II B.TECH II SEMESTER SYLLABUS

BUSINESS ECONOMICS AND FINANCIAL ANALYSIS

II B. TECH- II SEMESTER

Course Code	Category	Hours / Week			Credit s	Maximum Marks		
		L	T	P	C	CIE	SEE	Total
A5HS06	HSMC	3	-	-	3	30	70	100

COURSE OBJECTIVES:

To enable the student to understand and appreciate, with a particular insight, the importance of certain basic issues governing the business operations namely; demand and supply, production function, cost analysis, markets, forms of business organizations, capital budgeting and financial accounting and financial analysis.

COURSE OUTCOMES:

At the end of the course, the student will

1. Understand the market dynamics namely, demand and supply, demand forecasting, elasticity of demand and supply, pricing methods and pricing in different market structures.
2. Gain an insight into how production function is carried out to achieve least cost combination of inputs and cost analysis.
3. Develop an understanding of
4. Analyse how capital budgeting decisions are carried out.
5. Understanding the framework for both manual and computerised accounting process
6. Know how to analyse and interpret the financial statements through ratio analysis.

UNIT - I		CLASSES: 10

Introduction & Demand Analysis: Definition, Nature and Scope of Managerial Economics. Demand Analysis: Demand Determinants, Law of Demand and its exceptions. Elasticity of Demand: Definition, Types, Measurement and Significance of Elasticity of Demand. Demand Forecasting, Factors governing demand forecasting, methods of demand forecasting.

UNIT - II		CLASSES: 10

Production & Cost Analysis: Production Function - Isoquants and Isocosts, MRTS, Least Cost Combination of Inputs, Cobb-Douglas Production function, Laws of Returns, Internal and External Economies of Scale. Cost Analysis: Cost concepts. Break-even Analysis (BEA)-Determination of Break-Even Point (simple problems) - Managerial Significance.

UNIT - III		CLASSES: 10

Markets & New Economic Environment: Types of competition and Markets, Features of Perfect competition, Monopoly and Monopolistic Competition. Price-Output Determination in case of Perfect Competition and Monopoly. Pricing: Objectives and Policies of Pricing. Methods of Pricing. Business: Features and evaluation of different forms of Business Organisation: Sole Proprietorship, Partnership, Joint Stock Company, Public Enterprises and their types, New Economic Environment: Changing Business Environment in Post-liberalization scenario.

UNIT - IV		CLASSES: 10

Capital Budgeting: Capital and its significance, Types of Capital, Estimation of Fixed and Working capital requirements, Methods and sources of raising capital - Trading Forecast, Capital Budget, Cash Budget. Capital Budgeting: features of capital budgeting proposals, Methods of Capital Budgeting: Payback Method, Accounting Rate of return (ARR) and Net Present Value Method (simple problems).

UNIT - V		**CLASSES: 08**

Introduction to Financial Accounting & Financial Analysis: Accounting concepts and Conventions - Introduction IFRS - Double - Entry Book Keeping, Journal, Ledger, Trial Balance - Final Accounts (Trasing Account, Profit and Loss Account and Balance Sheet with simple adjustments). Financial Analysis: Analysis and Interpretation of Liquidity Ratios, Activity Ratios, and Capital structure Ratios and Profitability ratios. Du Pont Chart.

TEXT BOOKS:

1. Varshney & Maheswari: Managerial Economics, Sultan Chand, 2009.
2. S.A. Siddiqui & A.S. Siddiqui, Managerial Economics and Financial Analysis, New Age international Publishers, Hyderabad 2013.
3. M. Kasi Reddy & Saraswathi, Managerial Economics and Financial Analysis, PHI New Delhi, 2012.

