# LessonPlan

Name of the Faculty : Reena Rani Discipline : Computer Engg.

Semester : 6th

Subject : Network Security

Lessonplanduration : 15weeksTheory-3hr,Practical-6hrs

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| **Week** | **Theory** | | **Practical** | |
| Lecture Day | Topic(includingassignments/tests) | Practical Day | Topic |
| 1stWeek | 1st | **Introduction:**Needforsecuringanetwork | 1st | Installation and comparison ofvarious anti virus software |
| 2nd | PrinciplesofSecurity | 2nd | Installationandstudyofvarious parameters of firewall. |
| 3rd | Typeofattacks |
| Week2 | 1st | Introductionto  cybercrime&cyberlaw-IndianPerspective(IT Act 2000 and amended 2008), | 1st | Practice |
| 2nd | Cyberethics&ethicalhacking | 2nd | PracticeofC language |
| 3rd | Whatishacking?Attacker,phreakeretc. |
| Week3 | 1st | AssignmentonCybercrime | 1st | PracticeofC language |
| 2nd | **SecuringDataoverInternet:**Introductionto basic encryption and decryption |
| 3rd | Conceptofsymmetricandasymmetrickey cryptography | 2nd | PracticeofC language |
| Week4 | 1st | Assignmentoncryptography | 1st | WritingprograminCtoEncryptusing XOR key. |
|  | 2nd | Test |
|  | 3rd | OverviewofDES, RSAandPGP | 2nd | Practice |
| Week5 | 1st | IntroductiontoHashing:MD5,SSL | 1st | WritingprograminCtoDecryptusing XOR key. |
| 2nd | IntroductiontoHashing:MD5,SSL,SSH, HTTPS, |
| 3rd | DigitalSignatures,Digitalcertification | 2nd | Practice |
| Week6 | 1st | DigitalSignatures,Digitalcertification,IPSec | 1st | Studyof VPN. |
| 2nd | AssignmentonHashing |
| 3rd | Test | 2nd | StudyofVPN./Hands On |
| Week7 | 1st | **Virus,WormsandTrojans:Introduction&Definition** | 1st | Studyof VPN. |
| 2nd | preventivemeasures–access central |
| 3rd | checksumverification&processconfiguration | 2nd | StudyofVPN./Hands On |
| Week8 | 1st | AssignmentonVirus,WormsandTrojans | 1st | HandsOn |
| 2nd | Virusscanners&Heuristicscanners |
| 3rd | Applicationlevelvirusscanners | 2nd | HandsOn |
| Week9 | 1st | Deployingvirusprotection | 1st | Studyofvarioushackingtools. |
| 2nd | Assignment&Test |
| 3rd | **Firewalls**:Definitionandtypesoffirewalls | 2nd | Studyofvarioushackingtools./Hands On |
| Week10 | 1st | Firewallconfiguration | 1st | Studyofvarioushackingtools./Hand On |
| 2nd | Limitationsoffirewall. |

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|  | 3rd | Assignment&Test | 2nd | Studyofvarioushackingtools./Hands On |
| Week11 | 1st | **IntrusionDetectionSystem(IDS)**:Introduction & IDS limitations | 1st | HandsOn |
| 2nd | Teardropattacks,countermeasures;Hostbased IDS set up |
| 3rd | **HandlingCyberAssets-**Configurationpolicyas per standards | 2nd | HandsOn |
| Week12 | 1st | Disposablepolicy | 1st | Practicalapplicationsofdigital signature. |
| 2nd | **VirtualPrivateNetwork(VPN)**:  Basics,settingof VPN, |
| 3rd | VPNdiagram&Configurationofrequiredobjects | 2nd | Practicalapplicationsofdigital signature./Hands On |
| Week13 | 1st | Exchangingkeys,modifyingsecuritypolicy | 1st | Practice&Viva |
| 2nd | Assignment |
| 3rd | Test | 2nd | Practice&Viva |
| Week14 | 1st | **DisasterandRecovery:**Disastercategories | 1st | DomainBasedNetworking |
| 2nd | Networkdisasters–cabling, topology |
| 3rd | Singlepointoffailure,saveconfigurationfiles | **2nd** | HandsOn |
| Week15 | 1st | Serverdisasters–UPS,RAID,Clustering | **1st** | HandsOn |
| 2nd | Backups,serverrecovery |
| 3rd | Assignment&Test |  |  |

# LessonPlan

Name of the Faculty : YashvirSingh,LecturerinComputerEngg. Discipline : Computer Engg.

