

Post Graduate Govt.Collgeg for Girls,Sec-42,Chandigarh

Teaching Plan – Facultywise

Name of Faculty: Mr. Sudhir Kumar Sharma

Class: M. Sc (IT)

Subject: Software Engineering

Paper: MS 40

Session: 2015-16

S. No	Date From	Date Upto	Topics to be covered
Week 1	20 th July	25 th July	Introduction to Software Engineering: Definition, Software Engineering Paradigms, Software Engineering goals, Characteristics of well-engineered software, Software Process Models: Waterfall Model, Prototyping Model, Spiral Model, RAD, Agile Models.
Week 2	27 th July	1 st Aug	Fourth Generation Techniques; Software Inspection, Preview and Inspection Procedures, Inspection Team; Software Engineer, Skills of Software Engineer, Human Factors in Software Engineering.
Week 3	3 rd Aug	8 th Aug	Software Requirement Specification (SRS): Software Requirements, Definition of SRS, Characteristics of SRS, Components of SRS, Designing of SRS. System Analysis: Principles of Structures Analysis, DFDs, E-R Diagrams, Data Dictionary. Software Metrics: Role of Metrics and Measurement, Types of Software Metrics:
Week 4	10 th Aug	15 th Aug	Object-Oriented Metrics, Software Quality Metrics, Process Metrics, People Metrics, Software Productivity and Quality, Size-oriented Metrics, Function Oriented Metrics.
Week 5	17 th Aug	22 nd Aug	Software Project Planning & Scheduling: Objectives, Decomposition techniques, Problem based estimation, Process based estimation, Cost estimation Cost estimation Models: Single Variable Model, COCOMO Model; Software Risks, Risk Assessment.
Week 6	24 th Aug	29 th Aug	Software Design: Design Objectives, Design Principles, Concepts, Design Process, Design
Week 7	31st Aug	5th Sept	Methodologies: Structured Design, Modular Design, Object Oriented Design.
Week 8	7 th Sept	12 th Sept	User Interface Design and its elements, GUI & its Characteristics, Elements of GUI.
Week 9	14 th Sept	19 th Sept	System Administration and Training: User Manual
Week 10 (including mid term)	21 st Sept	3 rd Oct	Implementation, Documentation
Week 11	5 th Oct	10 th Oct	Operation Plans, Maintenance and its types: Corrective Maintenance.
Week 12	12 th Oct	21 st Oct	Adaptive Maintenance, Preventive Maintenance, Perfective Maintenance.

Class: BCA III Sem

Paper: BCA-303

Subject: Implementation of Object Oriented concept through C++

Session: 2015-16

S. No	Date From	Date Upto	Topics to be covered
Week 1	20 th July	25 th July	Concepts of Object Oriented Programming (OOP): Introduction to OOP, Difference between OOP and Procedure Oriented Programming, Object, Class, Encapsulation, Abstraction, Polymorphism, Inheritance.
Week 2	27 th July	1 st Aug	Structure of a C++ Program and I/O streams. Classes and Objects, Class Declaration : Data Members, Member Functions, Private and Public members,
Week 3	3 rd Aug	8 th Aug	Creating Objects, Accessing class data members, Accessing member functions Class Function Definition: Member Function definition inside the class declaration and outside the class declaration,
Week 4	10 th Aug	15 th Aug	Introduction: Friend function, inline function, static function.
Week 5	17 th Aug	22 nd Aug	Scope resolution operator, Private and Public member function, Nesting of member functions, Arrays within a class. Arrays of Objects, Objects as function arguments : Pass by value, Pass by reference, Pointers to Objects.
Week 6	24 th Aug	29 th Aug	Constructors and Destructors: Declaration and Definition, Types of Constructors, (Default, Parameterized, Copy Constructors).
Week 7	31 st Aug	5 th Sept	Destructors: Definition and use. Function Overloading & Operator Overloading
Week 8	7 th Sept	12 th Sept	Inheritance - Concept of inheritance, Base class, Defining derived classes, Visibility modes :Public, Private, Protected ; Single inheritance:
Week 9	14 th Sept	19 th Sept	Privately derived, Publicly derived Making a protected member inheritable Access Control to private and protected members by member functions of a derived class
Week 10 (including mid term)	21 st Sept	3 rd Oct	Multilevel inheritance, Nesting of classes
Week 11	5 th Oct	10 th Oct	Polymorphism: Definition, Application and demonstration of Data Abstraction, Encapsulation and polymorphism.
Week 12	12 th Oct	21 st Oct	. Early Binding, Polymorphism with pointers, Virtual Functions, Late binding, pure virtual functions.

Name of Faculty: Ms. Nidhi Goyal

Class: M.Sc (IT) – I sem

Paper code: MS-39

Subject: Interactive Computer Graphics

Session: 2015-16

S. No	Date From	Date Upto	Topics to be covered
Week 1	20 th July	25 th July	Introduction: Overview of Graphics Systems, Display Devices, Hardcopy Devices. Interactive Input Devices- Pointing and positioning devices (cursor, light pen, digitizing tablet, the mouse, track balls)
Week 2	27 th July	1 st Aug	Display Processors, Character Generation; Interactive graphical techniques; Positioning, (Elastic or Rubber Band lines, Inking, zooming, panning)
Week 3	3 rd Aug	8 th Aug	Raster Scan Graphics: Introduction, Line Drawing algorithms-Direct method, DDA
Week 4	10 th Aug	15 th Aug	Line Drawing algorithms: DDA(contd.) and Bresenham's;
Week 5	17 th Aug	22 nd Aug	Circle drawing algorithm- 2-point, 4-point, trigonometric method, 8-point, Bresenham method, Bresenham Midpoint method.
Week 6	24 th Aug	29 th Aug	Two Dimensional Geometric Transformation & Viewing: homogeneous coordinate system; Basic Transformations- Translation, Rotation, Scaling, Reflection, Shear
Week 7	31 st Aug	5 th Sept	Composite transformation like- Rotation about an Arbitrary Point, Reflection through an Arbitrary Line; transformation of points and unit square.
Week 8	7 th Sept	12 th Sept	Clipping: Point clipping Line clipping algorithms: Cyrus-Beck
Week 9	14 th Sept	19 th Sept	Clipping: Cohen-Sutherland and Liang-Barsky,
Week 10 (including mid term)	21 st Sept	3 rd Oct	Clipping: Polygon Clipping; Window to viewport coordinate transformation
Week 11	5 th Oct	10 th Oct	Graphics Programming using C/C++: Mouse Programming, Graphic Languages: Primitives (Constants, actions, operators, variables), display subroutines, plotting and geometric transformations, Concept of Animation, Saving, Loading and Printing graphics images from/to disk. Animated algorithms for sorting, Towers of Hanoi..
Week 12	12 th Oct	21 st Oct	Open GL using C/C++: Geometric Primitives and Attributes; Viewing; Color; Lighting, Animation.