REFERENCE BOOKS:

1. Ambrish Gupta, Financial Accounting for Management, Pearson Education, New Delhi, 2012.
2. H. Craig Peterson & W. Cris Lewis, Managerial Economics, Pearson, 2012.
3. Lipsey & Chrystel, Economics, Oxford University Press, 2012.
4. Domnick Salvatore: Managerial Economics In a Global Economy, Thomson, 2012.
5. Narayanaswamy: Financial Accounting - A Managerial Perspective, Pearson, 2012.
6. S.N. Maheswari & S.K. Maheswari, Financial Accounting, Vikas, 2012.
7. Truet and Truet: Managerial Economics: Analysis, Problems and Cases, Wiley, 2012.
8. Dwivedi: Managerial Economics, Vikas, 2012.
9. Shailaja & Usha: MEFA, University Press, 2012.
10. Aryasri: Managerial Economics and Financial Analysis, TMH, 2012.
11. Vijay Kumar & Appa Rao, Managerial Economics & Financial Analysis, Cengage 2011.
12. J.V. Prabhakar Rao & P.V. Rao, Managerial Economics & Financial Analysis, Maruthi Publishers, 2011.

DATA STRUCTURES USING PYTHON

II B. TECH- II SEMESTER

Course Code	Category	Hours / Week			Credits	Maximum Marks		
		L	T	P	C	CIE	SEE	Total
A5AI01	PCC	3	1	-	4	30	70	100

COURSE OBJECTIVES:

1. Impart the basic concepts of data structures and different data structures like arrays.
2. Understand concepts python Lists, Tuples, Dictionaries, Sets and Maps.
3. Understand basic concepts about stacks, queues and their applications.
4. Understand basic concepts of linked lists and advanced linked lists.
5. Enable them to write programs for sorting and searching and hashing.
6. Use advanced data structures like Binary Trees, AVL-trees etc., for efficient problem solving

COURSE OUTCOMES:

1. Implement basic data structures such as arrays.
2. Solve problem involving Lists, Tuples, Dictionaries, Sets and Maps.
3. Solve problems using data structures such as stacks, Queues, Linked Lists and writing programs for these solutions.
4. Use different sorting and searching techniques to solve the problems.
5. Implement advanced data structures such as Binary Trees, Search Trees and AVL-Trees

UNIT I	ABSTRACT DATA TYPES	CLASSES: 10

Introduction: Abstract Data Types, Data Structures.
Date Abstract Data Type: Defining the ADT, Using the ADT, Preconditions and Post conditions, implementing the ADT.
Arrays: The Array Structure, Implementing the Array.
Two-Dimensional Arrays: The Array 2D Abstract Data Type, Implementing the 2-D Array.
Multi-Dimensional Arrays: The Multi array Abstract Data Type, Data Organization, Variable-Length Arguments, Implementing the Multi array

UNIT II	LISTS, TUPLES, DICTIONARIES, SETS AND MAPS	CLASSES: 10

The Python List: Creating a Python List, Appending Items, Extending a List, Inserting Items, List Slice.
Tuples and Dictionary: Creating a Tuple and Dictionary, Built in functions, Tuple and Dictionary operations and List comprehension.
Sets: The Set Abstract Data Type, List-Based Implementation.
Maps: The Map Abstract Data Type, List-Based Implementation.

UNIT III	STACKS AND QUEUES	CLASSES: 10

The Stack ADT: Stack operations, implementing the Stack using a Python List.
Stack Applications: Balanced Delimiters, Evaluating Postfix Expressions.
The Queue ADT: Queue operations, implementing the Queue using a Python List,
Priority Queues: Priority Queue operations, The Priority Queue ADT Implementation

UNIT IV	SEARCHING, SORTING AND LINKED STRUCTURES	CLASSES: 10

Searching: The Linear Search, the Binary Search.
Sorting: Bubble Sort, Selection Sort, Insertion Sort, Quick sort, Merge sort
The Singly Linked: Traversing the Nodes, Searching for a Node, Prepending Nodes, Removing Nodes.
Advanced Linked Lists: The Doubly Linked List: Organization, List Operations

UNIT V	BINARY TREES, SEARCH TREES AND AVL TREES	CLASSES: 08

Binary Trees: The Tree Structure, the Binary Tree, Properties, Implementation, Tree Traversals.
Search Trees: The Binary Search Tree, Min and Max Values, Insertions, Deletions, Efficiency of Binary Search Trees.
AVL Trees: Insertion, Deletion, Implementation.

