

Lesson Plan

Name of the Faculty : Reenu Sharma
 Discipline : Computer Engg.
 Semester : 6th
 Subject : Network Security
 Lesson plan duration : 15 weeks Theory-4hr, Practical-3hrs

Week	Theory		Practical	
	Lecture Day	Topic (including assignments /tests)	Practical Day	Topic
1 st Week	1 st	Introduction: Need for securing a network	1 st	Installation and comparison of various anti virus software
	2 nd	Principles of Security	2 nd	Installation and study of various parameters of firewall.
	3 rd	Type of attacks		
Week 2	1 st	Introduction to cyber crime & cyber law-Indian Perspective (IT Act 2000 and amended 2008),	1 st	Practice
	2 nd	Cyber ethics & ethical hacking	2 nd	Practice of C language
	3 rd	What is hacking? Attacker, phreaker etc.		
Week 3	1 st	Assignment on Cyber crime	1 st	Practice of C language
	2 nd	Securing Data over Internet: Introduction to basic encryption and decryption		
	3 rd	Concept of symmetric and asymmetric key cryptography	2 nd	Practice of C language
Week 4	1 st	Assignment on cryptography	1 st	Writing program in C to Encrypt using XOR key.
	2 nd	Test		
	3 rd	Overview of DES, RSA and PGP		
Week 5	1 st	Introduction to Hashing: MD5, SSL	1 st	Writing program in C to Decrypt using XOR key.
	2 nd	Introduction to Hashing: MD5, SSL, SSH, HTTPS,		
	3 rd	Digital Signatures, Digital certification	2 nd	Practice
Week 6	1 st	Digital Signatures, Digital certification, IPSec	1 st	Study of VPN.
	2 nd	Assignment on Hashing		
	3 rd	Test	2 nd	Study of VPN./Hands On
Week 7	1 st	Virus, Worms and Trojans: Introduction & Definition	1 st	Study of VPN.
	2 nd	preventive measures – access control		
	3 rd	checksum verification & process configuration	2 nd	Study of VPN./Hands On
Week 8	1 st	Assignment on Virus, Worms and Trojans	1 st	Hands On
	2 nd	Virus scanners & Heuristic scanners		
	3 rd	Application level virus scanners	2 nd	Hands On
Week 9	1 st	Deploying virus protection	1 st	Study of various hacking tools.
	2 nd	Assignment & Test		
	3 rd	Firewalls: Definition and types of firewalls	2 nd	Study of various hacking tools./Hands On
Week 10	1 st	Firewall configuration	1 st	Study of various hacking tools./ Hand On
	2 nd	Limitations of firewall.		

	3 rd	Assignment & Test	2 nd	Study of various hacking tools./ Hands On
Week 11	1 st	Intrusion Detection System (IDS) : Introduction & IDS limitations	1 st	Hands On
	2 nd	Teardrop attacks, counter measures; Host based IDS set up		
	3 rd	Handling Cyber Assets- Configuration policy as per standards	2 nd	Hands On
Week 12	1 st	Disposable policy	1 st	Practical applications of digital signature.
	2 nd	Virtual Private Network (VPN) : Basics, setting of VPN,		
	3 rd	VPN diagram & Configuration of required objects	2 nd	Practical applications of digital signature./Hands On
Week 13	1 st	Exchanging keys, modifying security policy	1 st	Practice & Viva
	2 nd	Assignment		
	3 rd	Test	2 nd	Practice & Viva
Week 14	1 st	Disaster and Recovery: Disaster categories	1 st	Domain Based Networking
	2 nd	Network disasters – cabling, topology		
	3 rd	Single point of failure, save configuration files	2 nd	Hands On
Week 15	1 st	Server disasters – UPS, RAID, Clustering	1 st	Hands On
	2 nd	Backups, server recovery		
	3 rd	Assignment & Test		

Lesson Plan

Name of the Faculty : Yashvir Singh, Lecturer in Computer Engg.
 Discipline : Computer Engg.
 Semester : 6th
 Subject : EDM
 Lesson plan duration : 15 weeks Theory-3hr