Class: BCA II**Paper code: BCA 10****Subject: Numerical and Statistical Methods using C****Session: 2015-16**

S. No	Date From	Date Upto	Topics to be covered
Week 1	20 th July	25 th July	Introduction to Numerical Methods and Analysis, Basic Terminologies, Errors,
Week 2	27 th July	1 st Aug	Computer Arithmetic, Normalization
Week 3	3 rd Aug	8 th Aug	Iterative Methods
Week 4	10 th Aug	15 th Aug	Iterative Methods: Transcendental Equations
Week 5	17 th Aug	22 nd Aug	Simultaneous Linear Equations
Week 6	24 th Aug	29 th Aug	Simultaneous Linear Equations (Contd), Concept of pivoting
Week 7	31 st Aug	5 th Sept	Numerical Integration
Week 8	7 th Sept	12 th Sept	Numerical Differentiation – RK 2 nd and 4 th order methods, Practical Problems
Week 9	14 th Sept	19 th Sept	Measures of Central Tendency : Preparing Frequency distribution table, Arithmetic mean
Week 10 (including mid term)	21 st Sept	3 rd Oct	Measures of Central Tendency : Geometric mean, Harmonic mean
Week 11	5 th Oct	10 th Oct	Measures of Central Tendency: Median
Week 12	12 th Oct	21 st Oct	Measures of Central Tendency: Mode

Class: BCA II**Subject: Data Structure using C****Paper code: BCA 25****Session: 2015-16**

S. No	Date From	Date Upto	Topics to be covered
Week 1	20 th July	25 th July	Basic Concepts and Notations, Data Structure and Data Structure Operations.
Week 2	27 th July	1 st Aug	Algorithm – Introduction, Analysis, Complexity
Week 3	3 rd Aug	8 th Aug	Arrays- Concepts, Operations, Algorithms and Programs
Week 4	10 th Aug	15 th Aug	Arrays- Concepts, Operations, Algorithms and Programs
Week 5	17 th Aug	22 nd Aug	Stacks - Concepts, Operations, Algorithms and Programs
Week 6	24 th Aug	29 th Aug	Stacks - Applications and Implementations.
Week 7	31 st Aug	5 th Sept	Queues - Concepts, Operations, Types One way queues - Concepts, Operations, Algorithms and Programs
Week 8	7 th Sept	12 th Sept	Doubly, Circular, Priority Queue - Concepts, Operations, Algorithms and Programs
Week 9	14 th Sept	19 th Sept	Linked List- Introduction, Concepts, Types, Memory representation Linked List – Simple (One way) linked list - Concepts, Operations, Algorithms and Programs
Week 10 (including mid term)	21 st Sept	3 rd Oct	Doubly linked list - Concepts, Operations, Algorithms and Programs
Week 11	5 th Oct	10 th Oct	Circular linked list - Concepts, Operations, Algorithms and Programs
Week 12	12 th Oct	21 st Oct	Header linked list - Concepts, Operations, Algorithms and Programs

Name of Faculty: Ms. Anu Chawla

Class: MSc(IT) III Sem

Subject: Linux System Administration

Session: 2015-16

S. No	Date From	Date Upto	Topics to be covered
Week 1	20 th July	25 th July	What is Linux, Linux's History, Minimum System Requirements; Installing Linux: Working with Linux, Floppy-less Installation, Boot and Root Disks, Choosing Text or Graphics Installation, Setting up your Hard Drive, Formatting the Partitions, Configuration X
Week 2	27 th July	1 st Aug	Selecting packages to Install, Using LILO; Partitioning the Hard Disk: Linux Swap Space Partitions, Linux's fdisk, Enabling the Swap Space for Installation, Creating the Linux File-system partition, Using LILO
Week 3	3 rd Aug	8 th Aug	Starting and Stopping your Linux System, Linux Shutdown Commands, Login, Passwords, Creating a New Login, Logging Out; Linux Error Messages, Search Paths; the who Command.
Week 4	10 th Aug	15 th Aug	How Linux Commands Work, Command Options, Other Parameters, Input and Output Redirection, Notational conventions used to Describe Linux commands, Online help available in Linux, The Linux Man pages, Finding keywords in Man pages, The bash shell help facility; Wildcards: * and ?, Environment Variables, Process and how to Terminate them, The process status Commands: ps, The process termination command: kill, the su command, the grep command.
Week 5	17 th Aug	22 nd Aug	Files Overview, Common types of files, filenames, Directories Parent directories and sub-directories, The root directory, The home directory; Navigating the Linux file System: pwd command, Absolute and relative filenames; cd command, Creating and Deleting files; Moving and Copying with Wildcards, Moving Directories, Removing files and directories, Fear of Compression: The Zipless file, Important directories in the Linux file System
Week 6	24 th Aug	29 th Aug	File and Directory Permissions: File and Directory ownership, User and ownership, Groups, Changing group ownership, File Permissions, UMASK Setting, Changing File Permission, Changing directory permissions; Bash: What is Shell?How the Shell gets Started, The most common Shells; The Bourne Shell: Command-line Completion, Wildcards, Command History, Aliases, Input Redirection, Output Redirection, Pipelines Shell, Prompts, Job control, Customizing bash, bash commands, bash variables.
Week 7	31 st Aug	5 th Sept	Linux - tesh : An Introduction to tesh, Command completion, Wildcards, Command History, Aliases, Input and Output Redirection, Pipelines, Prompts, Job Control; Key Bindings, Correcting Spelling