TEXT BOOKS:

1. Data Structures and Algorithms Using Python, Rance D. Necaise, JOHN WILEY & SONS, INC.
2. ReemaThareja, Python Programming using Problem Solving Approach, First Edition,Oxford Higher Eduction.

REFERENCE BOOKS

1. Core Python Programming, by R.NageswaraRao
2. Kenneth A.Lambert, Fundamentals of Python
3. Charles Dierach, Introduction to Computer Science using Python

DATABASE MANAGEMENT SYSTEMS

II B. TECH- II SEMESTER

Course Code	Category	Hours / Week			Credits	Maximum Marks		
		L	T	P	C	CIE	SEE	Total
A5CS05	PCC	3	1	-	4	30	70	100

COURSE OBJECTIVES:

The course should enable the students to:

1. Discuss the basic database concepts, applications, data models, schemas and instances.
2. Design Entity Relationship model for a database.
3. Demonstrate the use of constraints and relational algebra operations.
4. Describe the basics of SQL and construct queries using SQL
5. Understand the importance of normalization in databases.
6. Demonstrate the basic concepts of transaction processing and concurrency control.
7. Understand the concepts of database storage structures and identify the access techniques.

COURSE OUTCOMES:

At the end of the course the students are able to:

1. Use the basic concepts of Database Systems in Database design
2. Design a Database using ER Modelling
3. Apply normalization on database design to eliminate anomalies
4. Apply SQL queries and PL/SQL queries to interact with Database
5. Analyze database transactions and can control them by applying ACID properties.

UNIT - I	INTRODUCTION	CLASSES: 09

INTRODUCTION: Introduction and applications of DBMS, Purpose of data base, Data Independence, Database System architecture- Levels, Database users and DBA.

DATABASE DESIGN: Database Design Process, ER Diagrams - Entities, Attributes, Relationships, Constraints, keys, extended ER features, Generalization, Specialization, Aggregation, Conceptual design with the E-R model.

UNIT - II	RELATIONAL MODEL &SCHEMA REFINEMENT	CLASSES: 09

THE RELATIONAL MODEL: Introduction to the relational model, Integrity constraints over relations, Enforcing integrity constraints, Querying relational data, Logical database design: E-R to relational, Introduction to views, Destroying/altering tables and views.

SCHEMA REFINEMENT AND NORMAL FORMS: Introduction to schema refinement, functional dependencies, reasoning about FDs. Normal forms: 1NF, 2NF, 3NF, BCNF, properties of decompositions, normalization, schema refinement in database design.

UNIT - III	RELATIONAL ALGEBRA AND CALCULS &SQL	CLASSES: 11

RELATIONAL ALGEBRA AND CALCULUS:Relational algebra operators, relational calculus - Tuple and domain relational calculus.

SQL: Basics of SQL, DDL,DML,DCL, structure – creation, alteration, defining constraints – Primary key, foreign key, unique, not null, check, IN operator, Functions - aggregate functions, Built-in functions – numeric, date, string functions, set operations, sub-queries, correlated sub-queries,

UNIT - IV	SQL &PL/SQL	CLASSES: 11

SQL: Use of group by, having, order by clauses, join and its types, Exist, Any, All clauses . Transaction control commands – Commit, Rollback, Save point,

PL/SQL: Environment, block structure, variables, operators, data types, control structures; cursors, stored procedures, Triggers.

UNIT - V	TRANSACTION &CONCURRENCY CONTROL	CLASSES: 10

TRANSACTIONS MANAGEMENT: Transaction concept, transaction state, concurrent executions, Serializability, recoverability, testing for serializability.

CONCURRENCY CONTROL AND RECOVERY SYSTEM: Concurrency control,lock based protocols, time-stamp based protocols, validation based protocols, multiple granularity and deadlock handling. Recovery system - failure classification, storage structure, recovery and atomicity, log based recovery.

