

ACADEMIC PLANNING

Name of Course M.C.A-II	Subject : mca-21 :computer oriented numerical & statistical methods
Name of Teacher : Ranna Patel	Year : 2014-15

Month	Week	Teaching Plan	Remarks	Sign
Jan	I	(unit-1) Solutions of Non-Linear Equations : Absolute, Relative and Percentage Error, Roots of an equation, Linear and non -Linear equations (Definition and Difference)		
		Methods for finding roots of non -Linear equations : Bisection Method		
	II	False Position Method		
		Newton -Raphson Method		
	III	secant Method		
		(unit-2) Solution of Simultaneous Linear Equations : Definitions : System of linear equations, Existence of unique roots, multiple roots and no roots		
	IV	Difference between direct and iterative methods, Gauss - Elimination Method		
		Gauss -seidel Method		

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Month	Week	Teaching Plan	Remarks	Sign
Feb	I	(unit-3) Frequency Distribution : Collection of data, Classification of data, Class interval, Types of Classes, Class frequency, Class mark, Class Boundaries, Width of a class, Frequency density, Relative frequency, Percentage frequency, Cumulative frequency		
		Internal Evaluation (Test-1)		
	II	Method of Central Tendency : Introduction, Arithmetic Mean, Simple and weighted for raw data		
		Discrete frequency distribution, Continuous frequency distribution, Properties of A.M.		
	III	Merits & De merits of A.M., Median for raw data, Discrete frequency distribution		
		Continuous frequency distribution, Merits and demerits of Median		
	IV	Mode for raw data, D.f.d., C.f.d., Merits & demerits of mode		
		Measures of Dispersion : Introduction, Range, coefficient of range, Quartiles, Quartiles deviations, coefficient of quartile deviations		

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Month	Week	Teaching Plan	Remarks	Sign
March	I	Mean deviation and coefficient of mean deviation, S.D and variance for all types of frequency distribution, Coefficient of Dispersion, Coefficient of variation		
		(unit-4) Correlation : Definition of Correlation, Types of Correlation		
	II	Scatter Diagram Method, Karl Person's Correlation Coefficients		
		Correlation Coefficients for Bivariate frequency distribution		
	III	Probable error for Correlation Coefficients		
		Regression : Definition of Regression, Regression lines		
	IV	Regression Coefficients		
		Properties of regression Coefficients		

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Month	Week	Teaching Plan	Remarks	Sign
April	I	Fitting of regression lines		
		estimation for Bivariate frequency distribution		
	II	Paper solution		
		Internal Evaluation (Test-2)		

ACADEMIC PLANNING

Name of Course : M.C.A-II	Subject : 22-Software Engineering
Name of Teacher : Alpa Rajput	Year : 2014-15

Month	Week	Teaching Plan	Remarks	Sign
Jan	I	Historical Overview and Software characteristics and myths		
		Software Framework and Software LS Process Models		
	II	Software EP Model Specialized Models		
		Software Measurement		
	III	Project Estimation and Scope		
		Decomposition techniques		
	IV	EE Model and Make/Buy Decision		
		Types of Software Risk and Risk Projection		

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Month	Week	Teaching Plan	Remarks	Sign
Feb	I	Risk Identification , RMMM and Risk Refinement		
		Internal Evaluation (Test-1)		
	II	Quality Concepts and SQA		
		Software Review and FTR		
	III	SSQA, Software Reliability and SQA plan		
		Software Configuration Management		
	IV	Overview of Testing strategies and Unit Testing		
		Integration and Validation Testing		

ACADEMIC PLANNING

Month	Week	Teaching Plan	Remarks	Sign
March	I	System testing and Debugging		
		Whitebox testing		
	II	Control Structure Testing		
		Blackbox Testing		
	III	Quality Factors and Analysis Metrics		
		Design Metrics		
	IV	Code, Test and Maintainance metrics		
		Design Concepts and Principles		

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Month	Week	Teaching Plan	Remarks	Sign
April	I	Transform Mapping		
		Transaction Mapping		
	II	Paper Solution		
		Internal Evaluation (Test-1)		

ACADEMIC PLANNING

Name of Course : M.C.A.	Subject : MCA-23– OPERATING SYSTEM & UNIX
Name of Teacher : V.H.Bhemwala	Year : 2014-15