			Errors, Pre-commands, Change directory Commands, Monitoring Logins and Logouts, Customizing tcsh, tcsh Command Summary, tcsh variables.
Week 8	7 th Sept	12 th Sept	Editing and Typesetting : Text Editors vi, The vi Editor, Starting vi, vi modes, Inserting Text, Quitting vi, Moving the Cursor, Deleting Text, Copying and Moving Text, Searching and Replacing Text, Setting Preferences Shell Programming: Creating and Running Shell Programs, Using variables: Assigning a value to a variable, Accessing the value of a variable, Positional Parameters and other Built-In Shell Variables; The Importance of Quotation Marks:
Week 9	14 th Sept	19 th Sept	The test Command, The tcsh Equivalent of the test command, Conditional Statements: if Statement, case Statement; Iteration Statements: for Statement, while Statement, until Statement, shift Command, select Statement, repeat Statement
Week 10	21 st Sept	3 rd Oct	Functions
Week 11	5 th Oct	10 th Oct	PERL: Creating and Executing Perl Programs, Handling Data in Perl: Variables, Numbers, Strings, File Operators: Arrays, Perl Programming Constructs: Statement Blocks,
Week 12	12 th Oct	21 st Oct	If Statements, unless Statements, for Statements, for each Statements, while Statements, until Statements, Functions: Passing Arguments to Functions, Using Return Values; Perl Operators.

Class: BCA III Sem

Subject: Object Oriented Programming (Using C++)

Session: 2015-16

S. No	Date From	Date Upto	Topics to be covered
Week 1	20 th July	25 th July	Introduction to OOP, Difference between OOP and Procedure Oriented Programming, Object, Class, Encapsulation, Abstraction, Polymorphism, Inheritance. Structure of a C++ Program and I/O streams. Classes and Objects Class Declaration : Data Members, Member Functions, Private and Public members
Week 2	27 th July	1 st Aug	Creating Objects, Accessing class data members, Accessing member functions Class Function Definition: Member Function definition inside the class declaration and outside the class declaration,
Week 3	3 rd Aug	8 th Aug	friend function, inline function, static function
Week 4	10 th Aug	15 th Aug	Scope resolution operator, Private and Public member function, Nesting of member functions, Arrays within a class. Arrays of Objects, Objects as function arguments : Pass by value, Pass by reference,.
Week 5	17 th Aug	22 nd Aug	Pointers to Objects Constructors and Destructors : Declaration and Definition, Types of Constructors, Default, Parameterized,
Week 6	24 th Aug	29 th Aug	Copy Constructors. Destructors: Definition and use.
Week 7	31 st Aug	5 th Sept	Function Overloading & Operator Overloading.

Week 8	7 th Sept	12 th Sept	Inheritance - Extending Classes Concept of inheritance, Base class, Defining derived classes, Visibility modes :Public, Private, Protected ; Single inheritance
Week 9	14 th Sept	19 th Sept	Privately derived, Publicly derived Making a protected member inheritable Access Control to private and protected members by member functions of a derived class
Week 10 (including mid term)	21 st Sept	3 rd Oct	Multilevel inheritance, Nesting of classes
Week 11	5 th Oct	10 th Oct	Polymorphism : Definition, Application and demonstration of Data Abstraction, Encapsulation and polymorphism.
Week 12	12 th Oct	21 st Oct	Early Binding, Polymorphism with pointers, Virtual Functions, Late binding, pure virtual functions.

Class: BCA II Section B
Subject: Data Structure using C

Paper code: BCA 25
Session: 2015-16

S. No	Date From	Date Upto	Topics to be covered
Week 1	20 th July	25 th July	-
Week 2	27 th July	1 st Aug	-
Week 3	3 rd Aug	8 th Aug	-
Week 4	10 th Aug	15 th Aug	Discussion of Concepts done by previous teacher. Arrays- Concepts, Operations, Algorithms and Programs
Week 5	17 th Aug	22 nd Aug	Arrays- Concepts, Operations, Algorithms and Programs Stacks - Concepts, Operations, Algorithms and Programs, Applications and Implementations.
Week 6	24 th Aug	29 th Aug	Queues - Concepts, Operations, Types One way queues - Concepts, Operations, Algorithms and Programs
Week 7	31 st Aug	5 th Sept	Doubly, Circular, Priority Queue - Concepts, Operations, Algorithms and Programs
Week 8	7 th Sept	12 th Sept	Linked List- Introduction, Concepts, Types, Memory representation Linked List – Simple (One way) linked list - Concepts, Operations, Algorithms and Programs
Week 9	14 th Sept	19 th Sept	Doubly linked list - Concepts, Operations
Week 10 (including mid term)	21 st Sept	3 rd Oct	Circular linked list - Concepts, Operations
Week 11	5 th Oct	10 th Oct	Header linked list - Concepts, Operations
Week 12	12 th Oct	21 st Oct	Algorithms and Programs

Name of Faculty: Ms. Jasdeep Kaur

Class: M.sc(IT) 3rd sem

Paper code: MS-26

Subject: Software Testing and Quality Assurance

Session: 2015-16

S.No	Date From	Date Upto	Topics to be covered
Week 1	15 th july 2015	18 th july 2015	Software Testing, Objectives of Software Testing
Week 2	20 th july 2015	25 th July 2015	Testing Process, Static and Dynamic Analysis.
Week 3	27 th July 2015	1 st aug 2015	STEP Methodology, Elements of STEP and STEP Architecture.
Week 4	3 rd aug 2015	8th aug 2015	Importance of Metrics to Software Project.
Week 5	10 th aug 2015	15 th aug 2015	Metrics for Software Software Quality Metrics.
Week 6	17 th aug 2015	22 nd aug, 2015	Software Metrics, Product Metrics, Software size Metrics.
Week 7	24 th aug 2015	29 th Aug 2015	Control complexity metrics
Week 8	31 th aug 2015	5 th sept 2015	Object oriented Metrics and software quality Metrics
Week 9	7 th sept 2015	12 th sept 2015	Software Testing Techniques: BBT & its Technique, Boundary Value .
Week 10	21 st sep 2015	26 th sept 2015	Analysis, Cause- Effect Graph, white-Box Testing and its Techniques: Domain and Boundary, Testing, Logic Based Testing, Data Flow Testing.
Week 11	28 th sept 2015	3 rd Oct 2015	Software Testing Strategies: Characteristics, Integration Testing, Functional Testing, Object Oriented Testing, Alpha and Beta.
Week 12	5 th Oct 2015	10 th Oct 2015	Software Quality Assurance: Concepts and Standards, Quality Control, Quality Assurance, SQA Activities, Software Reviews, Formal Technical Reviews.
Week 13	12 th Oct 2015	17 th Oct 2015	Review Guidelines, Software Safety, CMM, TQM, Six Sigma, SPICE, Software Quality Assurance Metrics.
Week 14	19 th Oct 2015	21 st Oct 2015	Overview of Software Quality, Software Quality Attributes, Factors Affecting Software Quality

