

TEACHING PLAN FOR THEORY

Subject: CN & Information Security Class: SY(E)		Branch: MCA Year 2016-2017		
Lecture No	Scheduled Date	Topics to be covered on the scheduled date	Dates On which Actually covered	Reasons for deviation(if any)
		Unit I: Networking Fundamentals		
1	15/12/16	What is Computer communication? Transmission Modes, Synchronous and asynchronous transmission,		
2	16/12/16	Transmission Media: Guided Media – Twisted Pair, Coaxial and Fiber-optic cables		
3	19/12/16	Unguided Media: Radio, VHF, MicroXX Waves and Satellite		
4	20/12/16	Multiplexing: FDM, TDM, CDM and WDM		
5	21/12/16	Switching Techniques: Circuit switching, Packet switching and message switching,		
6	22/12/16	Network topologies, LAN, MAN, WAN		
7	23/12/16	Types of Networks: Peer to Peer, Client-Server		
8	26/12/16	Network Hardware Components: Connectors, Transceivers and Media Converters		
9	27/12/16	Repeaters, NICs, Bridges and Switches ,Router, Gateway		
		Unit II: Data Modeling:		
10	28/12/16	Protocols and Standards, OSI Model,		
11	29/12/16	TCP/IP Model		
12	30/12/16	Data Link Layer: Services, Framing, Error and flow control		
13	02/01/17	Stop-and-Wait protocol, Sliding Window protocol		
14	03/01/17	Go-Back-N ARQ, Selective Repeat ARQ		
15	04/01/17	Medium Access Control sub-layer: Multiple Access Protocols:		
16	05/01/17	ALOHA, CSMA, Collusion-free and limited-contention Protocols		

G.H. Rasoni College Of Engineering and Management

17	06/01/17	WDMA Ethernet: Cabling, encoding, Switched, fast and Gigabit Ethernet		
----	----------	---	--	--

TEACHING PLAN FOR THEORY

Subject: CN & Information Security		Class: SY(E)	Branch: MCA	Year 2016-2017
Lecture No	Scheduled Date	Topics to be covered on the scheduled date	Dates On which Actually covered	Reasons for deviation(if any)
18	09/01/17	Virtual LANs, Bluetooth, Virtual Circuit Switching: Frame Relay and ATM		
		Unit III: Network Layer::		
19	10/01/17	Connectionless and Connection-oriented Services , Routing Algorithms		
20	11/01/17	Internetworking, Congestion prevention policies,		
21	12/01/17	Load sharing, Jitter Control, Network layer Protocols: ARP,		
22	13/01/17	IP protocol, IP Addresses, IPV6, ICMP, Unicast		
23	16/01/17	Routing Algorithms: RIP, OSPF, BGP, Multicast Routing: IGMP, Mobile IP		
24	17/01/17	Transport Layer: Sockets, Elements of Transport protocol:		
25	18/01/17	Addressing, Connection establishment and release		
26	19/01/17	flow control and buffering, Multiplexing,		
27	20/01/17	Simple Transport Protocol- TCP & UDP		
		Unit IV:		
28	23/01/17	Application Layer: Domain Name System (DNS)		
29	24/01/17	DNS servers,		
30	25/01/17	Electronic Mail: Architecture and services,		
31	27/01/17	Message Formats, MIME		
32	30/01/17	Masage transfer, SMTP, Mail Gateways,		
33	31/01/17	Relays , File Transfer Protocol		
34	01/02/17	General Model, commands, TFTP		
35	02/02/17	World Wide Web: Introduction, Architectural overview		

36	05/02/17	static and dynamic web pages		
----	----------	------------------------------	--	--