Month	Week	Teaching Plan	Remarks	Sign
January	I	Introduction to Operating System		
		Types of Operating system		
	II	Operating System Services		
		Process, Process Control Block (PCB), Process States, Scheduling – Types of Schedulers, Scheduling & Performance Criteria		
	III	Scheduling Algorithms – FCFS, SJF, Priority & Round Robin (RR) Scheduling		
		Interprocess Synchronization: Mutual exclusion, Semaphore,		
	IV	Classical Problems in Synchronization, Intraprocess Synchronization: Critical Region		
		Deadlocks, Static Memory Allocation		

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Month	Week	Teaching Plan	Remarks	Sign
February	I	Dynamic Memory Allocation		
		Segmentation		
	II	Virtual memory – Paging		
		Demand Paging		
	III	Page Replacement Algorithms		
		Page Replacement Algorithms Examples		
	IV	Fragmentation & Defragmentation, Cache memory.		
		Program Controlled I/O		

ACADEMIC PLANNING

Month	Week	Teaching Plan	Remarks	Sign
March	I	Interrupt Driven I/O, USART, PIT		
		File Management: File concept, Access method, Directory structure		
	II	Disk Space Management - Continuous allocation		
		Non continuous allocation		
	III	File related system services		
		Protocol Architecture, TCP/IP Architecture		
	IV	Client/Server Computing		
		Message Passing, Remote Procedure Calls		

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Month	Week	Teaching Plan	Remarks	Sign
April	I	Features of Unix		
		Types of shell		
	II	Unix file system		
		Editors of Unix: (VI)		
	III	Paper solution of last 5 years		
		Paper solution of last 5 years		
	IV			

ACADEMIC PLANNING

Name of Course : M.C.A-II	Subject :MCA 23–Operating System
Name of Teacher : D.G.SHRIVASTAV	Year : 2014-15

Month	Week	Teaching Plan	Remarks	Sign
January	I	PRACTICAL-1		
		PRACTICAL-1		
	II	PRACTICAL-2		
		PRACTICAL-3		
	III	PRACTICAL-4		
		PRACTICAL-5		
	IV	PRACTICAL-6		
		PRACTICAL-7		

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Month	Week	Teaching Plan	Remarks	Sign
February	I	PR TEST-1		
		PR TEST-1		
	II	PRACTICAL-8		
		PRACTICAL-9		
	III	PRACTICAL-10		
		PRACTICAL-11		
	IV	PRACTICAL-12		
		PRACTICAL-13		

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Month	Week	Teaching Plan	Remarks	Sign
March	I	PRACTICAL-14		
		PRACTICAL-15		
	II	PRACTICAL-16		
		PRACTICAL-17		
	III	PRACTICAL-18		
		PRACTICAL-19		
	IV	PRACTICAL-20		
		PRACTICAL-21		

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Month	Week	Teaching Plan	Remarks	Sign
April	I	PRACTICAL-22		
		PRACTICAL-23		
	II	PRACTICAL-24		
		PRACTICAL-25		
	III	PRACTICAL-26		
		PRACTICAL-27,28		
	IV	PR TEST- 2		
		PR TEST-2		

ACADEMIC PLANNING

Name of Course : M.C.A.-II	Subject : MCA-24: Object Technology-I
Name of Teacher : K.B.Patel	Year : 2014-15

Month	Week	Teaching Plan	Remarks	Sign
Jan	I	The Byte-code, Features of Java, IDE for Java		
		Object-Oriented Programming in Java, Java Program Structure and Java's Class Library		
	II	The Simple Data Types, Literals, Variables, Type Conversion and Casting		
		Automatic Type Promotion in expressions, Java Operators, Operator Precedence		
	III	Control Statements - if and switch, Scope of Variable, Iterative Statements - for, while, do... While, Jump Statements		
		Definition of a Class, Definition of Methods, Constructors, Creating Objects of a Class		
	IV	Assigning Object Reference Variables, The Variable this, Defining and Using a Class, Automatic Garbage Collection.		
		Internal Evaluation (Test-1)		

ACADEMIC PLANNING

Month	Week	Teaching Plan	Remarks	Sign
Feb	I	Arrays, String Handling, Inheritance: Using Existing Classes, Class Inheritance, Choosing Base Class		
		Polymorphism, Multiple Levels of Inheritance, Abstraction through Abstract Classes, Using Final Modifier		
	II	Understanding Packages, Defining a Package, Packaging up Your Classes, Understanding CLASSPATH		
		Standard Packages, Access Protection in Packages, Concept of Interface.		
	III	Types of Exceptions, Dealing with Exceptions, Exception Objects, Defining Your Own Exceptions		
		The Java Thread Model, The Main Thread, Creating a Thread, Creating Multiple Threads		
	IV	Thread Priorities, Synchronization, Inter-thread communication, Deadlocks		
		Internal Evaluations (Test-2)		

