
- Learn the method of creating Multi-threaded programs and handle exceptions
- Learn Java features to create GUI applications & perform event handling

**Course Outcomes:**

- Use object oriented approach for solving problems and implementing them
- Ability to write Efficient programs that handle exceptions
- Create user friendly interface

**Unit - I :**

The Java Language, The key attributes of object oriented programming language, JDK, simple program, Java keywords, identifiers in java, the java class libraries, introducing data types and operators, program control structures

**Unit – II:**

Introducing classes, objects, and methods, Arrays, multidimensional arrays, strings, a closer look at methods and classes, Inheritance

**Unit – III :**

Interface fundamentals, creating and implementing an interface, using interface references, implementing multiple interfaces, constants in interfaces, interfaces can be extended, nested interfaces, final thoughts on interface, packages, Exception handling

**Unit – IV :**

Byte streams and character streams, byte and character stream classes, using byte streams for reading and writing, reading and writing binary data, random access files, using character streams for file i/o, Multi threaded programming, Applet basics, a complete applet skeleton, applet initialization and termination, requesting repainting, using the status window, passing parameters to applets

**Unit – V :**

Swings – the origin and design philosophy of swing, components and containers, layout managers, event handling, using a push button, jtextfield, jlabel and image icon, the swing buttons, jtext field, jscrollpane, jlist, jcombobox, trees, jtable, an overview of jmenubar, jmenu and jmenutem, creating a main menu, showmessagedialog, showconfirmdialog, showinputdialog, showoptiondialog, jdialo, create a modeless dialog

**Text Books :**

1. “Java Fundamentals A Comprehensive Introduction” Herbert Schildt and Dale Skrien, Mc Graw Hill.
2. “Java – How to Program”, Paul Deitel, Harvey Deitel, PHI



## **Reference Books :**

1. “Programming with Java” T.V.Suresh Kumar, B.Eswara Reddy, P.Raghavan Pearson Edition.
2. “Core Java”, Nageswar Rao, Wiley Publishers.
3. “Thinking in Java”, Bruce Eckel, Pearson Education.
4. “Programing In java”, Malhotra, Oxford University Press
5. “Head First Java”, Kathy Sierra, Bert Bates, O’Reilly
6. “SCJP – Sun Certified Programmer for Java Study guide” – Kathy Sierra, Bert Bates, McGrawHill
7. “Java in Nutshell”, David Flanagan, O’Reilly
8. “Core Java : Volume I – Fundamentals, Cay S. Horstmann, Gary Cornell, The Sun Micro Systems Press

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**(17F00205) DATA STRUCTURES LAB**

**Course Objectives:**

- To write and execute programs in C to solve problems using data structures such as arrays, linked lists, stacks, queues, trees, graphs, hash tables and search trees.
- To write and execute write programs in C to implement various sorting and searching methods
- Exemplify and implement how abstract data types such as stack, queue and linked list can be implemented to manage the memory using static and dynamic allocations
- Understand and distinguish the conceptual and applicative differences in trees, binary trees, and binary search trees
- Examine and analyze why self balancing trees are necessary in real world dynamic applications
- Develop and compare the comparison-based search algorithms and sorting algorithms

**Week 1**

- Write a Program to Implement Stack Operations by using Array and Linked Lists.
- Write a Program to Implement the Operations of Double Linked Lists

**Week 2**

- Write a C program that uses stack operations to convert a given infix expression into its postfix
- Write a Program to Implement Queue Operations by using Array and Linked Lists.

**Week 3**

Write a Program to Implement Circular Queue Operations by using Array and Linked Lists.

**Week 4**

Write a Program to Sort the set of elements by using  
i). Quick Sort    ii). Heap Sort.    iii). Merge Sort

**Week 5**

Write a Program to Implement the Binary Search Tree Operations.

**Week 6**

Write a Program to Perform the Tree Traversal Techniques by using the Iterative Method

**Week 7**

Write C programs for implementing the following graph traversal algorithms:  
a)Depth first traversal    b)Breadth first traversal

**Week 8**

Write a Program to Implement All functions of a Dictionary by using Hashing

**Week 9**

Write a Program to Implement Skip List Operations.

**Week 10**

Write a Program to Implement Insertion, Deletion and Search Operations on SPLAY Trees.

Week 11

Write a program to Implement Insertion and Deletion Operations on AVL Trees

Week 12

Write a Program to Implement Insertion and Deletion Operations on B – Trees

Note: Use Classes and Objects to implement the above programs.

