

DEGLOOR COLLEGE, DEGLOOR**Annual Teaching Plan**

Department :- Computer Science		Class :- B. Sc. First Year		
Name of Teacher :- Mr. Hangarge D.		Year :- 2015 - 16		
Subject :- Computer Science		Semester :- I		
Paper Name & NO. :- Fundamentals of Computer Organization		Paper No: I		
Chapter No.	Topic - Title	Expected Lectures	Expected Duration	
			From	To
I	Introduction to Computer System History of Computer, Generations, Block diagram of computer, Characteristics of computer, Classification and Types of computer.	6	1-Jul-15	20-Jul-15
II	Data Representation within Computer Bit, Byte, Word, ASCII, EBCDIC, BCD code, Introduction to Number system: Binary, Decimal, Octal, Hexadecimal. Conversions from one Number system to another.	6	21-Jul-15	10-Aug-15
III	Memory Memory Cell, RAM, ROM, EPROM, Floppy Disk, Hard Disk, CD-ROM, DVD.	5	11-Aug-15	25-Aug-15
IV	Input and Output Devices Keyboard Entry, Direct Entry: Card Reader, OCR, OMR, MICR, Pointing Devices: Light Pen, Mouse, Touch Screen. Monitor. Printers: Dot-Matrix, Inkjet, Laser.	7	26-Aug-15	10-Sep-15
V	Disk Operating System DOS Preliminaries, Files, Directory, Wild Character, Booting Procedure, Internal DOS Commands, External DOS Commands.	8	11-Sep-15	20-Sep-15
VI	Introduction to Windows Operating System Windows Operating system History, Files, Folders, Architecture of Windows O.S., Desktop, My Computer, Recycle bin, Control Panel, Features of Windows (GUI, Multasking, Multi-user)	8	21-Sep-15	1-Oct-15

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Department :- Computer Science		Class :- B. Sc. First Year		
Name of Teacher :- Mrs. Bunnawar S. V		Year :- 2015 - 16		
Subject :- Computer Science		Semester :- I		
Paper Name & NO. :- Foundations of Computer Programming		Paper No: II		
Chapter No.	Topic - Title	Expected Lectures	Expected Duration	
			From	To
I	Introduction to Problem Solving and representation Problem Aspects, Top-Down design, implementations of algorithm, program verification, efficiency of algorithms, analysis of algorithms. Definition and properties, Principles of flowchart, Flowchart Symbols, Converting algorithm to flowchart.	7	1-Jul-15	20-Jul-15
II	Fundamental of Algorithms Algorithm for exchanging the value of two variables, counting, summation of set of numbers, factorial computations, generation of Fibonacci series, reversing digits of and integers, Character to number conversion.	7	21-Jul-15	10-Aug-15
III	Factoring Methods Finding square root of numbers, smallest divisor of an integer, GCD of two integers, generating prime numbers, computing prime factors of integers	6	11-Aug-15	25-Aug-15
IV	Array Techniques Introduction to array, memory representation of array, algorithm for array order Reversal, array counting, finding maximum and minimum element from array.	7	26-Aug-15	10-Sep-15
V	Sorting and searching techniques Bubble sort, selection sort, merge sort, insertion sort, linear search and binary search	7	11-Sep-15	20-Sep-15
VI	Text processing and pattern searching techniques Text line length adjustment, Left and Right justification of text, keyword searching in text	6	21-Sep-15	1-Oct-15

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Department :- Computer Science		Class :- B. Sc. First Year		
Name of Teacher :- Mr. Hangarge D.		Year :- 2015 - 16		
Subject :- Computer Science		Semester :- II		
Paper Name & NO. :- Programming in C		Paper No: III		
Chapter No.	Topic - Title	Expected Lectures	Expected Duration	
			From	To
I	Introduction to C Introduction, Character set, C tokens, Data types, Constant, Variables, declaration of storage class, Input/Output Statement, operators, Hierarchy of Operation, Structure of C program.	5	1-Dec-15	12-Dec-15
II	The Decision and Looping, Control Structure If Statement, If-Else statement, Nesting of If-Else, else-if ladder, Switch Statement, Goto. While loop, Do-While loop, For loop.	8	13-Dec-15	22-Dec-15
III	Arrays and Pointers Introduction to Array, One-dimensional arrays: Declaration & Initialization, Two-dimensional arrays: Declaration & Initialization, Multi-dimensional arrays Introduction, understanding pointers, accessing address of variable, declaring pointer variables, initialization of pointer variable	5	23-Dec-15	2-Jan-16
IV	Storage Classes Automatic, Register, Static, Scope rules.	7	3-Jan-16	14-Jan-16
V	Functions Introduction, Definition of function, return values and their types, function calls, function declaration, recursion, passing arrays to functions, What are string, Standard Library string functions: strlen(), strcpy(), strcmp(), strcat.	7	15-Jan-16	27-Jan-16
VI	Structure and Union Introduction, defining a structure, defining a structure variable, accessing structure members, initialization of structure, structure within structure, union.	7	28-Jan-16	8-Feb-16