ACADEMIC PLANNING

Month	Week	Teaching Plan	Remarks	Sign
Mar	I	I/O Basic, I/O Classes, Reading Console Input Writing Console Output, Reading and Writing on Files		
		Random Access Files, Storing and Retrieving Objects from File, Stream Benefits		
	II	Applet Basics, Applet Architecture, Applet Life Cycle		
		Simple Applet Display Methods, Requesting Repainting, Using the Status Window		
	III	The HTML APPLETTAG Passing Parameters to Applets		
		AWT Classes, Window Fundamentals		
	IV	Working with Frame, Creating a Frame Window in an Applet, Displaying Information Within a Window		
		Working with Graphics, Setting the Paint Mode, Managing Text Output Using Font Metrics		

ACADEMIC PLANNING

Month	Week	Teaching Plan	Remarks	Sign
Apr	I	Labels, Buttons, Check Boxes and Check Box Groups, Lists, Scroll Bars, Text Field and Text Area Controls		
		Understanding Layout Managers, Different Layout Managers, Menu Bars and Menus, Dialog Boxes, File Dialog		
	II	Two Event Handling Mechanisms, The Delegation Event Model, The Event Handling Process, Event Classes		
		Sources of Events, Event Listener Interfaces, Using the Delegation Event Model, Adapter Classes		
	III	Internal Evaluations (Test-3)		
		Question Paper Solutions		
	IV			

ACADEMIC PLANNING

Name of Course : M.C.A.-II	Subject : MCA-24: Object Technology-I (Practical)
Name of Teacher : K.B.Patel	Year : 2014-15

Month	Week	Teaching Plan	Remarks	Sign
Jan	I	Java Program to print Message and find the Area of circle		
		Java Program that displays Factorial of the given number, display the sum of $1+1/2+1/3+\dots+1/n$		
	II	Java Program that will display 25 Fibonacci nos		
		Java Program to display following kind of output on screen		
	III	Java Program that will accept command-line arguments and display the same		
		Java Program which will read a text and count all occurrences of a particular word.		
	IV	Java Program which will read a string and rewrite it in reverse alphabetical order		
		Internal Evaluation (Test-1)		

ACADEMIC PLANNING

Month	Week	Teaching Plan	Remarks	Sign
Feb	I	Make an Applet in which button is pressed the background color of the applets is set to the color named by the button's label		
		Write a Java Applet that create some text fields and text areas to demonstrate features of each, Program to Use a Grid layout class to arrange instance of circle canvas		
	II	Program in which When user double clicks on any filename of the list box, its contents should be displayed in the text Area		
		Create an applet with three text Fields and two buttons add and subtract and perform operations accordingly		
	III	Create an applet to display the scrolling text. When the applet is deactivated, it should stop moving; Write a program to change background color of the label according to scrollbars values.		
		Create user entry form for student data to insert in the Text Area in a row format for each record.		
	IV	Write a program that accepts five strings from the user and stored them in a vector and perform add, delete and print operation on vector items.		
		Internal Evaluations (Test-2)		

ACADEMIC PLANNING

Month	Week	Teaching Plan	Remarks	Sign
Mar	I	Write a program to return the specified number with its digits reserved (another Package), Create an application to display file in text area named in text field		
		Program to display the arithmetic table for number in the list box, Develop a program to write the text to a file and also to read and display contents of file		
	II	Application to change the background of applet according to menu item and also to change font of text field in applet according to menu item font		
		Develop a Program add items to list box on add button and delete items from list on delete button.		
	III	Create an applet to display the co-ordinates of the mouse pointer		
		Write a program to display sum of two textboxes values in a dialog box		
	IV	Write a program to store information of student to a file and display it in the Text Area using FileWriter and FileReader class		
		Write a program to demonstrate the concept of FileInputStream and FileOutputStream		