**Class: PGDCA
BASED ACCOUNTING.**

**Paper code: PGD-03 Subject: COMPUTER
Session: 2015-16**

S.No	Date From	Date Upto	Topics to be covered
Week 1	15 th july 2015	18 th july 2015	Accounting: Principles, concepts and conventions.
Week 2	20 th july 2015	25 th July 2015	Double entry system of accounting
Week 3	27 th July 2015	1 st aug 2015	Introduction of basic books of accounts of sole proprietary concern.

Week 4	3 rd aug 2015	8th aug 2015	control accounts for debtors and creditors, closing of books of accounts.
Week 5	10 th aug 2015	15 th aug 2015	preparation of trial balance
Week 6	17 ^h aug 2015	22 nd aug, 2015	Closing entry of account
Week 7	24 th aug 2015	29 th Aug 2015	Final Accounts: Trading, profit and loss accounts proprietary concern with normal closing entries.
Week 8	31 th aug 2015	5 th sept 2015	Balance sheet of sole proprietary concern with normal closing entries
Week 9	7 th sept 2015	12 th sept 2015	Introduction to manufacturing account, final accounts of partnership firms
Week 10	21 st sep 2015	26 th sept 2015	Introduction to computerized financial accounting, coding logic and codes required, master files.
Week 11	28 th sept 2013	3 rd Oct 2013	Transaction files, Introduction to documents used for data collection, processing of different files, outputs obtained
Week 12	5 th Oct 2013	10 th Oct 2013	types of inventory and associated documents, Inventory reports-nature and types, Inventory Control : ABC and Ageing analysis, Methods of Stock validation : LIFO, FIFO, actual bases,
Week 13	12 th Oct 2015	17 th Oct 2015	Interfacing Inventory with Financial Accounting, Purchasing Sub-Systems, Sales Order processing.
Week 14	19 th Oct 2015	21 st Oct 2015	Introduction to Computerized Payroll

Class: BCA III

Paper code: BCA-20

Subject: Internet Programming

Session: 2015-16

S.No	Date From	Date Upto	Topics to be covered
Week 1	15 th july 2015	18 th july 2015	Introduction to HTML, Building blocks of HTML
Week 2	20 th july 15	25 th July 2015	How to make forms in HTML
Week 3	27 th July 2015	1 st aug 2015	Introduction to cascading style sheets (CSS) defining and applying CSS
Week 4	3 rd aug 15	8th aug 2015	Java Script: Features, tokens, data types, variables
Week 5	10 th aug 15	15 th aug 2015	Java Script: operations, control structures string arrays.
Week 6	17 ^h aug 15	22 nd aug, 2015	Functions, core language objects, event handling
Week 7	24 th aug 2015	29 th Aug 2015	Fundamentals of Java: Java Vs. C++, Byte lode, Java virtual machine
Week 8	31 th aug 2015	5 th sept 2015	Constants, variables, data types, operators, expressions, control structures
Week 9	7 th sept 2015	12 th sept 2015	Defining class, creating objects, accessing class Members.
Week 10	21 st sep 15	26 th sept 2015	Constructor Method and Method Overloading
Week 11	28 th sept 2013	3 rd Oct 2013	Inheritance: Types of inheritance, Basics Members Access
Week 12	5 th Oct 2013	10 th Oct 2013	Using super to call super class constructor and creating Multilevel Hierarchy

Week 13	12 th Oct 2015	17 th Oct 2015	Method overriding. Dynamic Method dispatch, using abstract classes and using Final.
Week 14	19 th Oct 15	21 st Oct 2015	Introduction to Exception handling catch Blocks.

Name of Faculty: Ms. Sarbjit Kaur

Class: Msc.IT-IIIrd Sem

Paper code- MS – 32

Subject: NET FRAMEWORK AND C#

S. No	Date From	Date Upto	Topics to be covered
Week 1	15 th july, 2015	18 th july, 2015	Introduction to .NET environment: The .NET strategy,
Week 2	20 th july, 2015	25 th July, 2015	the origins of the .NET technology, the .NET framework, the common language runtime, framework base classes, user and programs interface,
Week 3	27 th July, 2015	1 st Aug, 2015	visual studio .NET, .NET languages, benefits of the .NET approach. Introduction to C# , Overview of C#, Literals,
Week 4	3 rd Aug, 2015	8 th Aug, 2015	Variables, Data Types, Operators Expressions, Branching, Looping, Methods
Week 5	10 th Aug, 2015	15 th Aug, 2015	Arrays, Strings, Structures, Enumerations, difference between C++ and C#, difference between Java and C#.
Week 6	17 th Aug, 2015	22 nd Aug, 2015	Object Oriented Aspects of C# : Classes, Objects, Inheritance
Week 7	24 th Aug , 2015	29 th Aug, 2015	Polymorphism, Interfaces, Operator Overloading, Delegates, Events, Errors and Exceptions.
Week 8	31 st Aug, 2015	5 th Sept, 2015	I/O and Object Serialization: I/O: System. I/O, Streams, Text Writer TextReader, BinaryWriter, Binary Reader, File Stream, File;
Week 9	7 th Sept, 2015	12 th Sept, 2015	Serialisation: Binary, SOAP, XML and Custom Serialisation.
Week 10	14 th Sept, 2015	19 th Sept, 2015	Writing Windows Forms Applications and Deploying Windows Forms Applications: Writing Windows Forms
Week 11	21 th Sept, 2015	26 th Sept, 2015	Applications: Understanding Windows Forms, Window form controls, Menus,
Week 12	28 th Sept, 2015	3 rd Oct. 2015	MDI Forms, Using Inheritance in Windows Forms, Using Common Dialog Controls,
Week 13	5 th Oct,2015	10 th Oct,2015	Deploying Windows Forms Applications: Introduction to deployment, Click Once deployment
Week 14	12 th Oct,2015	17 th Oct,2015	Creating an Installation Package for project Writing ASP .NET applications and Deploying ASP .NET Applications:
Week 15	19 th Oct,2015	21 st Oct,2015	Introduction to ASP.NET, Using Validation Controls,