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Department :- Computer Science		Class :- B. Sc. First Year		
Name of Teacher :- Mrs. Bunnawar S. V		Year :- 2015 - 16		
Subject :- Computer Science		Semester :- II		
Paper Name & NO. :- Data Structures		Paper No: IV		
Chapter No.	Topic - Title	Expected Lectures	Expected Duration	
			From	To
I	Introductions and Overviews Introduction, Elementary Data Organization, Data Structure Operation, Notation and Concept of Algorithm.	6	1-Dec-15	12-Dec-15
II	Array, Records and Pointers Introduction, Linear array, representation of Linear Array in Memory, Traversing Linear Array, Inserting and Deleting.	6	13-Dec-15	22-Dec-15
III	Sorting and Searching Methods Sorting Methods: Quick Sort, radix -exchange sort, merge sort Sort. Searching Methods: Binary Search, Linear Search. Time complexity analysis of sorting and searching techniques	7	23-Dec-15	2-Jan-16
IV	Linked List Introduction, Representation Linked list in memory, searching a linked list, Inserting and deleting linked list.	7	3-Jan-16	14-Jan-16
V	Stack, Queue and Recursion Introduction to Stack, Array representation of stack, Push and Pop operation. Introduction to Queue, Array representation of queue, Insert and Delete operation, Recursion.	7	15-Jan-16	27-Jan-16
VI	Trees and Graphs: Basic terminology, binary trees and its representation, insertion and deletion of nodes in binary tree, binary search tree and its traversal, threaded binary tree, Heap, Balanced Trees. Terminology and representation of graphs using adjacency matrix, Warshall's algorithm	7	28-Jan-16	8-Feb-16

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Department :- Computer Science		Class :- B. Sc. Second Year		
Name of Teacher :- Ms. Bushra Khan		Year :- 2015 - 16		
Subject :- Computer Science		Semester :- III		
Paper Name & NO. :- Digital Electronics & 8085 Microprocessor Paper No: VI				
Chapter No.	Topic - Title	Expected Lectures	Expected Duration	
			From	To
I	Fundamental Concepts Introduction, Digital Signal, Basic Digital Circuits, NAND & NOR Operations, EX-OR & EX-NOR Operations, De-Morgan's theorems, Rules & Laws of Boolean Algebra	10	1-Jul-15	20-Jul-15
II	Combinational Logic Design Introduction, K-map representation of logical function, simplification of logical function using K-map, minimization of logical functions specified in minterm/maxterm of truth table, use of Don't care condition	12	21-Jul-15	10-Aug-15
III	Flip Flop A 1-Bit Memory Cell, RS Flip-Flop, D type Flip-Flop, T-type Flip-Flop J-K Flip-Flop, J-K Master Slave Flip-Flop.	13	11-Aug-15	25-Aug-15
IV	Sequential Logic Design Introduction, Registers, shift registers, Ripple/Asynchronous counter, Synchronous counter	10	26-Aug-15	10-Sep-15
V	Fundamentals of Microprocessor Introduction, an ideal microprocessor, data bus, address bus, control bus, microprocessor operation, microprocessor architecture, instruction set	8	11-Sep-15	20-Sep-15
VI	8085 Microprocessor Introduction, Architecture of 8085 microprocessor, pin diagram of 8085 microprocessor	8	21-Sep-15	1-Oct-15