**Reference Books:**

1. Data Structures and Algorithms Using C++ by Ananda Rao Akepogu and Radhika Raju Palagiri.
2. Object Oriented Programming with ANSI & Turbo C++, Ashok N.Kamthane, Pearson Education
3. Data Structures using C++, D.S.Malik, 2<sup>nd</sup> Edition, Cengage Learning
4. Data Structures through C++, Yashavant P.Kanetkar, BPB Publication
5. Data Structures using C and C++, Yedidyah Langsam.Moshe J.Augenstein Aaron M.Tenenbaum, 2<sup>nd</sup> Edition,PHI
6. Data Structures using C & C++, Rajesh K.Shukla, Wiley-India
7. ADTs, Data Structures and Problem Solving with C++, Larry Nyhoff, Pearson

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**(17F00206) JAVA PROGRAMMING LAB**

**Course Objectives:**

- To introduce java compiler and eclipse platform
- To impart hand on experience with java programming

**Note:**

1. **IDEs are not mandatory, encourage the use of Eclipse or Netbean platform**
2. **The list suggests the minimum program set. Hence, the concerned staff is requested to add more problems to the list as needed**

**Week-1:**

1. Use Eclipse or Netbean platform and acquaint with the various menus. Create a test project, add a test class and run it. See how you can use auto suggestions, auto fill. Try code formatter and code refactoring like renaming variables, methods and classes. Try debug step by step with java program to find prime numbers between 1 to n.

**Week-2:**

1. Write a Java program that prints all real and imaginary solutions to the quadratic equation  $ax^2 + bx + c = 0$ . Read in a, b, c and use the quadratic formula.
2. Write a Java program for sorting a given list of names in ascending order
3. Write a java program to accept a string from user and display number of vowels, consonants, digits and special characters present in each of the words of the given text.

**Week -3:**

1. Write a java program to make rolling a pair of dice 10,000 times and counts the number of times doubles of are rolled for each different pair of doubles.  
*Hint: Math.random()*
2. Write java program that inputs 5 numbers, each between 10 and 100 inclusive. As each number is read display it only if it's not a duplicate of any number already read display the complete set of unique values input after the user enters each new value.
3. Write a java program to read the time intervals (HH:MM) and to compare system time if the system time between your time intervals print correct time and exit else try again to repute the same thing. By using StringTokenizer class

**Week-4:**

1. Write a java program to split a given text file into n parts. Name each part as the name of the original file followed by .part<n> where n is the sequence number of the part file.
2. Write java program to create a super class called Figure that receives the dimensions of two dimensional objects. It also defines a method called area that computes the area of an object. The program derives two subclasses from Figure. The first is Rectangle and second is Triangle. Each of the sub class overridden area() so that it returns the area of a rectangle and a triangle respectively.
3. Write a Java program that creates three threads. First thread displays "Good Morning" every one second, the second thread displays "Hello" every two seconds and the third thread displays "Welcome" every three seconds

**Week-5:**

1. Write a Java program that correctly implements producer consumer problem using the concept of inter thread communication
2. Write a java program to find and replace pattern in given file,
3. Use inheritance to create an exception super class called EexceptionA and exception sub class ExceptionB and ExceptionC, where ExceptionB inherits from ExceptionA and ExceptionC inherits from ExceptionB. Write a java program to demonstrate that the catch

block for type ExceptionA catches exception of type ExceptionB and ExceptionC

**Week-6:**

1. Write a java program to convert an ArrayList to an Array.
2. Write a Java Program for waving a Flag using Applets and Threads
3. Write a Java Program for Bouncing Ball (The ball while moving down has to increase the size and decrease the size while moving up)

**Week-7:**

1. Write a Java Program for stack operation using Buttons and JOptionPane input and Message dialog box.
2. Write a Java Program to Addition, Division, Multiplication and subtraction using JOptionPane dialog Box and Textfields.

**Week-8:**

1. Write a Java Program for the blinking eyes and mouth should open while blinking.
2. Implement a Java Program to add a new ball each time the user clicks the mouse. Provided a maximum of 20 balls randomly choose a color for each ball.

**Week-9:**

1. Suppose that a table named Table.txt is stored in a text file. The first line in the file is the header, and the remaining lines correspond to rows in the table. The elements are separated by commas. Write a java program to display the table using Jtable component
2. Write a program that creates a user interface to perform integer divisions. The user enters two numbers in the textfields, Num1 and Num2. The division of Num1 and Num2 is displayed in the Result field when the Divide button is clicked. If Num1 or Num2 were not an integer, the program would throw a NumberFormatException. If Num2 were Zero, the program would throw an ArithmeticException Display the exception in a message dialog box.

**Week-10:**

1. Write a Java Program to implement the opening of a door while opening man should present before hut and closing man should disappear.
2. Write a Java code by using JTextField to read decimal value and converting a decimal number into binary number then print the binary value in another JTextField

**Week-11:**

1. Write a Java program that works as a simple calculator. Use a grid layout to arrange buttons for the digits and for the +, -, \*, % operations. Add a text field to display the result.
2. Write a Java program for handling mouse events.

**Week-12:**

1. Write a java program establish a JDBC connection, create a table student with properties name, register number, mark1, mark2, mark3. Insert the values into the table by using the java and display the information of the students at front end.