Semester : 6th

Subject : EDM

Lessonplanduration : 15weeksTheory-3hr

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| Week | Theory | |
| LectureDay | Topic(includingassignments/tests) |
| 1stWeek | 1st | Concept/MeaninganditsneedofEntrepreneurship |
| 2nd | Qualitiesandfunctionsofentrepreneur |
| 3rd | Barriersinentrepreneurship |
| Week2 | 1st | Soleproprietorshipandpartnershipformsofbusiness organisations |
| 2nd | SchemesofassistancebyentrepreneurialsupportagenciesatNational,State, KVIB, |
| 3rd | Districtlevel:NSIC |
| Week3 | 1st | Districtlevel:NRDC&DC:MSME |
| 2nd | Districtlevel:SIDBI&NABARD, |
| 3rd | Districtlevel:CommercialBanks,SFC’sTCO,KVIB,&DIC |
| Week4 | 1st | TechnologyBusinessIncubator(TBI)andScienceandTechnologyEntrepreneur Parks (STEP). |
| 2nd | AssignmentonEntrepreneurship |
| 3rd | Test |
| Week5 | 1st | MarketSurveyandOpportunityIdentification |
| 2nd | Scanningofbusinessenvironment |
| 3rd | SalientfeaturesofNationalandStateindustrialpoliciesandresultantbusiness opportunities |
| Week6 | 1st | Typesandconductofmarketsurvey |
| 2nd | Assessmentofdemandandsupplyinpotentialareasofgrowth |
| 3rd | Identifyingbusinessopportunity |
| Week7 | 1st | Considerationsinproductselection |
| 2nd | AssignmentonMarketSurvey |
| 3rd | Test |
| Week8 | 1st | ProjectreportPreparation |
| 2nd | Preliminaryprojectreport |
| 3rd | Detailedprojectreportincludingtechnical&economicfeasibility |
| Week9 | 1st | Detailedprojectreportincludingmarketfeasibility |
| 2nd | Commonerrorsinprojectreport preparations |
| 3rd | Exercisesonpreparationofproject report |
| Week10 | 1st | Assignmentonprojectreport |
| 2nd | Test |
| 3rd | IntroductiontoManagement:Definitionsandimportanceofmanagement |
| Week11 | 1st | Functionsofmanagement:ImportanceandProcessofplanning,organising, staffing, directing and controlling |
| 2nd | Principlesofmanagement(HenriFayol,F.W.Taylor) Concept and structure of an organisation  Typesofindustrialorganisations:a)Lineorganisationb)Lineandstaff organisation c) Functional Organisation |
| 3rd | Test |
| Week12 | 1st | Leadership Definition and Need Qualitiesandfunctionsofaleader Manager Vs leader  Typesofleadership |
| 2nd | Motivation:Definitionsandcharacteristics Factors affecting motivation  Theoriesofmotivation(Maslow,Herzberg,McGregor) |
| 3rd | AssignmentonLeadership&Motivation |
| Week13 | 1st | Test |
|  | 2nd | **ManagementScopeinDifferentAreas:**  HumanResourceManagement Introduction and objective  IntroductiontoManpowerplanning,recruitmentandselection Introduction to performance appraisalmethods |
|  | 3rd | **MaterialandStoreManagement**  Introductionfunctions,andobjectives ABC Analysis and EOQ |
| Week14 | 1st | **Marketingandsales**  Introduction,importance,anditsfunctions Physical distribution  Introductiontopromotionmix |

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|  |  | Salespromotion |
| 2nd | **FinancialManagement**  Introductions,importanceanditsfunctions  Elementaryknowledgeof incometax,salestax,exciseduty,customdutyand VAT |
| 3rd | AssignmentonManagementScopeinDifferentAreas |
| Week15 | 1st | **MiscellaneousTopics:**  **CustomerRelationManagement(CRM)**&DefinitionandneedTypesof CRM |
| 2nd | **TotalQualityManagement(TQM)**  Statistical process control TotalemployeesInvolvement Just in time (JIT) |
| 3rd | **IntellectualPropertyRight(IPR)**:Introductions,definitionanditsimportance Infringement related to patents, copy right, trade mark |

# LessonPlan

NameoftheFaculty : YashvirSingh

.Discipline : ComputerEngg.