Class: BCA**Paper code- BCA-04****Subject: Personal Computing Software**

S. No	Date From	Date Upto	Topics to be covered
Week 1	20 th July, 2015	25 th July, 2015	Computer Appreciation : Introduction, characteristics of computer; History of computers; classification of computers on size, architecture and chronology; Applications of computers;
Week 2	27 th July, 2015	1 st Aug, 2015	commonly used terms–Hardware, Software, Firmware; Computer Architecture and organisation; Input, Process Output
Week 3	3 rd Aug, 2015	8 th Aug, 2015	Representation of information; BIT, BYTE, Memory, Memory size; Units of measurement of storage; Input/Output devices; Secondary storage devices;
Week 4	10 th Aug, 2015	15 th Aug, 2015	Generation of Languages; Translators - Interpreters, Compilers, Assemblers and their comparison.
Week 5	17 th Aug, 2015	22 nd Aug, 2015	DOS: Booting sequence; Warm and Cold reboot; Concept of File and directory, Redirecting command input and output pipes, Wildcard characters
Week 6	24 th Aug, 2015	29 th Aug, 2015	Types of DOS commands: Internal and External; Internal Commands: DIR, MD, CD, CLS, COPY, DATE, DEL, PATH, PROMPT, REN, RD, TIME, TYPE, VER, VOL; External Commands: XCOPY, ATTRIB, BACKUP, RESTORE, FIND, SYS, FORMAT, CHKDSK, DISKCOPY,
Week 7	31 st Aug, 2015	5 th Sept, 2015	Batch Files: Introduction to simple batch files; Introduction to CONFIG.SYS and AUTOEXEC.BAT files.
Week 8	7 th Sept, 2015	12 th Sept, 2015	Graphical User Interface: Fundamentals of Windows, types of Windows, anatomy of windows, Icons, Recycle bin, Operations on Folders, Control panel.
Week 9	14 th Sept, 2015	19 th Sept, 2015	Word Processing Package: Basics of Word Processing; Opening and Closing of documents; Text creation and Manipulation; Finding and replacing text, Printing of document,
Week 10	21 th Sept, 2015	26 th Sept, 2015	Formatting of text; Margin setting, Adding Borders and shading, Adding Headers and Footers, Setting up Multiple columns, Working with tables,
Week 11	28 th Sept, 2015	3 rd Oct. 2015	Spell check, Grammar facility, Autotext, language setting and thesaurus; Mail merging. <i>Installation of Word Processing Software</i> .
Week 12	5 th Oct, 2015	10 th Oct, 2015	Spreadsheet Package : Worksheet Basics, Data Entry in Cells : Moving data in a worksheet, Moving around in a worksheet, Selecting Data Range, Using the Interface (Toolbars, Menus), Editing Basics, Working with workbooks
Week 13	12 th Oct, 2015	17 th Oct, 2015	Cell referencing; Formatting and Calculations : using Autofill, Formulae, Efficient Data Display with Data formatting (number formatting, date formatting etc.), Working with Ranges, Worksheet Printing; Working with Graphs and Charts : Creating Embedded Chart using chartwizard
Week 14	19 th Oct, 2015	21 st Oct, 2015	sizing and moving charts, updating charts, Changing chart types, Chart wizard, Adding Titles, Legends and Gridlines, Printing Charts; Database Management. Finding records with Data form, Adding/Deleting Records, Filtering Records in a worksheet; Functions and Macros: Worksheet Creating Macros, Recording Macros, Running Macros, Assigning Macros to Buttons, Defining Macros from Scratch. Multiple

Name of Faculty: Ms. Sheenam

Subject: Systems Approach to Management and Optimization Techniques

S. No	Date From	Date Upto	Topics to be covered
Week 1	15 th july, 2015	18 th july, 2015	An introduction to the Concepts of Computer Based Systems, Data, Information, Information Systems
Week 2	20 th july, 2015	25 th July, 2015	Model of computer based information system, Introduction to Management Information System,
Week 3	27 th July, 2015	1 st Aug, 2015	An introduction to Decision Support System and Knowledge Based Systems.
Week 4	3 rd Aug, 2015	8 th Aug, 2015	An introduction to Accounting Information System Characteristics, sample system subsystems for filling customer order,
Week 5	10 th Aug, 2015	15 th Aug, 2015	order replenishment stock performing general ledger processes
Week 6	17 th Aug, 2015	22 nd Aug, 2015	features and use of Accounting Information System Package-Tally.
Week 7	24 th Aug, 2015	29 th Aug, 2015	An introduction to Marketing Information System: Basic concepts
Week 8	31 st Aug, 2015	5 th Sept, 2015	An introduction to model, subsystems including Marketing Research, Marketing Intelligence
Week 9	7 th Sept, 2015	12 th Sept, 2015	An introduction to Product, Place, Promotion and Pricing subsystems. Model and subsystems including Accounting Information, Industrial Engineering,
Week 10	14 th Sept, 2015	19 th Sept, 2015	Inventory, Quality and Cost Subsystems. Model and Subsystems including Forecasting, Funds Management and Control Subsystems.
Week 11	21 th Sept, 2015	26 th Sept, 2015	Model and Subsystems including human resources research, human resources intelligence, HRIS Database, HRIS output.
Week 12	28 th Sept, 2015	3 rd Oct. 2015	Basics of Operations Research (OR), Origin and Development of OR, Characteristics of OR
Week 13	5 th Oct, 2015	10 th Oct, 2015	Models in OR, OR and Decision Making, Role of Computers in OR, Limitations of OR.
Week 14	12 th Oct, 2015	17 th Oct, 2015	Mathematical Formulation, Graphical and Simplex method, Duality in Linear programming,
Week 15	19 th Oct, 2015	21 st Oct, 2015	Dual Simplex Method, The Revised Simplex Method, Sensitivity Analysis.

