Third Year

Electronics & Telecommunication

Engineering(2019Course)Course Outcome and Course

Objectives

Sr.No.	Nameof thesubject	DigitalCommunication
1	CourseObjectives1	Tofamiliarizestudentswithvariousdigitalmodulationtechniquesusedin Digital communication systems.
	CourseObjectives2	Toequipstudentsthestudentswithtoolsrequiredforperformanceanalysis Of digital communication systems..
	CourseObjectives3	Tointroducethestudentswiththeconceptofinformationtheory&coding techniques
	CourseOutcomes1	Applythestatisticaltheoryfordescribingvarioussignalsinacommunication system.
	CourseOutcomes2	Understandandexplainvariousdigitalmodulationtechniquesusedindigital Communication systems and analyze their performance in presence of AWGN noise.
	CourseOutcomes3	Describeand analyze the digital communication system with spread Spectrum modulation..
	CourseOutcomes4	Analyzeacommunicationsystemusinginformationtheoreticapproach.
	CourseOutcomes5	Useerrorcontrolcodingtechniquestoimproveperformanceofadigital communicationsystem
2	**Nameof thesubject**	**ElectromagneticFieldTheory**
	CourseObjectives 1	Provide thefoundationandrudimentsofElectromagnetictheoryessentialto Subsequent courses of radiation, microwave and wireless communications.
	CourseObjectives2	Exposethestudentstobasiclawsofelectrostatics,magnetostaticsleading To the Maxwell Equations or static and dynamic fields.
	CourseObjectives3	ExtendtheselawstoUniformPlanewaves,transmissionlinetheoryand Some of the case studies of applications of engineering electromagnetic field theory.
	CourseObjectives4	Themainfocuswillbeonthephysicalinterpretationofallthemathematicalformulat onsandextendtheseconceptstorealtimeapplicationsinthefield ElectronicsandTelecommunicationEngineering
	CourseOutcomes1	Applythebasicelectromagneticprinciplesanddeterminethefields(E&H)

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		Due to the given source.

	CourseOutcomes2	Applyboundaryconditionstotheboundariesbetweenvariousmediato Interpret behavior of the fields one ithersides.
	CourseOutcomes3	State,IdentifyandApplyMaxwell'sequations(integralanddifferentialforms) in both the forms (Static, time-varying or Time-harmonic field) forvarioussources,Calculatethetimeaveragepowerdensityusing Poynting Theorem,Retardedmagneticvectorpotential.
	CourseOutcomes4	Formulate,Interpretandsolvesimpleuniformplanewave(Helmholtz Equations)equations,andanalyzetheincident/reflected/transmittedwavesatnor mal incidence.
	CourseOutcomes5	InterpretandApplythetransmissionlineequationtotransmissionlineproblemswith loadimpedancetodetermineinputandoutputvoltage/currentatanypointonthe Transmissionline,Findinput/loadimpedance,input/loadadmittance,reflectionc oefficient,SWR,Vmax/Vmin, Length of transmission line using Smith Chart.
	CourseOutcomes6	Carryoutadetailedstudy,interprettherelevanceandapplicationsof Electromagnetics
3	**Nameof thesubject**	**DatabaseManagement**
	CourseObjectives1	Tounderstandfundamentalconceptsofdatabasefromitsdesigntoits implementation.
	CourseObjectives2	Toanalyzedatabaserequirementsanddeterminethe entities involvedinthe System and with one another.
	CourseObjectives3	Tomanipulatedatabaseusing SQLQueryto create,updateandmanage Database.
	CourseObjectives4	Befamiliarwiththebasicissuesoftransactionprocessingandconcurrency control.
	CourseObjectives5	TolearnandunderstandParallelDatabasesanditsArchitectures.
	CourseObjectives6	TolearnandunderstandDistributedDatabasesanditsapplications.
	CourseOutcomes1	Ability toimplementtheunderlyingconceptsofadatabase system.
	CourseOutcomes2	Designandimplementadatabaseschemaforagivenproblem-domainusing Data model.
	CourseOutcomes3	Formulate,usingSQL/DML/DDLcommands,solutionstoawiderangeof Query and update problems.
	CourseOutcomes4	Implementtransactions,concurrencycontrol,andbeabletodoDatabase recovery.
	CourseOutcomes5	Ableto understand various Parallel Database Architectures and its applications
	CourseOutcomes6	AbletounderstandvariousDistributedDatabasesanditsapplications.
4	**NameoftheSubject**	**Microcontroller**