Semester : 6th

Subject : Project Lesson plan duration : 15weeks

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| **Week** | **Practical** | |
| PracticalDay | Topic |
| 1stWeek | 1st | SelectionofProject |
| 2nd | SelectionofProject |
| Week2 | 1st | FinalizationofProject |
| 2nd | FinalizationofProject |
| Week3 | 1st | OutlineofProject |
| 2nd | OutlineofProject |
| Week4 | 1st | PlanningofProject |
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|  | 2nd | PlanningofProject |
| Week5 | 1st | ExecutionofProject |
| 2nd | ExecutionofProject |
| Week6 | 1st | ExecutionofProject |
| 2nd | ExecutionofProject |
| Week7 | 1st | ExecutionofProject |
| 2nd | ExecutionofProject |
| Week8 | 1st | ExecutionofProject |
| 2nd | ExecutionofProject |
| Week9 | 1st-G | ExecutionofProject |
| 2nd | ExecutionofProject |
| Week10 | 1st | ProvidingSolutionofProblems |
| 2nd | ProvidingSolutionofProblems |
| Week11 | 1st | ProductionofFinalExecutedproject |
| 2nd | ProductionofFinalExecutedproject |
| Week12 | 1st | CheckingofFinalProject |
| 2nd | CheckingofFinalProject |
| Week13 |  |  |

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|  | 1st | Reportwriting |
| 2nd | Reportwriting |
| Week14 | 1st | Seminar |
| 2nd | Seminar |
| Week15 | 1st | Viva-Voce |
| 2nd | Viva-Voce |

# LessonPlan

Name of Faculty : HarishKaushik Discipline :Computer Engg.

Semester : 6th

Subject : **MOBILE APPLICATIONDEVELOPMENT**

LessonPlanDuration : 15 Weeks

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| Week | **Theory** | | **Practical** | |
| **Lecture Day** | **Topic (includingassignment/test)** | **Practical Day** | **Topic** |
| 1st | 1 | Introduction :Evolution of Mobile Computing,Importantterminologies,  Mobile  computingfunctions | 1 | Write a program to demonstrate activity (ApplicationLifeCycle) |
| 2 | Mobilecomputingsecurityissues, 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  StationandMediumaccesscontroland Mobilestation. |  |
| 2nd | 5 | Architecture : Architecture of Mobile Computing, 3- Tier Architecture, Presentation (Tier-1),Application(  Tier-2),Data (Tier–3) | 2 | Write a program to demonstratedifferenttypesof layouts |
| 6 | MobilecomputingthroughTelephony: Evolution through telephony |  |
| 7 | Wireless LAN: Introduction-  ApplicationsofWLAN,Infraredversus Radio Transmission |  |
| 8 | Features of WI-FI and WI-MAX, Bluetooth:Introductionandapplication |  |
| 3rd | 9 | GlobalSystemforMobile  Communication (GSM):Introduction | 3 | Writeaprogramtoimplement simple calculator using text view, edit view, option  buttonandbutton |
| 10 | GSMArchitecture, GSMEntities( Basics only), Introduction to CDMA |  |
| 11 | ComparisonofFDMA,CDMAandIDMA. |  |
| 12 | ShortMessageService(SMS):Mobile  computingoverSMS,ShortMessage Service, |  |
| 4th | 13 | StrengthofSMS,SMSArchitecture | 4 | 1. Write a program to demonstratelistview 2. Writeaprogramto demonstratephoto gallery |
| 14 | ValueaddedservicesthroughSMS,VAS Examples |  |
| 15 | GeneralPacketRadioService(GPRS): Introduction, |  |
| 16 | , GPRS Packet data Network, ApplicationsforGPRS,Generic  Applications, |  |
| 5th | 17 | GPRSSpecificApplications,Limitations  ofGPRS,Featuresof3Gand4GData Service | 5 | Write a program to demonstrateDatepickerand time picker |
| 18 | MobileOperatingSystems:Evaluation  ofMobileOperatingSystem-Handset Manufactures |  |
| 19 | andtheirMobileOS-MobileOSand their features |  |
| 20 | LinuxKernelbasedMobileOr |  |

