ACADEMIC PLANNING

Name of Course : M.C.A-42	Subject : MCA-42: Networking – II
Name of Teacher : Avani Rajde	Year : 2014-15

Month	Week	Teaching Plan	Remarks	Sign
Jan	I	Basic Concepts – Standards, Internet ,History		
		OSI model, Protocol suite		
	II	Addressing, Transmission media, Local Area and Wide Area Networks,Switching,Connecting devices		
		IP addressing		
	III	Subnetting		
		Supernetting		
	IV	IPv6		
		Internet Protocol – Delivery and Forwarding of IP packets – Forwarding, Routing Table		

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Month	Week	Teaching Plan	Remarks	Sign
Feb	I	Datagram, Fragmentation		
		Internal Evaluation (Test-I)		
	II	Checksum, IP Design, Internet group management protocol		
		ARP ,RARP		
	III	Internet control message protocol		
		User Datagram protocol, UDP operation, Use, UDP design		
	IV	TCP services – Flow control, Error control, TCP, connection		
		Transition diagram, Congestion control		

Month	Week	Teaching Plan	Remarks	Sign
March	I	DHCP		
		Domain name system – Namespace,Distribution Resolution, Messages		
	II	File Transfer Protocol – Connections, Communication		
		Telnet(Rlogin),Network Virtual Terminal –Character Set, Controlling the server		
	III	Simple Mail Transfer Protocol		
		Simple Network Management Protocol		
	IV	Simple Network Management Protocol		
		Mobile IP		

Month	Week	Teaching Plan	Remarks	Sign
April	I	Telecommunications Management Network: TMN Broadband Network Management		
		ATM Networks–Broadband Network and Services–ATM Technology–Virtual Path – Virtual Circuit, ATM Packet		
	II	Role of SNMP and ILMI in ATM Management– ATM Digital Exchange Interface Management		
		Internal Evaluation (Test–II)		

Name of Course : M.C.A-IV	Subject : Advance Web Technology-I
Name of Teacher : R.D Prajapati	Year : 2014-15

Month	Week	Teaching Plan	Remarks	Sign
Jan	I	Data Types (Boxing and UnBoxing), Operators, Access Specifier		
		Class, Inheritance, Constructor, Destructor, Abstraction, interface, polymorphism (Over loading and over ridding)		
	II	Garbage Collection, Array (One Dimensional and Two Dimensional) Jagged Array, Collection: Generic Collection (List)		
		Non Generic Collection (Array list, Hash table,), Property		
	III	Delegates and events(Multicasting , Multicasting Event),Exception Handling		
		Introduction to Namespace: Creating & Using Namespace(DLL)		
	IV	Architecture of ADO.Net		
		Comparison with ADO(Connected and Disconnected Architecture)		

Month	Week	Teaching Plan	Remarks	Sign
Feb	I	Net Data provider, Data Adapter, Data Set **(1st Theory Test :3rd February)**		
		Data Row, Data Column, Data Relation		
	II	command, Data Reader, Querying with LINQ:		
		LINQ to SQL (Insert, Update And Delete Queries through LINQ)		
	III	ASP.NET Page Life Cycle, Server Control		
		Validation Controls, Request, Response and Server Object		
	IV	State Management: session, cookie, View State		
		Data Rendering Controls: Grid View, Data list, Repeater, List view		

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Month	Week	Teaching Plan	Remarks	Sign
March	I	Data Rendering Controls: Data list		
		Data Rendering Controls: Repeater, List view		
	II	Understanding Site Maps, Sitemap Path, Menu, Tree View		
		Menu, Tree View		
	III	Binding and perform operations(Insert, Update, Delete) with Grid View		
		Rich Controls: File Upload, Calendar, Ad rotator		
	IV	Creating and Using web services,		
		Working with Master pages		

Month	Week	Teaching Plan	Remarks	Sign
April	I	.Net architecture, framework class library, Common Language Run Time, managed code, assemblies		
		In termediate Language, Just In Time Compiler, common type system		
	II	common language specification, .Net Features		
		File I/O and Streams: Drive info class, Directory Info class		
	III	file and file Info, working with paths Reading and Writing Files		
		Streams, Readers and Writers **(2nd Theory Test :14th April)**		
	IV			

ACADEMIC PLANNING

Name of Course : M.C.A. Sem - IV	Subject : MCA 43 : Advance Web Technology – I (.net)
Name of Teacher : D.G.Prajapati	Year : 2014-15