Week	Theory	
	Lecture Day	Topic (including assignments /tests)
1 st Week	1 st	Concept /Meaning and its need of Entrepreneurship
	2 nd	Qualities and functions of entrepreneur
	3 rd	Barriers in entrepreneurship
Week 2	1 st	Sole proprietorship and partnership forms of business organisations
	2 nd	Schemes of assistance by entrepreneurial support agencies at National, State, KVIB,
	3 rd	District level: NSIC
Week 3	1 st	District level: NRDC & DC:MSME
	2 nd	District level: SIDBI & NABARD,
	3 rd	District level: Commercial Banks, SFC's TCO, KVIB, &DIC
Week 4	1 st	Technology Business Incubator (TBI) and Science and Technology Entrepreneur Parks (STEP).
	2 nd	Assignment on Entrepreneurship
	3 rd	Test
Week 5	1 st	Market Survey and Opportunity Identification
	2 nd	Scanning of business environment
	3 rd	Salient features of National and State industrial policies and resultant business opportunities
Week 6	1 st	Types and conduct of market survey
	2 nd	Assessment of demand and supply in potential areas of growth
	3 rd	Identifying business opportunity
Week 7	1 st	Considerations in product selection
	2 nd	Assignment on Market Survey
	3 rd	Test
Week 8	1 st	Project report Preparation
	2 nd	Preliminary project report
	3 rd	Detailed project report including technical & economic feasibility
Week 9	1 st	Detailed project report including market feasibility
	2 nd	Common errors in project report preparations
	3 rd	Exercises on preparation of project report
Week 10	1 st	Assignment on project report
	2 nd	Test
	3 rd	Introduction to Management: Definitions and importance of management
Week 11	1 st	Functions of management: Importance and Process of planning, organising, staffing, directing and controlling
	2 nd	Principles of management (Henri Fayol, F.W. Taylor) Concept and structure of an organisation Types of industrial organisations : a) Line organisation b) Line and staff organisation c) Functional Organisation
	3 rd	Test
Week 12	1 st	Leadership Definition and Need Qualities and functions of a leader Manager Vs leader Types of leadership
	2 nd	Motivation : Definitions and characteristics Factors affecting motivation Theories of motivation (Maslow, Herzberg, McGregor)
	3 rd	Assignment on Leadership & Motivation
Week 13	1 st	Test
	2 nd	Management Scope in Different Areas : Human Resource Management Introduction and objective Introduction to Man power planning, recruitment and selection Introduction to performance appraisal methods
	3 rd	Material and Store Management Introduction functions, and objectives ABC Analysis and EOQ
Week 14	1 st	Marketing and sales Introduction, importance, and its functions Physical distribution Introduction to promotion mix

		Sales promotion
	2 nd	Financial Management Introductions, importance and its functions Elementary knowledge of income tax, sales tax, excise duty, custom duty and VAT
	3 rd	Assignment on Management Scope in Different Areas
Week 15	1 st	Miscellaneous Topics : Customer Relation Management (CRM) & Definition and need □ Types of CRM
	2 nd	Total Quality Management (TQM) Statistical process control Total employees Involvement Just in time (JIT)
	3 rd	Intellectual Property Right (IPR): Introductions, definition and its importance Infringement related to patents, copy right, trade mark

Lesson Plan

Name of the Faculty : Yashvir Singh
 .Discipline : Computer Engg.
 Semester : 6th
 Subject : Project
 Lesson plan duration : 15 weeks

Week	Practical	
	Practical Day	Topic
1 st Week	1 st	Selection of Project
	2 nd	Selection of Project
Week 2	1 st	Finalization of Project
	2 nd	Finalization of Project
Week 3	1 st	Outline of Project
	2 nd	Outline of Project
Week 4	1 st	Planning of Project
	2 nd	Planning of Project
Week 5	1 st	Execution of Project
	2 nd	Execution of Project
Week 6	1 st	Execution of Project
	2 nd	Execution of Project
Week 7	1 st	Execution of Project
	2 nd	Execution of Project
Week 8	1 st	Execution of Project
	2 nd	Execution of Project
Week 9	1 st -G	Execution of Project
	2 nd	Execution of Project
Week 10	1 st	Providing Solution of Problems
	2 nd	Providing Solution of Problems
Week 11	1 st	Production of Final Executed project
	2 nd	Production of Final Executed project
Week 12	1 st	Checking of Final Project
	2 nd	Checking of Final Project
Week 13		

	1 st	Report writing
	2 nd	Report writing
Week 14	1 st	Seminar
	2 nd	Seminar
Week 15	1 st	Viva-Voce
	2 nd	Viva-Voce

Lesson Plan

Name of Faculty : Harish Kaushik
 Discipline : Computer Engg.
 Semester : 6th
 Subject : **MOBILE APPLICATION DEVELOPMENT**
 Lesson Plan Duration : 15 Weeks