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Department :- Computer Science		Class :- B. Sc. Second Year		
Name of Teacher :- Mrs. Bunnawar S. V.		Year :- 2015 - 16		
Subject :- Computer Science		Semester :- III		
Paper Name & NO. :- Object Oriented Programming using C++ No: VII				
Chapter No.	Topic - Title	Expected Lectures	Expected Duration	
			From	To
I	Principles of Object Oriented Programming A look at Procedure Oriented Programming, Object oriented Programming paradigm, Basic Concepts of OOP, Benefits of OOP, Applications of OOP	10	1-Jul-15	20-Jul-15
II	Basics of C++ What is C++, Tokens, Data Types in C++, Operators in C++: Scope Resolution, Member dereferencing Operators, Memory management Operators, Manipulators, A simple C++ Program, More C++ statements , structure of C++ program, , Control structures	8	21-Jul-15	10-Aug-15
III	Functions in C++ Introduction, Function Prototyping, Call by reference & return by reference, Function with Default arguments, Inline function, Function Overloading, Mathematical Library functions	10	11-Aug-15	25-Aug-15
IV	Classes & Objects Introduction, Specifying a class, Defining member functions, a C++ program with class, nesting of member functions, Memory allocation for objects, static data members, static member functions, objects as function arguments, friend functions	10	26-Aug-15	10-Sep-15
V	Constructors & Destructors Constructors, Parameterized Constructors, Copy Constructor, Multiple Constructors In a class, constructors with default argument, Dynamic constructors, Dynamic Constructors, Destructors	8	11-Sep-15	20-Sep-15
VI	Operator Overloading Defining Operator Overloading, Unary and Binary Operator Overloading, Overloading Binary Operators using Friend, Manipulation on String Using Operator, Rules for overloading Operator	8	21-Sep-15	1-Oct-15
VII	Inheritance Defining Derived Class, Type of inheritance (Single, Multiple, Multilevel, Hierarchical, Hybrid inheritance), Virtual base class, Abstract class	8	2-Oct-15	8-Oct-15
VIII	Working with Files Introduction, Classes for file stream Operations, Opening & Closing a file, Detecting end of file, File modes in Open()	8	9-Oct-15	18-Oct-15

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Department :- Computer Science		Class :- B. Sc. Second Year		
Name of Teacher :- Ms. Bushra Khan		Year :- 2015 - 16		
Subject :- Computer Science		Semester :- IV		
Paper Name & NO. :- ALP using 8086 Microprocessor		Paper No: VIII		
Chapter No.	Topic - Title	Expected Lectures	Expected Duration	
			From	To
I	Software Architecture of 8086 Microprocessor Microarchitecture of 8086 microprocessor, Software model of 8086 microprocessor, Memory address space & Data Organization, Data types Segment Registers & Memory segmentation, dedicated reserved & general use memory instruction Pointer, Data Register, Pointer & Index Register, Status Registers, Generating a memory address, stack, I/P & O/P address space	10	1-Dec-15	12-Dec-15
II	Assembly Language Programming Software, Assembly Language Program Development on PC: Describing the problem, planning the solution, coding the solution with assembly language, creating source program, assembling the source program into an object module, producing a run module, verifying a solution, programs & files involved in the program development life cycle Instruction set, the mov instruction, Addressing mode	8	13-Dec-15	22-Dec-15
III	8086 programming instructions & computation Data transfer instructions- MOV, XCHG, XLAT, LEA, LDS, and LES Instruction, Arithmetic Instructions- ADD, ADC, INC, AAA, DAA, Subtraction Instruction- SUB, SBB, DEC, AAS, DAS, NEG, Multiplication & Division Instruction - IMUL, IDIV, AAM, AAD, CBW, & CND	8	23-Dec-15	2-Jan-16
IV	More 8086 Instructions Logic Instructions- AND, OR, XOR & NOT instructions, Clearing, setting & toggling bits of an operand, Shift Instructions- SHL, SHR, SAL, SAR INSTRUCTIONS, ISOLATING value of a bit in an operand, Rotate Instruction- ROL, ROR, RCL, & RCR Instructions, Alignment of data in an operand	10	3-Jan-16	14-Jan-16
V	Control Flow Instructions Flag control instructions, compare instructions, control flow & jump instructions, Unconditional & Conditional Jump- Unconditional Jump Instruction, Conditional Jump Instruction, Branch Program structure- if then else, Loop Program Structure - repeat until & while do	8	15-Jan-16	27-Jan-16
VI	Subroutine & Loop Instruction Subroutines & subroutine handling instructions- CALL & RET Instruction, PUSH & POP Instruction, Loops & loop handling instructions, Strings & strings handling Instructions- Move String- MOVSB, MOVSW, Compare string & scan string- CMPSB/ CMPSW, SCASB/SCASW, Load & store string - LODSB/LODSW & STOSB/STOSW, Repeat string- REP, auto indexing for string	8	28-Jan-16	8-Feb-16