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| 6th | 21 | ANDROID:AndroidVersions,Features of Android, | 6 | Developansimpleapplication withcontextmenuandoption menu |
| 22 | ArchitectureofAndroid |  |
| 23 | AndroidMarket,AndroidRuntime  (DalvikVirtualMachine) |  |
| 24 | ANDROIDSDK&ADT:AndroidSDK, |  |
| 7th | 25 | AndroidDevelopmentTool(ADT) | 7 | Developanapplicationtosend SMS |
| 26 | InstallingandconfiguringAndroid,  AndroidVirtualDevice (AVD) |  |
| 27 | ACTIVITIES&INTENTS:Understanding Activites |  |
| 28 | activities and indents |  |
| 8th | 29 | Callingbuilt-inapplicationsusing intents, Fragments Displaying  Notifications | 8 | Writeaprogramtoview,edit contact |
| 30 | UserInterface:ViewsandViewgroups |  |
| 31 | DisplayOrientation,Action Bar, |  |
| 32 | ListeningforUINotifications |  |
| 9th | 33 | BasicViews:Textview,Button,Image  Button,EditText,CheckBox, | 9 | Writeaprogramtosende- mail |
| 34 | ToggleButton,RadioButtonand RadioGroup Views, |  |
| 35 | ProgressBarView,AutoCompleteText  View |  |
| 36 | AdvancedViews:TimePickerViewand Date Picker View, |  |
| 10th | 37 | ,ListViews,ImageView,Menus | 10 | Write a program to demonstrateaservice |
| 38 | AnalogandDigitalView,DialogBoxes |  |
| 39 | DisplayingPictures&Menuswith Views:ImageView,GalleryView, |  |
| 40 | ImageSwitcher,GridView-Creatingthe Helper Methods |  |
| 11th | 41 | OptionsMenu,ContextMenu | 11 | Write a program to demonstratewebviewto display web site |
| 42 | SMS,Phone:SendingSMS |  |
| 43 | ReceivingSMS, |  |
| 44 | Makingphonecall |  |
| 12th | 45 | LocationBasedServices:Obtainingthe Maps API Key- Displaying the Map,  Zoom Control,Navigatingtoa specificlocation | 12 | Writeaprogramtodisplaymap ofgivenlocation/positionusing mapview |
| 46 | AddingMarker,GeoCoding and  reverseGeocoding |  |
| 47 | LocationBasedServiceandSQLite |  |
| 48 | LocationBasedServices:Obtainingthe Maps API Key, Displaying the Map,  ZoomControl, |  |
| 13th | 49 | Navigatingtoaspecificlocation | 13 | Write a program to demonstratetheapplicationof intent class |
| 50 | AddingMarker |  |
| 51 | GeoCodingandreverseGeocoding |  |
| 52 | ContentProvider:Sharingdata |  |
| 14th | 53 | viewcontacts | 14 | Write a program to create a textfileinaexternalmemory |
| 54 | Addcontacts,Modifycontacts,Delete  Contacts |  |
| 55 | Storage:StoreandRetiredata’sin Internal and External Storage |  |
| 56 | SQLite,Creatingandusingdatabases |  |
| 15th | 57 | AndroidService:ConsumingWeb service using HTTP | 15 | Writeaprogramtostoreand fetch data from SQL life database. |
| 58 | downloadingbinary Data, |  |
| 59 | DownloadingTextContent |  |
| 60 | AccessingWebService |  |