TEXT BOOKS:

1. Abraham Silberschatz, Henry F. Korth, S. Sudharshan, “Database System Concepts”, Sixth Edition, Tata McGraw Hill, 2011.
2. Raghurama Krishnan, Johannes Gehrke, “Data base Management Systems”, TATA McGraw Hill, 3rd Edition, 2007.
3. R.P. Mahapatra & Govind Verma, Database Management Systems, Khanna Publishing House, 2013.
4. Michael McLaughlin, Oracle Database 11g PL/SQL Programming, Oracle press.

REFERENCE BOOKS:

1. Peter Rob, Carlos Coronel, Database Systems Design Implementation and Management, 7th edition, 2009.
2. Scott Urman, Michael McLaughlin, Ron Hardman, “Oracle database 10g PL/SQL programming “, 6th edition, Tata McGraw Hill,2010
3. S.K.Singh, “Database Systems Concepts, Design and Applications”, First edition, Pearson Education, 2006.
4. Ramez Elmasri, Shamkant B. Navathe, “Fundamentals of Database Systems”, Fourth Edition, Pearson / Addision wesley, 2007

WEB REFERENCES:

1. http://www.learndb.com/databases/how-to-convert-er-diagram-to-relational-database
2. https://www.w3schools.com/sql/sql_create_table.asp
3. http://www.edugrabs.com/conversion-of-er-model-to-relational-model/?upm_export=print
4. http://ssyu.im.ncnu.edu.tw/course/CSDB/chap14.pdf
5. http://web.cs.ucdavis.edu/~green/courses/ecs165a-w11/8-query.pdf

E-TEXT BOOKS:

1. http://www.freebookcentre.net/Database/Free-Database-Systems-Books-Download.html
2. http://www.ddegjust.ac.in/studymaterial/mca-3/ms-11.pdf

MOOC COURSE:

1. https://www.mooc-list.com/tags/dbms-extensions
2. https://onlinecourses.nptel.ac.in/noc18_cs15/preview

DESIGN AND ANALYSIS OF ALGORITHMS

II B. TECH- II SEMESTER

Course Code	Category	Hours / Week			Credits	Maximum Marks		
		L	T	P	C	CIE	SEE	Total
A5CS08	PCC	3	1	-	4	30	70	100

COURSE OBJECTIVES:

The course should enable the students to:

1. To demonstrate performance of algorithms with respect to time and space complexity.
2. To explain graph and tree traversals.
3. To explain the concepts greedy method and dynamic programming. Applying for several applications like knapsack problem, job sequencing with deadlines, and optimal binary search tree, TSP and so on respectively.
4. To illustrate the methods of backtracking and branch bound techniques to solve the problems like n-queens problem, graph colouring and TSP respectively.
5. To familiarize the concepts of deterministic and non-deterministic algorithms.

COURSE OUTCOMES:

At the end of this course students will be able to:

1. Identify various Time and Space complexities of various algorithms
2. Understand Tree Traversal method and Greedy Algorithms
3. Apply Dynamic Programming concept to solve various problems
4. Apply Backtracking, Branch and Bound concept to solve various problems
5. Implement different performance analysis methods for non deterministic algorithms

UNIT - I	INTRODUCTION	CLASSES: 10

Characteristics of algorithm. Analysis of algorithm: Asymptotic analysis ofcomplexity bounds – best, average and worst-case behavior; Performance measurements ofAlgorithm, Time and space trade-offs, Analysis of recursive algorithms throughrecurrence relations: Substitution method, Recursion tree method and Masters' theorem.

UNIT - II	FUNDAMENTAL ALGORITHMIC STRATEGIES – PART I	CLASSES: 12

DIVIDE AND CONQUER: General method, applications-analysis of binary search, quick sort, merge sort, AND OR Graphs.

GREEDY METHOD: Heuristics –characteristics, Applications-job sequencing with deadlines, 0/1 knapsack problem, minimum cost spanning trees, Single source shortest path problem.

UNIT - III	FUNDAMENTAL ALGORITHMIC STRATEGIES – PART II	CLASSES: 16

DYNAMIC PROGRAMMING: General method, applications - optimal binary search trees, 0/1 knapsack problem, All pairs shortest path problem, Travelling sales person problem, Reliability design.