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Department :- Computer Science		Class :- B. Sc. Second Year		
Name of Teacher :- Mrs. Bunnawar S. V.		Year :- 2015 - 16		
Subject :- Computer Science		Semester :- IV		
Paper Name & NO. :- Programming in Java		Paper No: IX		
Chapter No.	Topic - Title	Expected Lectures	Expected Duration	
			From	To
I	Java Evolution. Java History, Java Features, How java differs From C and C++, Java and Internet. Java & WWW, Web Browsers, Java support systems, Java virtual machine	10	1-Dec-15	12-Dec-15
II	Overview of Java Constants, Variables, Data Types, Java Tokens, Declaration of variable, Giving Values to variables, Scope of Variables, Symbolic Constants, Type Casting, Getting Values of variables, Standard Default values, Java Statements Introduction, simple java program, An application with two classes, Java program structure, implementation of a java program, Command Line Arguments	9	13-Dec-15	22-Dec-15
III	Classes, Object and Methods Introduction, Defining a class, Adding variables, Adding Methods, Creating Objects, Accessing Class Members, Constructors. Method Overloading, Static Members, Nesting of Method, Inheritance: Extending a class, Overriding Method, Final variable and Methods.	9	23-Dec-15	2-Jan-16
IV	Interfaces - Multiple Inheritances Introduction, Defining Interface, Extending Interface, Implementing Interface.	10	3-Jan-16	14-Jan-16
V	CArrays & Strings Introduction, One-dimensional Arrays, Creating an one dimensional array, Two dimensional Arrays, Creating an two dimensional array, String Arrays, String Method	8	15-Jan-16	27-Jan-16
VI	Packages: Putting Classes Together Introduction, Java API package, Using system packages, Naming Conventions, Creating Packages, Accessing a package, Using a Package, Adding a class to a package.	8	28-Jan-16	8-Feb-16
VII	Applet Programing Introduction, how applets differ from applications, preparing to write applets, building applet code, applet life cycle	8	9-Feb-16	18-Feb-16


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Department :- Computer Science		Class :- B. Sc. Third Year		
Name of Teacher :- Ms. Wazarkar M.		Year :- 2015 - 16		
Subject :- Computer Science		Semester :- V		
Paper Name & NO. :- Software Engineering Paper No: XII				
Chapter No.	Topic - Title	Expected Lectures	Expected Duration	
			From	To
I	Introduction to Software Engineering: Definitions - Size Factors - Quality and Productivity, Factors - Managerial Issues - Planing a software project : Defining the problem - Developing a Solution Strategy - Planning the Development Process - Planning an Organization structure - Other Planning Activities.	10	1-Jul-15	20-Jul-15
II	Software Cost Estimation: Software cost factors - Software Cost Estimation Techniqes - Staffing-level Estimation - Estimating Software Maintenance Costs - The Software Requirements Specification - Formal Specification Techniques - Languages and Processors for Requirements Specification.	12	21-Jul-15	10-Aug-15
III	Software design: Fundamental Design Concepts - Modules and Modularization Criteria - Design Notations - Design Techniques - Detailed Design Considerations - Real-Time and Distributed System Design - Test Plans - Milestones, walkthroughs, and Inspections.	13	11-Aug-15	25-Aug-15
IV	Implementation issues: Structured Coding Techniques - Coding Style - Standards and Guidelines - documentation guidelines - Type Checking - Scoping Rules - Concurrency Mechanisms.	10	26-Aug-15	10-Sep-15
V	Quality Assurance - Walkthroughs and Inspections - Static Analysis - Symbolic Execution	8	11-Sep-15	20-Sep-15
VI	Testing and Debugging - System Testing - Formal Verification: Enhancing Maintainability during Development - Managerial Aspects of Software Maintenance - Source Code Metrics - Other Maintenance Tools and Techniques.	8	21-Sep-15	1-Oct-15