Month	Week	Teaching Plan	Remarks	Sign
January	I	Practical - 1, 2 : Delegation, Jagged Array		
		Practical – 3, 4 : Event, Inheritance		
	II	Practical – 5, 6 : Abstraction, Interface, Array List, Hash Table		
		Practical – 7,8 : Exception Handling, Validation Control		
	III	Practical – 9 : Request, Response, Server Objects		
		Practical – 10 : Various Database Operations		
	IV	Practical – 10 : Various Database Operations		
		Internal Evaluation (Test-1)		

Month	Week	Teaching Plan	Remarks	Sign
February	I	Practical – 11 : Display Records in Gridview		
		Practical – 12 : Display Records in HTML Table		
	II	Practical – 13 : Gridview with Paging Option		
		Practical – 14 : Read / Write Data to XML File		
	III	Practical – 15 : Various Database Operations through Stored Procedure		
		Practical – 17 : Repeater & Data List Control		
	IV	Practical – 18 : Web Service		
		Internal Evaluations (Test-2)		

Month	Week	Teaching Plan	Remarks	Sign
March	I	Practical – 16 : Application for Online Shopping Cart		
		Practical – 16 : Application for Online Shopping Cart		
	II	Practical – 19 :Image Gallery & Video Gallery with the help of File Upload and DataList Control		
		Practical – 20 : Database Operations with the use of Listview		
	III	Practical – 21 : Navigation Menu and Master Page		
		Practical – 22 : Site Maps, SiteMapPath, Tree View Control		
	IV	Practical – 23 : Calendar Control		
		Practical – 24 : AdRotator Control		

April	I	Practical – 25 : Database Operation through LINQ		
		Practical – 26 : Various Operations on File with use of File Class		
	II	Practical – 27 : Prepare Master Application		
		Practical – 27 : Prepare Master Application		
	III	Internal Evaluations (Test-3)		
		Question Paper Solutions		
	IV			

ACADEMIC PLANNING

Name of Course : M.C.A. Sem- IV	Subject : MCA-44 Computer Graphics
Name of Teacher : J.B.Patel	Year : 2014-15

Month	Week	Teaching Plan	Remarks	Sign
JAN	I	Application of computer graphics		
		Refresh CRT, Raster scan display		
	II	Random scan display, Color CRT, DVST		
		Flat panel Display. Raster Scan Systems, Random Scan Systems		
	III	Introduction to Line Drawing Procedures, DDA algorithm		
		Bresnham Line Drawing Algorithm and Example		
	IV	Circle Symmetry, Midpoint Circle Algorithm		
		Example for Circle Drawing, Loading the Frame Buffer		

Month	Week	Teaching Plan	Remarks	Sign
FEB	I	Internal Evaluation (Test-1)		
		Boundary fill, flood fill algorithm, Inside-Outside test		
	II	Scan-Line Polygon Fill Algorithm		
		Character Generation, Line Attributes ,Character attributes, Area attributes, Color & Gray scale		
	III	Basic Transformation (Translation, Scaling and Rotation)		
		Matrix Representations and Homogeneous Coordinates, Composite Transformations		
	IV	Composite Transformations – translation, rotation, scaling		
		General pivot-point rotation, General fixed-point scaling, Scaling in Direction		

Month	Week	Teaching Plan	Remarks	Sign
MAR	I	Concate Properties		
		Other transformation – Reflection and Shearing, The viewing Pipeline,		
	II	Window to view port coordinate transformation, Clipping- point clipping		
		Parametric Line Clipping Procedure, Cohen-Sutherland line clipping		
	III	Liang-barsky Line clipping		
		N-L-N line clipping, Polygon Clipping – Sutherland Hodgeman polygon clipping, weiler-atherton polygon clipping, Text Clipping, Exterior Clipping.		
	IV	3D Transformations – translation, rotation, scaling.		
		Parallel Projection and Perspective Projection, Three Dimensional Display Methods		

Month	Week	Teaching Plan	Remarks	Sign
APR	I	Antialiasing techniques		
	II			
	III	Internal Evaluation (Test-2)		
	IV			

ACADEMIC PLANNING

Name of Course : M.C.A-IV	Subject :MCA 44 - COMPUTER GRAPHICS
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-4		
	IV	PRACTICAL-5		
		PRACTICAL-6		

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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-10		
	IV	PRACTICAL-11		
		PRACTICAL-12		

Month	Week	Teaching Plan	Remarks	Sign
March	I	PRACTICAL-13		
		PRACTICAL-13		
	II	PRACTICAL-14		
		PRACTICAL-15		
	III	PRACTICAL-16		
		PRACTICAL-16		
	IV	PRACTICAL-17		
		PRACTICAL-18		

Month	Week	Teaching Plan	Remarks	Sign
April	I	PRACTICAL-19		
		PRACTICAL-20		
	II	PRACTICAL-21		
		PRACTICAL-22		
	III	PRACTICAL-23		
		PRACTICAL-24		
	IV	PR TEST- 2		
		PR TEST-2		