S. No	Date From	Date Upto	Topics to be covered
Week 1	15 th july, 2015	18 th july, 2015	Introduction to Network definition Introduction to Network Hardware and Software
Week 2	20 th july, 2015	25 th July, 2015	Introduction to Network Topologies, Uses of Computer Networks
Week 3	27 th July, 2015	1 st Aug, 2015	Introduction to OSI reference model, Introduction to TCP/IP Reference Model.
Week 4	3 rd Aug, 2015	8 th Aug, 2015	Comparison of OSI & TCP/IP model Transmission Media
Week 5	10 th Aug, 2015	15 th Aug, 2015	Introduction to Multiplexing, Modems Switching, ISDN & its service.
Week 6	17 th Aug, 2015	22 nd Aug, 2015	Design Issueof data link layer, Error Detection & Correction Codes, Elementary Data LinkProtocols,
Week 7	24 th Aug , 2015	29 th Aug, 2015	Introduction to Static & Dynamic Channel Allocation, Introduction to IEEE standards, Sliding Window Protocol.
Week 8	31 st Aug, 2015	5 th Sept, 2015	Design issues of network layer, Routing Algorithms,
Week 9	7 th Sept, 2015	12 th Sept, 2015	Introduction to Shortest path routing, Flooding
Week 10	14 th Sept, 2015	19 th Sept, 2015	Introduction to Broadcast &Multicast routing
Week 11	21 th Sept, 2015	26 th Sept, 2015	Introduction to Congestion Control
Week 12	28 th Sept, 2015	3 rd Oct. 2015	Introduction to Network Security & Privacy
Week 13	5 th Oct,2015	10 th Oct,2015	Introduction to Data Compression & Cryptography.
Week 14	12 th Oct,2015	17 th Oct,2015	Introduction to Electronic Mail, Introduction to WWW
Week 15	19 th Oct,2015	21 st Oct,2015	Introduction to internetworking

Subject:COMPUTER FUNDAMENTALS

S. No	Date From	Date Upto	Topics to be covered
Week 1	15 th july, 2015	18 th july, 2015	Introduction to Computer ,ALU, Memory, CU, Booting Process, Introduction to concepts: Bit, Byte, Word, Hardware,
Week 2	20 th july, 2015	25 th July, 2015	Operating System, System and Application Software, Machine, Assembly and High Level Languages, Compilers, Assemblers, Loaders and Linkers.
Week 3	27 th July, 2015	1 st Aug, 2015	ASCII and EBCDIC Codes, Binary, Octal, Decimal and Hexadecimal Number Systems and their Conversion, Integer and Floating Point Representation.
Week 4	3 rd Aug, 2015	8 th Aug, 2015	Various Input Devices such as keyboard, mouse and joystick, Output Devices: Monitors (CGA, EGA, VGA andSVGA), different types of Printer and Plotters.
Week 5	10 th Aug, 2015	15 th Aug, 2015	Primary and secondary memory: RAM, ROM, PROM, EPROM, Cache, Removable and non-removable secondary memory: Tapes, Disks, CDROM, DVD,
Week 6	17 th Aug, 2015	22 nd Aug, 2015	Comparison of these devices based on technology and speed. Organization of data on disks: Tracks, sectors, cylinders, heads, access time, seek time and latency time.
Week 7	24 th Aug , 2015	29 th Aug, 2015	Comparison of main features of DOS, UNIX and Windows Operating Systems.
Week 8	31 st Aug, 2015	5 th Sept, 2015	Introduction to powerpoint presentation, Basics features, selecting design templates, creating, saving and printing a simple presentation.
Week 9	7 th Sept, 2015	12 th Sept, 2015	Internal DOS commands such as DIR, COPY, TYPE, DEL,DATE, and External commands such as UNDELETE,DELTREE,XCOPY,MOVE,and SCANDISK
Week 10	14 th Sept, 2015	19 th Sept, 2015	An introduction to GUI, Icons, Toolbar, Control panel, Explorer
Week 11	21 th Sept, 2015	26 th Sept, 2015	An introduction toFiles and directory management under windows Accessories
Week 12	28 th Sept, 2015	3 rd Oct. 2015	An introduction toNetwork Neighborhood, System Tools, An introduction toRecycle Bin, Installation of new software.
Week 13	5 th Oct,2015	10 th Oct,2015	Introduction to UNIX structure, general purpose UNIX commands such as date, echo, cal, bc, pwd, passwd, file
Week 14	12 th Oct,2015	17 th Oct,2015	An introduction toDirectory commands such as ls, mkdir, cp, mv, rm, process management commands such as ps, kill,.
Week 15	19 th Oct,2015	21 st Oct,2015	An introduction toCommunication commands such as news, mesg, wall; working with editor

Name of Faculty: Ms. Sonika

Class: Msc IT (1ST SEM)
Subject: Operating system concepts

Paper MS-42
Session:2015-16

S. No	Date From	Date Upto	Topics to be covered
Week 1	20 th July	25 th July	OS, Types of OS, Functions of OS
Week 2	27 th July	1 st Aug	History of OS, User services, address protection.
Week 3	3 rd Aug	8 th Aug	Segmentation, virtual memory
Week 4	10 th Aug	15 th Aug	Paging, page replacement algorithms.
Week 5	17 th Aug	22 nd Aug	Cache memory, hierarchy, associative memory
Week 6	24 th Aug	29 th Aug	Process states, virtual processors, interrupt mechanism.
Week 7	31 st Aug	5 th Sept	Scheduling algorithms.
Week 8	7 th Sept	12 th Sept	Introduction to System deadlock.
Week 9	14 th Sept	19 th Sept	Mutual exclusion, critical sections
Week 10 (including mid term)	21 st Sept	3 rd Oct	Peterson's solution, busy form of waiting.
Week 11	5 th Oct	10 th Oct	lock and unlock primitives
Week 12	12 th Oct	21 st Oct	Baker's Algorithm

Class: BCA III
Subject: Entrepreneurship Development Programme

Paper BCA 17
Session:2015-16

S. No	Date From	Date Upto	Topics to be covered
Week 1	20 th July	25 th July	Need, Scope and approaches for project formulation.
Week 2	27 th July	1 st Aug	structure of project report; study and analysis of sample project report;
Week 3	3 rd Aug	8 th Aug	preparation of a project report;
Week 4	10 th Aug	15 th Aug	Techno economic feasibility of the project.
Week 5	17 th Aug	22 nd Aug	Working capital assessment,
Week 6	24 th Aug	29 th Aug	its management & exercise thereon;
Week 7	31 st Aug	5 th Sept	Assessment of fixed capital and exercise thereon;
Week 8	7 th Sept	12 th Sept	Capital budgeting;
Week 9	14 th Sept	19 th Sept	Product costing and cost consciousness.
Week 10 (including mid term)	21 st Sept	3 rd Oct	Financial ratios and their significance; Break-even analysis;
Week 11	5 th Oct	10 th Oct	Credit institutions and financing procedures; Books of accounts,
Week 12	12 th Oct	21 st Oct	Financial statements & fund flow analysis.