BACKTRACKING: Heuristics –characteristics, Applications- n-queen problem, Sum of subsets problem, Graph coloring, 0/1knapsack problem, and Hamiltonian cycles.

BRANCH AND BOUND: General method, applications - travelling sales person problem, 0/1 knapsack problem- LC branch and bound solution, FIFO branch and bound solution.

UNIT - IV	GRAPH AND TREE ALGORITHMS	CLASSES : 12

GRAPHS (Algorithm and Analysis): Breadth first search and traversal, Depth first search and traversal, Spanning trees, connected components and bi-connected components, Articulation points, Shortest path algorithms, Transitive closure,Topological sorting, Network Flow Algorithm.

UNIT - V	TRACTABLE AND INTRACTABLE PROBLEMS	CLASSES: 10

Computability of Algorithms, Computability classes – P,NP, NP-complete and NP-hard. Cook's theorem, Standard NP-complete problems andReduction techniques, Approximation algorithms, Randomized algorithms.

TEXT BOOKS:

1. Introduction to Algorithms, 4TH Edition, Thomas H Cormen, Charles E Lieserson, Ronald L Rivest and Clifford Stein, MIT Press/McGraw-Hill.
2. Fundamentals of Algorithms – E. Horowitz et al.

REFERENCE BOOKS:

1. Algorithm Design, 1ST Edition, Jon Kleinberg and ÉvaTardos, Pearson.
2. Algorithm Design: Foundations, Analysis, and Internet Examples, Second Edition,Michael T Goodrich and Roberto Tamassia, Wiley.
3. Algorithms -- A Creative Approach, 3RD Edition, UdiManber, Addison-Wesley,Reading, MA

WEB REFERENCES:

1. https://www.hackerrank.com/domains/algorithms
2. https://discuss.codechef.com/questions/48877/data-structures-and-algorithms
2. http://openclassroom.stanford.edu/MainFolder/CoursePage.php?course=IntroToAlgorithms
3. https://www.tutorialspoint.com/design_and_analysis_of_algorithms/design_and_analysis_of_algo rithms_tutorial.pdf
4. http://nptel.ac.in/courses/106101060/

E-TEXT BOOKS:

1. http://www.trips-to-morocco.com/introduction-to-algorithms-3rd-edition-mit-press-english.pdf
2. https://comsciers.files.wordpress.com/2015/12/horowitz-and-sahani-fundamentals-of-computer-algorithms-2nd-edition.pdf
3. https://doc.lagout.org/science/0_Computer%20Science/2_Algorithms/Algorithm%20Design_%20Foundations%2C%20Analysis%2C%20and%20Internet%20Examples%20%5BGoodrich%20%26%20Tamassia%202001%5D.pdf

MOOC COURSE:

1. https://onlinecourses.nptel.ac.in/noc17_cs27/preview
2. https://www.coursera.org/courses?languages=en&query=Algorithm+design+and+analysis

OPERATING SYSTEMS

II B. TECH- II SEMESTER

Course Code	Category	Hours / Week			Credits	Maximum Marks		
		L	T	P	C	CIE	SEE	Total
A5CS13	PCC	3	1	-	4	30	70	100

COURSE OBJECTIVES:

To learn

1. To explain main components of OS and their working
2. To familiarize the operations performed by OS as a resource Manager
3. To impart various scheduling policies of OS
4. To teach the different memory management techniques.

COURSE OUTCOMES:

Upon successful completion of the course, the student is able to

1. Identify and analyze the different structures and services of operating system.
2. Compare various algorithms used for OS services with respect to defined/chosen criteria.
3. Solve the resource allocation and sharing problems.
4. Assess different methods to solve OS problems.
5. Analyze the memory management approaches of operating systems.