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Department :- Computer Science		Class :- B. Sc. Third Year		
Name of Teacher :- Mrs. Wangikar V.		Year :- 2015 - 16		
Subject :- Computer Science		Semester :- V		
Paper Name & NO. :- Relational Database Management System Paper No: XIII				
Chapter No.	Topic - Title	Expected Lectures	Expected Duration	
			From	To
I	Advantages and Components of a Database Management Systems - Feasibility Study - Class Diagrams - Data Types - Events - Normal Forms - Integrity - Converting Class Diagrams to Normalized Tables - Data Dictionary.	10	1-Jul-15	20-Jul-15
II	Query Basics - Computation Using Queries - Subtotals and GROUP BY Command - Queries with Multiple Tables Subqueries - Joins - DDL & DML - Testing Queries.	12	21-Jul-15	10-Aug-15
III	Effective Design of Forms and Reports - Form Layout - Creating Forms - Graphical Objects - Reports -- Procedural Languages - Data on Forms - Programs to Retrieve and Save Data - Error Handling.	13	11-Aug-15	25-Aug-15
IV	Power of Application Structure - User Interface Features - Transaction -- Forms Events - Custom Reports - Distributing Application - Table Operations - Data Storage Methods - Storing Data Columns - Data Clustering and Partitioning.	10	26-Aug-15	10-Sep-15
V	Database Administration - Development Stages - Application Types - Backup and Recovery - Security and Privacy -	8	11-Sep-15	20-Sep-15
VI	Distributed Databases - Client/Server Databases - Web as a Client/Server System - Objects - Object Oriented Databases - Integrated Applications	8	21-Sep-15	1-Oct-15

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Department :- Computer Science		Class :- B. Sc. Third Year		
Name of Teacher :- Ms. Wazarkar M.		Year :- 2015 - 16		
Subject :- Computer Science		Semester :- VI		
Paper Name & NO. :- Programming in Visual Basic		Paper No: XIV		
Chapter No.	Topic - Title	Expected Lectures	Expected Duration	
			From	To
I	Introduction to Windows , GUI concept, Concept of Event driven programming, The Visual Basic IDE ,Types of Visual Basic Projects, Visual Basic Editions, The Visual Basic Project Lifecycle, Project Files.	10	1-Dec-15	12-Dec-15
II	Customizing a Form - Writing Simple Programs - Toolbox - Creating Controls - Name Property - Command Button - Access Keys - Image Controls - Text Boxes - Labels - Message Boxes - Grid - Editing Tools - Variables - Data Types - String - Numbers.	12	13-Dec-15	22-Dec-15
III	Displaying Information - Determinate Loops - Indeterminate Loops - Conditionals - Built-in Functions - Functions and Procedures.	13	23-Dec-15	2-Jan-16
IV	Lists - Arrays - Sorting and Searching - Records - Control Arrays - Combo Boxes - Grid Control - Projects with Multiple forms - Do Events and Sub Main - Error Trapping.	10	3-Jan-16	14-Jan-16
V	VB Objects - Dialog Boxes - Common Controls - Menus - MDI Forms - Testing, Debugging and Optimization - Working with Graphics.	8	15-Jan-16	27-Jan-16
VI	Monitoring Mouse activity - File Handling - File System Controls - File System Objects - COM/OLE - automation - DLL Servers - OLE Drag and Drop.	8	28-Jan-16	8-Feb-16

M. Wazarkar
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Department :- Computer Science		Class :- B. Sc. Third Year		
Name of Teacher :- Mrs. Wangikar V.		Year :- 2015 - 16		
Subject :- Computer Science		Semester :- VI		
Paper Name & NO. :- Computer Network Paper No: XV (A)				
Chapter No.	Topic - Title	Expected Lectures	Expected Duration	
			From	To
I	Overview Networking terminology, network types- Transmission Media, Control Schemes Layered Architecture ,OSI Reference Model ,	10	1-Dec-15	12-Dec-15
II	TCP/IP Reference Model ,Telephone Networks Leased Lines ,PSTN,ISDN ,Broadband Communications ISPs.	12	13-Dec-15	22-Dec-15
III	Geographical Classifications of Network ,Ethernet ,LAN Interconnection ,Topologies- Fast Ethernet, VLANs ,Protocols ,Frame Relay, MAN ,IP Addresses , Routing Algorithms ,Internet Routing	8	23-Dec-15	2-Jan-16
IV	TCP/IP , UDP, Wireless TCP , DNS, Electronic Mail , FTP , TFTP , SNMP etc.	10	3-Jan-16	14-Jan-16
V	Wireless Networks , Blue Tooth ,Cellular Radio Networks ,Wireless LANs ,Cable Television Networks ,Satellite Television Networks ,Interactive Services.	8	15-Jan-16	27-Jan-16
VI	Internet ,Web Servers , Applications , URLs- WWW- HTTP & MIME ,HTML & XML Protocols Languages ,Scripts, RTSP , WAP , Securities Basic Techniques -Data Encryption, Authentication ,Network and Web Security ,Privacy.	8	28-Jan-16	8-Feb-16

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