Class: BCA**Paper code- BCA-04****Subject: Personal Computing Software**

S. No	Date From	Date Upto	Topics to be covered
Week 1	20 th July, 2015	25 th July, 2015	Computer Appreciation : Introduction, characteristics of computer; History of computers; classification of computers on size, architecture and chronology; Applications of computers;
Week 2	27 th July, 2015	1 st Aug, 2015	commonly used terms–Hardware, Software, Firmware; Computer Architecture and organisation; Input, Process Output
Week 3	3 rd Aug, 2015	8 th Aug, 2015	Representation of information; BIT, BYTE, Memory, Memory size; Units of measurement of storage; Input/Output devices; Secondary storage devices;
Week 4	10 th Aug, 2015	15 th Aug, 2015	Generation of Languages; Translators - Interpreters, Compilers, Assemblers
Week 5	17 th Aug, 2015	22 nd Aug, 2015	DOS: Booting sequence; Warm and Cold reboot; Concept of File and directory, Redirecting command input and output pipes, Wildcard characters
Week 6	24 th Aug, 2015	29 th Aug, 2015	Types of DOS commands: Internal and External; Internal Commands: DIR, MD, CD, CLS, COPY, TYPE, VER, VOL; External Commands: XCOPY, ATTRIB, BACKUP, RESTORE, FIND, SYS, FORMAT, CHKDSK, DISKCOPY, LABEL,
Week 7	31 st Aug, 2015	5 th Sept, 2015	Batch Files: Introduction to simple batch files; CONFIG.SYS and AUTOEXEC.BAT files.
Week 8	7 th Sept, 2015	12 th Sept, 2015	Graphical User Interface: Fundamentals of Windows, types of Windows, anatomy of windows, Icons, Recycle bin, Operations on Folders, Control panel.
Week 9	14 th Sept, 2015	19 th Sept, 2015	Word Processing Package: Basics of Word Processing; Opening and Closing of documents; Text creation and Manipulation; Finding and replacing text, Printing of document,
Week 10	21 th Sept, 2015	26 th Sept, 2015	Formatting of text; Margin setting, Adding Borders and shading, Adding Headers and Footers, Setting up Multiple columns, Working with tables,
Week 11	28 th Sept, 2015	3 rd Oct. 2015	Spell check, Grammar facility, Autotext, language setting and thesaurus; Mail merging. <i>Installation of Word Processing Software</i> .
Week 12	5 th Oct, 2015	10 th Oct, 2015	Spreadsheet Package : Worksheet Basics, Data Entry in Cells : Moving data in a worksheet, Moving around in a worksheet, Selecting Data Range, Using the Interface (Toolbars, Menus),
Week 13	12 th Oct, 2015	17 th Oct, 2015	Cell referencing; Formatting and Calculations : using Autofill, Formulae, Efficient Data Display with Data formatting (number formatting, date formatting etc.), Working with Ranges, Worksheet Printing; Working with Graphs and Charts :
Week 14	19 th Oct, 2015	21 st Oct, 2015	sizing and moving charts, updating charts, Changing chart types, Chart wizard, Adding Titles, Legends and Gridlines, Printing Charts; Database Management. Finding records with Data form, Adding/Deleting Records, Filtering Records in a worksheet; Functions and Macros: Worksheet Creating Macros, Recording Macros, Running Macros, Assigning Macros to Buttons, Defining Macros from Scratch. Multiple

Name of Faculty: Mr. Preet Kamal Sharma

Class: PGDCA

Paper code- PGD-05

Subject: COMPUTER PROGRAMMING (Using C/C++)

S. No	Date From	Date Upto	Topics to be covered
Week 1	15 th july, 2015	18 th july, 2015	Problem Solving : Problem Identification, Analysis
Week 2	20 th july, 2015	25 th July, 2015	Flow charts, Decision Tables, Pseudo code and algorithms, Program Coding, Program Testing and Execution.
Week 3	27 th July, 2015	1 st Aug, 2015	Computer Programming Language (C Language) : Concept of variable and constants, structure of a C program
Week 4	3 rd Aug, 2015	8 th Aug, 2015	Various operators, expression and their evaluation using rules of hierarchy. Assignment Statements.
Week 5	10 th Aug, 2015	15 th Aug, 2015	C Language Control Structures; Sequencing, alteration and iteration
Week 6	17 th Aug, 2015	22 nd Aug, 2015	Various Programs on Control structures for practical work
Week 7	24 th Aug, 2015	29 th Aug, 2015	Arrays, Manipulating vectors and matrices
Week 8	31 st Aug, 2015	5 th Sept, 2015	Practice on program relating to Arrays and matrices
Week 9	7 th Sept, 2015	12 th Sept, 2015	String functions and Using Strings with array
Week 10	14 th Sept, 2015	19 th Sept, 2015	Structures Programs and example relating to it
Week 11	21 th Sept, 2015	26 th Sept, 2015	Functions User defined functions, Practice problems relating to functions
Week 12	28 th Sept, 2015	3 rd Oct. 2015	Insert pictures in a document in Notepad /Wordpad, Format text in Notepad/Wordpad document, Save and Print a document file in Notepad/Wordpad, Starting and Using Paint, Printing a drawing; OLE Concepts.
Week 13	5 th Oct, 2015	10 th Oct, 2015	Input/Output files, Pre-Processors, Macros.
Week 14	12 th Oct, 2015	17 th Oct, 2015	Object Oriented Programming Language (C++ Language) Introduction to Object Oriented Programming
Week 15	19 th Oct, 2015	21 st Oct, 2015	Meaning of Objects, Classes, Data abstraction, Data encapsulation and Inheritance.