UNIT - I		CLASSES: 12

OPERATING SYSTEMS OVERVIEW: Introduction, operating system operations, process management, memory management, storage management, protection and security, distributed systems.
OPERATING SYSTEMS STRUCTURES: Operating system services and systems calls, system programs, operating system structure, operating systems generations

UNIT - II		CLASSES: 13

PROCESS MANAGEMENT: Process concepts, process state, process control block, scheduling queues, process scheduling, multithreaded programming, threads in UNIX, comparison of UNIX and windows.
CONCURRENCY AND SYNCHRONIZATION: Process synchronization, critical section problem, Peterson's solution, synchronization hardware, semaphores, classic problems of synchronization, readers and writers problem, dining philosophers problem, monitors, synchronization examples(Solaris), atomic transactions, Comparison of UNIX and windows.

UNIT - III		CLASSES: 12

DEADLOCKS: System model, deadlock characterization, deadlock prevention, detection and avoidance, recovery from deadlock banker's algorithm.

MEMORY MANAGEMENT: Swapping, contiguous memory allocation, paging, structure of the page table, segmentation, virtual memory, demand paging, page-replacement algorithms, allocation of frames, thrashing, case study - UNIX.

UNIT - IV		CLASSES: 13

FILE SYSTEM: Concept of a file, access methods, directory structure, file system mounting, file sharing, protection. **File system implementation:** file system structure, file system implementation, directory implementation, allocation methods, free-space management, efficiency and performance, comparison of UNIX and windows

UNIT - V		CLASSES: 10

MASS STORAGE STRUCTURE: overview of mass storage structure, disk structure, disk attachment, disk scheduling algorithms, swap space management, stable storage implementation, tertiary storage structure.

I/O: Hardware, application I/O interface, kernel I/O subsystem, transforming I/O requests to hardware operations, streams, performance

TEXT BOOKS:

1. Abraham Silberschatz, Peter Baer Galvin, Greg Gagne (2006), Operating System Principles, 7th edition, Wiley India Private Limited, New Delhi.

REFERENCE BOOKS:

1. Stallings (2006), Operating Systems, Internals and Design Principles, 5th edition, Pearson Education, India.
2. Andrew S. Tanenbaum (2007), Modern Operating Systems, 2nd edition, Prentice Hall of India, India
3. Deitel & Deitel (2008), Operating systems, 3rd edition, Pearson Education, India.

DATA STRUCTURES USING PYTHON LAB

II B. TECH- II SEMESTER

Course Code	Category	Hours / Week			Credits	Maximum Marks		
		L	T	P	C	PCC	L	T
A5AI02	PCC	-	-	3	1.5	30	70	100

WEEK 1

1. Write a python program to perform matrix operations.
   a. Addition of two matrices
   b. Multiplication of two matrices.

WEEK 2

2. Write a python program to implement a list.
   a. Create a list
   b. Add elements to a list
   c. Access elements from the list
   d. Remove elements from the list.

WEEK 3

3. Write a python program to perform set operations
   a. Union
   b. Intersection
   c. Difference

WEEK 4

4. a) Write a Python program to get the 4th element and 4th element from last of a tuple.
   b) Write a python program using the map function to calculate the length of a string in a list.
   c) Write a python Program to print cube of the first 10 natural numbers using the map function

WEEK 5

5. Implement the following stack operations in python
   a. Insertion b. Deletion c. Display

WEEK 6

6. Implement the following Queue operations in python
   a. Insertion b. Deletion c. Display

WEEK 7

7.
   a. Write a python program to implement linear search.
   b. Write a python program to implement binary search

WEEK 8

8. Write a python program to sort the following data using bubble sort
   a. List of integers
   b. List of float numbers
   c. List of strings

WEEK 9

9. Write a python program to implement a singly linked list.
   a. Create a singly linked list

b. Add elements to a singly linked list
c. Access elements from the singly linked list
d. Remove elements from the singly linked list.

WEEK 10

10. Write a python program to implement a doubly linked list.
a. Create a doubly linked list
b. Add elements to a doubly linked list
c. Access elements from the doubly linked list
d. Remove elements from the doubly linked list.

WEEK 11

11. Write a python program to implement Binary tree traversal
a. Preorder
b. Inorder
c. Postorder

WEEK 12

a. Write a Python program to insert a node with the given key in a given Binary search tree (BST).
b. Write a Python program to delete a node with the given key in a given Binary search tree (BST).