	CourseObjectives1	Understandarchitectureandfeaturesof8051andPIC18FXXMicrocontroller.
	CourseObjectives2	Learninterfacingofreal-worldperipheraldeviceswithmicrocontroller.
	CourseObjectives3	ExploredifferentfeaturesofPIC18FMicrocontrollerwithArchitecture
	CourseObjectives4	Use conceptsof timersandinterruptsofPIC18inprogramming.
	CourseObjectives5	Designanddevelopmicrocontrollerbasedembeddedapplication.
	CourseObjectives6	Demonstratereallifeapplications usingPIC18.
	CourseOutcomes1	Understandthefundamentalsofmicrocontrollerandprogramming.
	CourseOutcomes2	Interfacevariouselectroniccomponentswithmicrocontrollers.
	CourseOutcomes3	Analyze thefeaturesofPIC18FXXXX.
	CourseOutcomes4	Describetheprogrammingdetailsinperipheralsupport.
	CourseOutcomes5	Developinterfacingmodelsaccordingtoapplications.
	CourseOutcomes6	Evaluatetheserialcommunicationdetailsandinterfaces
5	**Nameof thesubject**	**FundamentalsofJAVAProgramming(Elective-I)**
	CourseObjectives1	Makethestudentsfamiliarwithbasicconceptsandtechniquesofobject Oriented programming in Java.
	CourseObjectives2	DevelopanabilitytowritevariousprogramsinJavaforproblemsolving.
	CourseOutcomes1	UnderstandthebasicprinciplesofJavaprogramminglanguage
	CourseOutcomes2	Apply the concepts of classes and objects write programs in Java
	CourseOutcomes3	Demonstratetheconceptsofmethods&Inheritance
	CourseOutcomes4	Usetheconceptsofinterfaces&packagesfor programimplementation
	CourseOutcomes5	UnderstandmultithreadingandExceptionhandlinginJavatodeveloprobust programs
	CourseOutcomes6	UseGraphicsclass,AWTpackages andmanageinput andoutput filesinJava
6	**Nameof thesubject**	**CellularNetworks**
	CourseObjectives1	Various propagation Model and Estimation techniques ofwireless Communication system.
	CourseObjectives2	OFDMandMIMOtechnologies toexplainmodernwirelesssystems.
	CourseObjectives3	Variousaspectsofmobilecommunicationsystem.
	CourseObjectives4	Variousaspectsofwireless-systemplanning.
	CourseObjectives5	DifferentGenerationofMobileNetworks.
	CourseObjectives6	DiversifiedissuesthatcanenhanceNetworkPerformance.
	CourseOutcomes1	Understandfundamentalsofwirelesscommunications.
	CourseOutcomes2	DiscussandstudyOFDMandMIMOconcepts.
	CourseOutcomes3	Elaboratefundamentalsmobilecommunication.
	CourseOutcomes4	Describesaspectsofwirelesssystem planning.

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	CourseOutcomes5	Understandofmodernandfuturisticwireless networksarchitecture.
	CourseOutcomes6	Summarizedifferentissuesinperformanceanalysis.
7	**Nameof thesubject**	**ProjectManagement**
	CourseObjectives1	The basicsofprojectmanagementanditslifecycle
	CourseObjectives2	Theprocessofprojectidentification,selectioncriteriaofthe project and how The project planning is under taken.
	CourseObjectives3	Theorganizationalstructurewithinaprojectandissuesrelatedtoproject management
	CourseObjectives4	Thetechniquesforeffectiveprojectschedulingandresourceconsiderations In project.
	CourseObjectives5	Thebasicsofeffectivehandlingtherisksaswellasmanagingfinanceswithin the project
	CourseObjectives6	Thecomplete product development process and requirements for Entrepreneurship along with relate dlegalissues.
	CourseOutcomes1	Applythefundamentalknowledgeofprojectmanagementforeffectively Handling the projects.
	CourseOutcomes2	Identifyandselecttheappropriateprojectbasedonfeasibilitystudyand Undertake its effective planning.
	CourseOutcomes3	Assimilateeffectivelywithintheorganizationalstructureofprojectand Handle project management relate disuses inanefficient manner.
	CourseOutcomes4	ApplytheprojectschedulingtechniquestocreateaProjectSchedulePlan And according lyutilize the resource stomeet the projec t deadline.
	CourseOutcomes5	Identifyandassesstheprojectrisksandmanagefinancesinlinewith Project FinancialManagementProcess.
	CourseOutcomes6	Developnewproductsassessingtheircommercialviabilityanddevelopskillsetsforb ecomingsuccessfulentrepreneurswhilebeingfullyawareofthe Legalissues related to Product development and Entrepreneurship.
8	**Nameof thesubject**	**PowerDevices&Circuits**
	CourseObjectives1	Tointroducedifferentpowerdevicesviz.SCR,GTO,MOSFETandIGBTwithconstructi on,characteristics,repetitiveandnonrepetitiveratingsandtypical triggering/ drivercircuits.
	CourseObjectives2	Tounderstandworking,designandperformanceanalysisandapplicationsofvarious powerconvertercircuitssuchasactodcconverters,inverterand chopper
	CourseObjectives3	Toknowvariousprotectioncircuitrequirementsofpowerelectronicdevices.
	CourseOutcomes1	Todifferentiatebasedonthecharacteristicparametersamong SCR,GTO, MOSFET&IGBTandidentifysuitabilityofthepowerdeviceforcertain