TEACHING PLAN FOR THEORY

Subject: CN & Information Security		Class: SY(E)	Branch: MCA	Year 2016-2017
Lecture No	Scheduled Date	Topics to be covered on the scheduled date	Dates On which Actually covered	Reasons for deviation(if any)
		Unit V:		
37	06/02/17	Introduction to Information security: Different Types of attack		
38	07/02/17	Principles of Data Security Architecture,		
39	08/02/17	Different types of Cipher, Security policies,		
40	09/02/17	Authentication protocol based on symmetric &		
41	10/02/17	asymmetric cryptosystem Overview of private key &		
42	13/02/17	public-key cryptographic algorithms		
43-44	14/02/17- 15/02/17	DES Algorithm		
45	16/02/17	Diffie-Hellman based Key Agreement protocol		
46	17/02/17	RSA Algorithm		
		Unit VI:		
47	20/02/17	Secure Socket Layer (SSL),		
48	21/02/17	Secure network infrastructure services:		
49	22/02/17	DNS, NTP,SNMP		
50	27/02/17	Privacy enhanced mail (PEM),		
51	28/02/17	Secure SNMP, ARP Hazards, One-time passwords		
52	01/03/17	schemes based on S/KEY, PKI components and Applications		
53	02/03/17	Secure binding of public and private values		
54	03/03/17	DNS certificates		

G.H. Raisoni College Of Engineering and Management

55	06/03/17	Firewall, User authentication		
56	07/03/17	Biometric devices.		

FACULTY TIME –TABLE

Effective From:16/06/2014

Period No.	Period		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	From	To						
1	9:15	10:15						←AT(E)L/JP/208-A,B→
2	10:15	11:15						
3	11:30	12:30	Elective(CC)					
4	12:30	1:30			DBMS	Elective(CC)	DBMS	
5	2:15	3:15						
6	3:15	4:15	DBMS			DBMS		
7								
8								
9								
10								

FACULTY TIME –TABLE

Effective From:16/06/2014

Period #	1	2	3	4	5	6	7	8	9	10
Day /Time	9:15	10:15	11:30	12:30	2:15	3:15				
Monday			Elective(CC)			DBMS				
Tuesday	←HBASE/JP/A/208A→									
Wednesday	←HBASE/JP/C/208B→			DBMS						
Thursday				Elective(CC)		DBMS				
Friday	←HBASE/JP/B/209A→			DBMS						

G.H. Raisoni College Of Engineering and Management

Saturday	← AT(E)L /JP/208-A,B→								

TEACHING LOAD

Academic Year-2016- 2017

Sr. No.	Subject Code Number	Subject Name	Sem	Class (Branch)	Workload Assigned		Examination Scheme				Total Marks
					Lecture	Pract	Paper	T/W	Pract	Oral	Total
1	410911	CN & IS	IV	SYMCA	5	--	50	50	--	--	100
2	410916	NS Lab	IV	SYMCA	--	2	--	50	--	--	50
3	MCAL202	WT	II	FYMCA	5		60	40	--	--	100
4	MCAL205	OR	II	FYMCA	5	--	60	40	--	--	100
5	MCAP202	Web Technology Laboratory	II	FYMCA	--	4		50	50	--	100
Total Load					15	6	21				

VISION AND MISSION OF THE DEPARTMENT OF MCA

Vision:

To achieve progress through education by keeping pace with rapidly changing technologies. To provide functional, technical, interpersonal & communication skills, while preparing students to work effectively for successful career position in the field of information & technology.

Mission:

To serve the society and enhance the quality of life through excellence and leadership. Our strength will be directed to create competent professional. Our endeavor will be to provide all possible support to promoter research and development activity.

RAISONI GROUP
a vision beyond

Regular Assessment of diary by HOD and Principal

Week no	Date	No. of lectures conducted	% syllabus covered	Status / Remarks by HOD	Dated Signature By HOD	Status / Remarks by Principal	Dated Signature By Principal
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							

15						
16						

LAB EXPERIMENT LIST

Subject: NS LAB		Class: SY (MCA)	Branch:	Year 2014-2015
Sr. No	Name of Experiment			Software/ Hardware/ Equipments Required
01	Study of different Networking Operations in the Windows / Linux			
02	Study of Campus LAN design & testing of LAN using Ping Command.			
03	Study of network devices: hubs, switches, modems, & routers.			
04	Installation and configuration of web server & client.			
05	PC to PC Communication using null modem.			
06	Implementation of echo server using 'C' / C++ / Java language.			
07	Study & Implementation of Symmetric Key Cryptography Algorithms.			
08	Study & Implementation of Asymmetric Key Cryptography Algorithms.			
09				
10				
11				
12				
13				
14				
15				
16				

G.H. Raisoni College Of Engineering and Management