**Text Books :**

1. Java How to Program, Sixth Edition, H.M.Dietel and P.J.Dietel, Pearson Education/PHI
2. Java The Complete Reference” by Herbert Schildt, TMH, 8<sup>th</sup> Edition

**Reference Books :**

1. Introduction to Java programming, Sixth edition, Y.Daniel Liang, Pearson Education
2. Programming in java Sachine
3. Big Java, 2<sup>nd</sup> edition, Cay Horstmann, Wiley Student Edition, Wiley India Private Limited.
4. Introduction to Programming with Java, J.Dean & R.Dean, McGraw Hill education.
5. Java Programming, D S Malik, cengage learning, India Edition

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<b>(17FHS202) ADVANCED COMMUNICATION SKILLS LAB</b>				

## 1. INTRODUCTION

The introduction of the Advanced Communication Skills Lab is considered essential at 3<sup>rd</sup> year level. At this stage, the students need to prepare themselves for their careers which may require them to listen to, read, speak and write in English both for their professional and interpersonal communication in the globalised context.

The proposed course should be a laboratory course to enable students to use 'good' English and perform the following:

- Gathering ideas and information to organise ideas relevantly and coherently.
- Engaging in debates.
- Participating in group discussions.
- Facing interviews.
- Writing project/research reports/technical reports.
- Making oral presentations.
- Writing formal letters.
- Transferring information from non-verbal to verbal texts and vice-versa.
- Taking part in social and professional communication.

## 2. OBJECTIVES:

This Lab focuses on using multi-media instruction for language development to meet the following targets:

- To improve the students' fluency in English, through a well-developed vocabulary and enable them to listen to English spoken at normal conversational speed by educated English speakers and respond appropriately in different socio-cultural and professional contexts.
- Further, they would be required to communicate their ideas relevantly and coherently in writing.
- To prepare all the students for their placements.

## 3. SYLLABUS:

The following course content to conduct the activities is prescribed for the Advanced Communication Skills (ACS) Lab:

### UNIT-I: COMMUNICATIVE COMPETENCY

1. Reading Comprehension
2. Listening comprehension
3. Vocabulary for competitive purpose
4. Spotting errors

### UNIT-II: TECHNICAL WRITING

1. Report writing
2. Curriculum vitae

3. E-mail writing
4. Abstract & Synopsis Writing
5. Reviewing ( Book/Film)

#### **UNIT-III: PRESENTATIONAL SKILLS**

1. Oral presentation
2. Power point presentation
3. Poster presentation
4. Stage dynamics
5. Body Language

#### **UNIT-IV: CORPORATE SKILLS**

1. Telephonic skills
2. Net Etiquettes
3. SMART Goal setting
4. Time Management
5. Negotiation Skills

#### **UNIT-V: GETTING READY FOR JOB**

1. Group discussions-II
2. Interview skills
3. Answering Strategies
4. Mock Interviews

#### **4. LEARNING OUTCOMES:**

- Accomplishment of sound vocabulary and its proper use contextually
- Flair in Writing and felicity in written expression.
- Effective Speaking Abilities
- Enhanced job prospects.

#### **5. MINIMUM REQUIREMENT:**

The Advanced Communication Skills (ACS) Laboratory shall have the following infra-structural facilities to accommodate at least 60 students in the lab:

- Spacious room with appropriate acoustics.
- Round Tables with movable chairs
- Audio-visual aids
- LCD Projector
- Public Address system
- P – IV Processor, Hard Disk – 80 GB, RAM–512 MB Minimum, Speed – 2.8 GHZ
- T. V, a digital stereo & Camcorder
- Headphones of High quality

#### **SUGGESTED SOFTWARE:**

The software consisting of the prescribed topics elaborated above should be procured and used.

1. K-VAN SOLUTIONS-Advanced communication lab
2. DELTA's key to the Next Generation TOEFL Test: Advanced Skill Practice.
3. TOEFL & GRE( KAPLAN, AARCO & BARRONS, USA, Cracking GRE by CLIFFS)
4. Train2success.com

**BOOKS RECOMMENDED:**

1. Objective English for Competitive Exams, Hari Mohana Prasad, 4<sup>th</sup> edition, Tata Mc Graw Hill.
2. Technical Communication by Meenakshi Raman & Sangeeta Sharma, O U Press 2009.
3. Books on TOEFL/GRE/GMAT/CAT/IELTS by Barron's/DELTA/Cambridge University Press.2012.
4. Soft Skills for Everyone, Butterfield Jeff, Cengage Publications, 2011.
5. Practice Psychometric Tests: How to familiarize yourself with genuine recruitment tests, 2012.
6. Management Shapers Series by Universities Press (India) Pvt Ltd., Himayatnagar, Hyderabad 2008.
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