		Applications and underst and the significance of device ratings.
	CourseOutcomes2	Todesigntriggering/ driver circuitsforvariouspowerdevices.
	CourseOutcomes3	Toevaluateandanalyzevariousperformanceparametersofthedifferent Converters and its topologies..
	CourseOutcomes4	Tounderstandsignificanceanddesignofvariousprotectionscircuitsfor Power devices.
	CourseOutcomes5	Toevaluatetheperformanceofuninterruptiblepowersupplies,switchmode powersuppliesandbattery
	CourseOutcomes6	Tounderstandcasestudiesofpowerelectronicsinapplicationslikeelectric Vehicles ,solar systems etc
9	**Nameof thesubject**	**AdvancedJAVAProgramming(Elective-II)**
	CourseObjectives1	DesignanddevelopGUIapplicationsusingAbstractWindowingToolkit (AWT),SwingandEventHandling.
	CourseObjectives2	Designanddevelop Webapplications
	CourseObjectives3	DesigningEnterprisebased applicationsbyencapsulatinganapplication's businesslogic..
	CourseObjectives4	Designingapplicationsusingpre-builtframeworks
	CourseOutcomes1	DesignanddevelopGUIapplicationsusingApplets.
	CourseOutcomes2	ApplyrelevantAWT/swingcomponentstohandlethegivenevent.
	CourseOutcomes3	DesignanddevelopGUIapplicationsusingAbstractWindowingToolkit (AWT),SwingandEventHandling.
	CourseOutcomes4	LearntoaccessdatabasethroughJavaprograms,usingJavaDatabase Connectivity(JDBC)
	CourseOutcomes5	Invoketheremotemethodsinanapplicationusing RemoteMethod Invocation(RMI)
	CourseOutcomes6	Developprogramforclient/servercommunicationusingJavaNetworking classes.
10	**Nameof thesubject**	**MiniProject**
	CourseObjectives1	Tounderstandthe—ProductDevelopmentProcess"includingbudgeting Through Mini Project.
	CourseObjectives2	Toplanforvariousactivitiesoftheprojectanddistributetheworkamongst team members.
	CourseObjectives3	Toinculcate electronichardwareimplementationskillsby-
	CourseObjectives4	LearningPCBartwork designusing anappropriateEDAtool.
	CourseObjectives5	Imbibinggoodsolderingandeffectivetrouble-shootingpractices.
	CourseObjectives6	Followingcorrectgroundingandshieldingpractices.
	CourseObjectives7	Todevelopstudent'sabilitiestotransmittechnicalinformationclearlyand Test the same by delivery of Seminar based on the Mini Project.

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	Course Objectives8	To understand the importance of document design by compiling Technical Report on the Mini Project work carried out.
	Course Outcomes1	Understand, planand executea Mini Project with team.
	Course Outcomes2	Implement electronic hardware by learning PCB art work design, soldering techniques, testing and trouble shooting etc.
	Course Outcomes3	Prepare a technical report based on the Mini project.
	Course Outcomes4	Deliver technical seminar based on the Mini Project work carried out.

Head of the Department
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Principal

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