ACADEMIC PLANNING

Name of Course : MCA Semester IV	Subject : MCA-45 Computer Security
Name of Teacher : J. N. Modi	Year : 2014-15

Month	Week	Teaching Plan	Remarks	Sign
Jan	I	What Does "Secure" Mean? , Attacks, The Meaning of Computer Security		
		Computer Criminals, Methods of Defense		
	II	Making a Business Case, Quantifying Security, Modeling Cyber -security		
		Current Research and Future Directions		
	III	Intruders • Intruders, Intruders detection, Password management.		
	IV	Malicious Software • Viruses and Related Threats		
		Test-I		

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Month	Week	Teaching Plan	Remarks	Sign
Feb	I	Firewalls • Firewalls Design principle, established systems .		
	II	Foundations of cryptography and computer security • Mathematical foundations, Randomness		
	III	Symmetric key cryptography • Classical Encryption Techniques • Block Ciphers and The Data Encryption Standard		
	IV	Advance Encryption Standard • Confidentiality Using Symmetric Encryption - Public key cryptography		

Month	Week	Teaching Plan	Remarks	Sign
March	I	Test-II		
		Public Key Cryptography And RSA		
	II	Protocols: Digital Signature standards		
		Electronics Mail Security -		
	III	MIME, data Compression technique		
		Web security: -Secure Socket Layer		
	IV	IP Security: Architecture, Authentication Leader,		

Month	Week	Teaching Plan	Remarks	Sign
April	I	Transport Layer security, secure electronics transactions		
		PGP (Pretty Good Privacy) MIME,		
	II	Encapsulating security Payload –Key management		
		Paper Solution		
	III	Assignment		
		Test-III		
	IV			
	V			

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ACADEMIC PLANNING

Name of Course : M.C.A-IV	Subject : M.C.A -45 Computer Security
Name of Teacher : Chandrakant B. Thakkar	Year : 2014-15

Month	Week	Teaching Plan	Remarks	Sign
January	I	Introduction to Encryption/Decryption Technique with practical example.		
		Introduction to menu driven program to implement [Mono-alphabetic Substitution Technique] Caesar Cipher Algorithm and also perform cryptanalytic Brute-Force Attack to print all translations of plaintext using all possible key values.		
	II	Assignment Practical-01 Mono-Alphabetic Substitution Cipher		
		Assignment Practical-02 Vigenere Cipher		
	III	Introduction to menu driven program to implement [Poly-alphabetic Substitution Technique] One-Time Pad Vigenere Cipher Algorithm Session 1.		
		Introduction to menu driven program to implement [Poly-alphabetic Substitution Technique] One-Time Pad Vigenere Cipher Algorithm Session 2.		
	IV	Assignment Practical-03 Autokey Vegenere Cipher		
		Practice Session		

Month	Week	Teaching Plan	Remarks	Sign
February	**I**	Internal Practical Evalution-01		
		Introduction to menu driven program to implement [Mono-alphabetic Substitution Technique] Playfair Cipher Algorithm.		
	II	Introduction to menu driven program to implement [Mono-alphabetic Substitution Technique] Playfair Cipher Algorithm.		
		Practice Session		
	III	Introduction to menu driven program to implement [Rotor Machine Technique] 3-Rotor Machines Cipher Encrypt algorithm.		
		Assignment Practical-04 Rail-Fence Transposition Cipher		
	IV	Introduction to menu driven program to implement S-DES block Cipher Encrypt algorithm Session-01		
		Introduction to menu driven program to implement S-DES block Cipher Encrypt algorithm Session-02		

Month	Week	Teaching Plan	Remarks	Sign
March	**I**	Introduction to menu driven program to implement S-DES block Cipher Encrypt algorithm Practice Session		
		Introduction to computer program that implements Columnar Transposition Cipher.		
	II	Introduction to computer program that implements fast exponentiation (successive squaring) modulo n.(Decryption)		
		Introduction to computer program that implements public key cryptography and RSA algorithm Session-01		
	III	Introduction to computer program that implements public key cryptography and RSA algorithm Session-02		
		Introduction to computer program that implements public key cryptography and RSA algorithm Practice Session.		
	IV	Introduction to computer program that implements Digital Signatures Algorithm.(Encryption)		
		Introduction to computer program that implements Digital Signatures Algorithm.(Decryption)		

Month	Week	Teaching Plan	Remarks	Sign
April	**I**	Introduction to computer program that implements cryptographic Hash function.(Encryption)		
		Introduction to computer program that implements cryptographic Hash function.(Decryption)		
	II	Project Submission		
		Project Submission		
	III	Internal Practical Evaluations-02		
	IV			