Class: BCA III

Paper code- BCA – 19

Subject: Computer Graphics and Multimedia Applications

S. No	Date From	Date Upto	Topics to be covered
Week 1	15 th july, 2015	18 th july, 2015	A Survey of Computer Graphics : CAD
Week 2	20 th july, 2015	25 th July, 2015	Presentation Graphics, Computer art, Entertainment, Education and Training
Week 3	27 th July, 2015	1 st Aug, 2015	Visualization, Image Pressing, Graphical User Interfaces.
Week 4	3 rd Aug, 2015	8 th Aug, 2015	Overview of Graphics Systems Video Display Devices, Raster Scan Systems, Random Scan.
Week 5	10 th Aug, 2015	15 th Aug, 2015	Graphics Monitors and Workstations , Input Devices, Hard-copy devices, Graphics Software.
Week 6	17 th Aug, 2015	22 nd Aug, 2015	Studying the Features and Developing Computer Graphics

Week 7	24 th Aug, 2015	29 th Aug, 2015	Using Standard Graphics packages like Auto CAD and Paint Brush.
Week 8	31 st Aug, 2015	5 th Sept, 2015	Developing Computer Graphics Using 'C' : Input-output primitives
Week 9	7 th Sept, 2015	12 th Sept, 2015	Discussion of practical example relating to graphics programs.
Week 10	14 th Sept, 2015	19 th Sept, 2015	Setting character and text attributes, Changing line styles, Using fill styles to fill images.
Week 11	21 th Sept, 2015	26 th Sept, 2015	Use the above primitives to develop programs relating to curves like drawing concentric circles, Ellipses, Sine curves
Week 12	28 th Sept, 2015	3 rd Oct. 2015	Programs relating to Histograms, Pie charts and human face.
Week 13	5 th Oct, 2015	10 th Oct, 2015	Multimedia Applications : Multimedia in use Introducing multimedia, What is multimedia ? using multimedia.
Week 14	12 th Oct, 2015	17 th Oct, 2015	Technology System Components, Multimedia Platforms
Week 15	19 th Oct, 2015	21 st Oct, 2015	Development Tools, Image, Audio, Video, Storage for multimedia, Communications.

Class: BCA II

Paper code- BCA – 10

Subject: Computer Based Numerical and Statistical Methods (Using C)

. No	Date From	Date Upto	Topics to be covered
Week 1	15 th july, 2015	18 th july, 2015	Computer Arithmetic : Floating Point Numbers, operations
Week 2	20 th july, 2015	25 th July, 2015	Normalizations and their consequences, Errors and its types.
Week 3	27 th July, 2015	1 st Aug, 2015	Iterative Methods : Bisection, False-Position
Week 4	3 rd Aug, 2015	8 th Aug, 2015	Newton - Raphson Methods, Zeros of a polynomial using Birge –Vieta Method.
Week 5	10 th Aug, 2015	15 th Aug, 2015	Practice of all Iteration Methods.
Week 6	17 th Aug, 2015	22 nd Aug, 2015	Simultaneous Linear Equations : Solution of Simultaneous Linear Equations Using Gauss - Elimination, Gauss-Jordan
Week 7	24 th Aug, 2015	29 th Aug, 2015	Simultaneous Linear Equations : Solution of Linear Equations Gauss-Seidal Methods, Concept of Pivoting.
Week 8	31 st Aug, 2015	5 th Sept, 2015	Interpolation: Lagrange, Newton forward, Backward.
Week 9	7 th Sept, 2015	12 th Sept, 2015	Divided Difference, Newton forward diff.
Week 10	14 th Sept, 2015	19 th Sept, 2015	Backward diff, Integration: Trapezoidal,
Week 11	21 th Sept, 2015	26 th Sept, 2015	Numerical Integration : Simpson's 1/3, 3/8.
Week 12	28 th Sept, 2015	3 rd Oct. 2015	Numerical Integration : Weddle and Runga–Kutta Methods: 2nd order & 4th order.
Week 13	5 th Oct, 2015	10 th Oct, 2015	Measures of Central Tendency : Preparing Frequency distribution table, AM, GM
Week 14	12 th Oct, 2015	17 th Oct, 2015	Harmonic mean, Median and Mode. Measures of Dispersion, Skewness and Kurtosis, Range :
Week 15	19 th Oct, 2015	21 st Oct, 2015	Mean deviation, Standard deviation, Coefficient of variation, Moments, Skewness and Kurtosis.

Name of Faculty: Ms. Sonamveer Kaur

Class: Msc IT 1st Sem

Subject: ADA

Paper

Session: 2015-16

S. No	Date From	Date Upto	Topics to be covered
Week 1	20 th July	25 th July	Introduction, Algorithms specification, Recursive algorithms, space and time complexity, Asymptotic Notation (O , and Θ , o), Best, average and worst case performance of algorithms.
Week 2	27 th July	1 st Aug	Divide and Conquer method, Binary search, Merge sort, Quick sort, Selection sort
Week 3	3 rd Aug	8 th Aug	Strassen's matrix multiplication, Greedy Method, Knapsack problem, Job sequencing with deadlines.
Week 4	10 th Aug	15 th Aug	Minimum spanning Trees : Prim's Algorithm, Kruskal's Algorithm, Single source shortest paths
Week 5	17 th Aug	22 nd Aug	Dynamic Programming method, Optimal binary search trees
Week 6	24 th Aug	29 th Aug	0/1 Knapsack, the traveling salesperson problem
Week 7	31 st Aug	5 th Sept	All pair shortest path problem :Bellman and Floyd's Algorithm,
Week 8	7 th Sept	12 th Sept	Back Tracking method, Graph coloring
Week 9	14 th Sept	19 th Sept	N queen's problem
Week 10 (including mid term)	21 st Sept	3 rd Oct	Hamiltonian cycles, Branch-And-Bound Method, 0/1 Knapsack
Week 11	5 th Oct	10 th Oct	Branch-And-Bound Traveling Salesperson problems
Week 12	12 th Oct	21 st Oct	NP-hard and NP-complete problems, Cook's Theorem