Week	Theory		Practical	
	Lecture Day	Topic (including assignment/test)	Practical Day	Topic
1 st	1	Introduction : Evolution of Mobile Computing, Important terminologies, Mobile computing functions	1	Write a program to demonstrate activity (Application Life Cycle)
	2	Mobile computing security issues, Mobile computing Devices		
	3	Networks: Wired , Wireless , Adhoc, Comparison of wired and wireless mechanism		
	4	Various types of wireless communication technologies used in Mobiles, Antennas , Basics of Base Station and Medium access control and Mobile station.		
2 nd	5	Architecture : Architecture of Mobile Computing, 3- Tier Architecture, Presentation (Tier-1), Application (Tier -2), Data (Tier – 3)	2	Write a program to demonstrate different types of layouts
	6	Mobile computing through Telephony: Evolution through telephony		
	7	Wireless LAN: Introduction- Applications of WLAN, Infrared versus Radio Transmission		
	8	Features of WI-FI and WI-MAX, Bluetooth :Introduction and application		
3 rd	9	Global System for Mobile Communication (GSM): Introduction	3	Write a program to implement simple calculator using text view, edit view, option button and button
	10	GSM Architecture, GSM Entities (Basics only), Introduction to CDMA		
	11	Comparison of FDMA, CDMA and IDMA.		
	12	Short Message Service (SMS): Mobile computing over SMS, Short Message Service,		
4 th	13	Strength of SMS, SMS Architecture	4	1. Write a program to demonstrate list view 2. Write a program to demonstrate photo gallery
	14	Value added services through SMS, VAS Examples		
	15	General Packet Radio Service (GPRS): Introduction,		
	16	, GPRS Packet data Network, Applications for GPRS, Generic Applications,		
5 th	17	GPRS Specific Applications, Limitations of GPRS, Features of 3G and 4G Data Service	5	Write a program to demonstrate Date picker and time picker
	18	Mobile Operating Systems : Evaluation of Mobile Operating System-Handset Manufactures		
	19	and their Mobile OS- Mobile OS and their features		
	20	Linux Kernel based Mobile Or		

6 th	21	ANDROID : Android Versions, Features of Android,	6	Develop an simple application with context menu and option menu
	22	Architecture of Android		
	23	Android Market, Android Runtime (Dalvik Virtual Machine)		
	24	ANDROID SDK & ADT : Android SDK,		
7 th	25	Android Development Tool (ADT)	7	Develop an application to send SMS
	26	Installing and configuring Android, Android Virtual Device (AVD)		
	27	ACTIVITIES & INTENTS : Understanding Activites		
	28	activities and indents		
8 th	29	Calling built-in applications using intents, Fragments Displaying Notifications	8	Write a program to view, edit contact
	30	User Interface : Views and Viewgroups		
	31	Display Orientation , Action Bar,		
	32	Listening for UI Notifications		
9 th	33	Basic Views : Textview, Button, Image Button, EditText, CheckBox,	9	Write a program to send e-mail
	34	ToggleButton, RadioButton and RadioGroup Views,		
	35	ProgressBar View, Auto Complete Text View		
	36	Advanced Views : Time Picker View and Date Picker View,		
10 th	37	, List Views, Image View, Menus	10	Write a program to demonstrate a service
	38	Analog and Digital View, Dialog Boxes		
	39	Displaying Pictures & Menus with Views: Image View, Gallery View,		
	40	ImageSwitcher, GridView - Creating the Helper Methods		
11 th	41	Options Menu, Context Menu	11	Write a program to demonstrate web view to display web site
	42	SMS, Phone: Sending SMS		
	43	Receiving SMS,		
	44	Making phone call		
12 th	45	Location Based Services : Obtaining the Maps API Key- Displaying the Map, Zoom Control , Navigating to a specific location	12	Write a program to display map of given location/position using map view
	46	Adding Marker , Geo Coding and reverse Geo coding		
	47	Location Based Service and SQLite		
	48	Location Based Services : Obtaining the Maps API Key, Displaying the Map, Zoom Control,		
13 th	49	Navigating to a specific location	13	Write a program to demonstrate the application of intent class
	50	Adding Marker		
	51	Geo Coding and reverse Geo coding		
	52	Content Provider : Sharing data		
14 th	53	view contacts	14	Write a program to create a text file in a external memory
	54	Add contacts, Modify contacts, Delete Contacts		
	55	Storage : Store and Retire data's in Internal and External Storage		
	56	SQLite, Creating and using databases		
15 th	57	Android Service : Consuming Web service using HTTP	15	Write a program to store and fetch data from SQL life database.
	58	downloading binary Data,		
	59	Downloading Text Content		
	60	Accessing Web Service		