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Month	Week	Teaching Plan	Remarks	Sign
Apr	I	Program to demonstrate the concept of RandomAccessFile with different mode of files		
		Program to create a deadlock with the use of Thread class.		
	II	Applet program to display a counter in its center. Counter begins with 0 and is incremented by 1 after every second. Infinite loop invokes paint method to display counter.		
		Applet program to display circle at different places on the screen.		
	III	Internal Evaluations (Test-3)		
		Question Paper Solutions		
	IV			

ACADEMIC PLANNING

Name of Course : M.C.A-II	Subject : MCA25– Adv. Database Architecture
Name of Teacher : B.M.Patel	Year : 2014-15

Month	Week	Teaching Plan	Remarks	Sign
January	I	Administration of SQL*Plus, Commands, Environment Variables		
		Using SQL to Create SQL, Tracing SQL statements, Understanding database administration tools		
	II	Review of Views, PL/SQL, Cursor & Exception Handling		
		Introduction to Procedure & Function, Modes of Parameter, Storage Details Information		
	III	Package creation & implementation		
		Introduction to triggers, Types of triggers, DML triggers, Usage of triggers as general user and DBA		
	IV	System triggers & Sequences		
		Introduction to SQL Loader, Control file, Data File & Output files like bad file, discard file, log file		

ACADEMIC PLANNING

Month	Week	Teaching Plan	Remarks	Sign
February	I	Internal Evaluation(Test-1)		
		Explanation of SQLLDR command, Direct path & Conventional Path Loading, Different types of loading schemes		
	II	Introduction to Oracle Instance Architecture, Explanation of complex memory structure		
		Explanation of Background Processes, Physical files like data files, redo log files, archived redo log files, control files		
	III	Introduction to OFA, Understanding system & user database objects		
		Creating oracle first database as per requirements using command line and GUI		
	IV	Creating users & tablespaces		
		Using grant & revoke to manage roles & privileges		

ACADEMIC PLANNING

Month	Week	Teaching Plan	Remarks	Sign
March	I	Integrity management using Locks, Explanation of how oracle lock works & V\$lock		
		Oracle Latches, and understanding V\$Latch		
	II	Introduction to BackUp of database, Logical vs Physical backup, Backup of Logical data using EXP command		
		Introduction to Physical Backup, Hot and Cold Backup, Backup of physical files in offline mode(Cold Backup)		
	III	Backup of Physical files in Online Mode(Hot Backup)		
		Introduction to different types of Failures, Recovery of database when Logical data is corrupted/missed/lost Using IMP command		
	IV	Recovery of database using backup copy of physical files, recovery of missing/corrupted control files		
		Recovery of missing/corrupted data files and synchronizing database with current logs		

ACADEMIC PLANNING

Month	Week	Teaching Plan	Remarks	Sign	
April	I	Administration of database storage space and managing it			
		Managing Roll back/undo segments and fragmented sapce			
	II	Introduction to performance tuning, goals &principles			
		ROI strategy			
	III	Internal Evaluation(Test-2)			
		Questions/Answers			
	IV				

ACADEMIC PLANNING

Name of Course : M.C.A. – II	Subject : MCA-25 (Adv. Database)
Name of Teacher : Badal K Kothari	Year : 2014-15

Month	Week	Teaching Plan	Remarks	Sign
January	I	PL-SQL Block (Extra)		
		PL-SQL Block (Extra)		
	II	Practical – 1,2 (Group – II)		
		Practical – 3,4 (Group-II)		
	III	Practical – 5 (Group-II)		
		Practical – 6,7 (Group-II)		
	IV	Practical – 8,9 (Group-II)		
		Practical – 10,11 (Group-II)		

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Month	Week	Teaching Plan	Remarks	Sign
February	I	Internal Practical Evaluation-01		
		Practice Session		
	II	Practical – 12 (Group-II)		
		Practice Session		
	III	Practical – 1 (Group-III)		
		Practical – 2,3 (Group-III)		
	IV	Practical – 4,5 (Group-III)		
		Practice Session		

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Month	Week	Teaching Plan	Remarks	Sign
March	I	Group-IV		
		Practice		
	II	Group-V		
		Group-V		
	III	Group-I		
		Group-I		
	IV	Database Creation		
		Database Creation		

ACADEMIC PLANNING

Month	Week	Teaching Plan	Remarks	Sign
April	I	Configuration of Enterprise Manager		
		Database Management through Enterprise Management		
	II	Database Object through Enterprise Management		
		Database Object through Enterprise Management		
	III	Internal Practical Evaluations-02		
	IV			