TEXT BOOKS:

1. Data Structures and Algorithms Using Python, Rance D. Necaise, JOHN WILEY & SONS, INC.
2. ReemaThareja, Python Programming using Problem Solving Approach, First Edition,Oxford Higher Eduction.

DATABASE MANAGEMENT SYSTEMS LAB

II B. TECH- I SEMESTER

Course Code	Category	Hours / Week			Credits	Maximum Marks		
		L	T	P	C	CIE	SEE	Total
A5CS06	PCC	-	-	3	1.5	30	70	100

COURSE OBJECTIVES:

The course should enable the students to:

1. Apply the basic concepts of Database Systems and Applications.
2. Use the basics of SQL and construct queries using SQL in database creation and interaction
3. Design a commercial relational database system (Oracle, MySQL) by writing SQL using the system.
4. Analyze and Select storage and recovery techniques of database system.

COURSE OUTCOMES:

The course should enable the students to:

1. Apply the basic concepts of Database Systems and Applications.
2. Develop an ER model for a given database.
3. Use the basics of SQL and construct queries using SQL in database creation and interaction.
4. Design a commercial relational database system (Oracle, MySQL) by writing SQL using the system.
5. Analyze and Select storage and recovery techniques of database system.
6. Develop Procedures, Cursors, and Triggers in database system.

LIST OF EXPERIMENTS

WEEK -1 DDL Commands

- Creation of Tables using SQL- Overview of using SQL tool and Data types in SQL
- Altering Tables and
- Dropping Tables

WEEK -2 Create Table with Primary key and Foreign Key& DML Commands

Creating Tables (along with Primary and Foreign keys),
Practicing DML commands-

- Insert,
- Update
- Delete.

WEEK -3 Selection Queries

Practicing Select command using following operations

- AND, OR
- ORDER BY
- BETWEEN
- LIKE
- Apply CHECK constraint

WEEK -4 AGGREGATE FUNCTIONS and Views

Practice Queries using following functions

- COUNT,
- SUM,
- AVG,
- MAX,
- MIN,

Apply constraint on aggregation using

- GROUP BY,
- HAVING,

VIEWS Create , Modify and Drop

WEEK -5	Nested QUERIES

Practicing Nested Queries using

- UNION,
- INTERSECT,
- CONSTRAINTS
- IN

WEEK -6	CO- RELATED NESTED QUERIES

Practicing Co – Related Nested Queries using

- EXISTS,
- NOT EXISTS. ANY, ALL

WEEK -7	JOIN QUERIES

Practicing Join Queries using

- Inner join
- Outer join
- Equi join
- Natural join

WEEK -8	TRIGGERS

Practicing on Triggers - creation of trigger, Insertion using trigger, Deletion using trigger, Updating using trigger.

WEEK -9	PROCEDURES

Procedures- Creation of Stored Procedures, Execution of Procedure, and Modification of Procedure

WEEK -10	CURSORS

Cursors- Declaring Cursor, Opening Cursor, Fetching the data, closing the cursor.

WEEK -11	PL/SQL Part 1

. Practice PL/SQL –

- block structure,
- variables,
- data types,

WEEK -12	PL/SQL Part 2

. Practice PL/SQL –

- operators,
- control structures;
- aseca

Case study 1: College Management
Case study 2 : An Enterprise/Organization
Case study 3 : Library Management system
Case study 4: Sailors and shipment system

TEXT BOOKS:

1. Abraham Silberschatz, Henry F. Korth, S. Sudharshan, “Database System Concepts”, Sixth Edition, Tata McGraw Hill, 2011.
2. Raghurama Krishnan, Johannes Gehrke, “Data base Management Systems”, TATA McGraw Hill, 3rd Edition, 2007.

WEB REFERENCES:

1. http://www.learndb.com/databases/how-to-convert-er-diagram-to-relational-database
2. https://www.w3schools.com/sql/sql_create_table.asp
3. http://www.edugrabs.com/conversion-of-er-model-to-relational-model/?upm_export=print
4. http://ssyu.im.ncnu.edu.tw/course/CSDB/chap14.pdf
5. http://web.cs.ucdavis.edu/~green/courses/ecs165a-w11/8-query.pdf

GENDER SENSITIZATION

II B. TECH- II SEMESTER

Course Code	Category	Hours / Week			Credits	Maximum Marks		
		L	T	P	C	CIE	SEE	Total
A5HS03	HSMC	-	-	2	-	30	70	100
Contact Classes: 16	Tutorial Classes: 0	Practical Classes: 00				Total Classes: 16		

COURSE OBJECTIVES:

1. To provide a critical perspective on the socialization of men and women.
2. To introduce students to information about some key biological aspects of genders.
3. To expose the students to debates on the politics and economics of work.
4. To help students reflect critically on gender violence.
5. To expose students to more egalitarian interactions between men and women.

COURSE OUTCOMES:

1. Develop a better understanding of important issues related to gender in contemporary India.
2. Sensitized to basic dimensions of the biological, sociological, psychological and legal aspects of gender
3. Attain a finer grasp of how gender discrimination works in our society and how to counter it
4. Men and Women students and professionals will be better equipped to work and live together as equals.
5. reate a sense of appreciation of women in all walks of life.

UNIT - I	UNDERSTANDING GENDER	CLASSES: 03

Introduction: Introduction to Gender, What is Gender, Why should we study it.. Socialization: Making Women, Making Men - Preparing for Womanhood. Growing up Male. First lessons in Caste: Different Masculinities.

UNIT - II	GENDER ROLES AND RELATIONS	CLASSES: 03

Two or Many? -Struggles with Discrimination- Missing Women-Sex Selection and Its Consequences Declining Sex Ratio. Demographic Consequences- Gender Spectrum: Beyond the Binary

UNIT - III	GENDER AND LABOUR	CLASSES: 03

Valuation of Labour-Housework: The Invisible Labor- “My Mother doesn’t Work.” “Share the Load.”-Work: Its Politics and Economics -Fact and Fiction. Unrecognized and Unaccounted work. Additional Reading: Wages and Conditions of Work.

UNIT - IV	GENDER - BASED VIOLENCE	CLASSES: 04

Sexual Harassment: Say No! -Sexual Harassment, not Eve-teasing- Coping with Everyday Harassment- Further Reading: “Chupulu”. Domestic Violence: Speaking Out Is Home a Safe Place? -When Women Unite [Film]. Rebuilding Lives. Thinking about Sexual Violence Blaming the Victim-“I Fought for my Life….” Additional Reading: The Caste Face of Violence.

UNIT - V	GENDER AND COEXISTENCE	CLASSES: 03

Gender Issues- Just Relationships: Being Together as Equals Mary Kom and Onler. Love and Acid just do not Mix. Love Letters. Mothers and Fathers. Rosa Parks The Brave Heart.

TEXT BOOKS:
1. All the five Units in the Textbook, “Towards a World of Equals: A Bilingual Textbook on Gender” written by A. Suneetha, Uma Bhrugubanda, Duggirala Vasanta, Rama Melkote, Vasudha Nagaraj, Asma Rasheed, Gogu Shyamala, Deepa Sreenivas and Susie Tharu and published by Telugu Akademi, Hyderabad,Telangana State in the year 2015.
REFERENCE BOOKS:
1. Menon, Nivedita. Seeing like a Feminist. New Delhi: Zubaan-Penguin Books, 2012 2. Abdulali Sohaila. “I Fought For My Life…and Won.”Available online at: http://www.thealternative.in/lifestyle/i-fought-for-my-lifeand-won-sohaila-abdulal/
WEB REFERENCES:
1. http://www.thealternative.in/lifestyle/i-fought-for-my-lifeand-won-sohaila-abdulal/
E-TEXT BOOKS:
1. Abdulali Sohaila. “I Fought For My Life…and Won.” Available online at: http://www.thealternative.in/lifestyle/i-fought-for-my-lifeand-won-sohaila-abdulal/