		es & Social Sciences	·		3.Tech		1		
Semester : F			Course Category Code: HSM				Semester Exam Type:		
Course Code	Course	Perio	Periods / Week			Ma	aximum Ma	arks	
Course Coue	Course	IVAIIIC	L	Т	Р	С	CA	SE	TM
HS202	Industr	ial Economics and	3	_	_	3	40	60	100
113202	Manag	ement	3			3	40	00	100
Prerequisite	Nil								
	CO1	Assess the knowledge economics/macroecono	•	nather	matics	to unde	erstand	industrial	micro
Course	CO2	Implement various man	agement '	technic	ques b	ased on the	needs		
Outcome	CO3	Implement various inves	stment ev	aluatio	n base	ed on the n	eeds		
	CO4	Apply formula and work	out probl	em					
	CO5	Understand Case studies	s on Gene	ral, Pr	oducti	on and Fina	ncial mai	nagement	
UNIT-I	Micro a	and Macro Economics and				Periods: 9			
Nature and S		Economic science: Micr				s. Econom	ic decisi	ons and	
	•	mand and Supply concept							
	•	ilibrium, Elasticity of Der				•			
	•	Market structure – Price							CO1
competition Sr	mall Scale	Industries – Role of SSI	in Indian	Econo	my. M	acro Econo	mics: Na	ture and	COI
functions of N	/lonev –	National Income – GNP	and Savi	ngs –	Inflation	on and Def	flation co	ncept –	
		n Trade and Balance of pa		0-					
UNIT-II		ement Techniques	yiiiciic.			Periods: 9	1	<u> </u>	
		.				Perious. 3			
		. N. A	C N A					C1 - (C;	
	-	Management – Element		_		_	ganising,	- :	
Directing, Coo	rdinating	Controlling - Scope of	Managem	ent –		_	ganising,	- :	CO2
Directing, Coo	rdinating es of (Ov	Controlling - Scope of vnership) of a firm Merits	Managem	ent –		of Organiz	ganising, ation Me	- :	CO2
Directing, Coo	rdinating es of (Ov	Controlling - Scope of	Managem	ent –		_	ganising, ation Me	- :	CO2
Directing, Coo Demerits – Typ UNIT-III	rdinating es of (Ov Industr	Controlling - Scope of vnership) of a firm Merits	Managem and Dem	erits.	Types	of Organiz	ganising, ation Me	erits and	CO2
Directing, Coo Demerits – Typ UNIT-III Need for Final	rdinating pes of (Ov Industr nce – Typ	Controlling - Scope of vnership) of a firm Merits ial Finance pes of finance - Sources	Managem and Dem of financ	erits. e – Ty	Types pes of	of Organiz Periods: 9 Investment	ganising, ation Me) t – Evalu	erits and	
Directing, Coo Demerits – Typ UNIT-III Need for Final Investment –	rdinating bes of (Ov Industrace – Typ Preparat	Controlling - Scope of vnership) of a firm Merits ial Finance pes of finance - Sources ion of Trading, Profit a	Managem and Dem of financ	erits. e – Ty	Types pes of	of Organiz Periods: 9 Investment	ganising, ation Me) t – Evalu	erits and	
Directing, Coo Demerits – Typ UNIT-III Need for Final Investment – accounting and	rdinating bes of (Ov Industrace – Typ Preparated significa	Controlling - Scope of wnership) of a firm Merits ial Finance pes of finance - Sources ion of Trading, Profit ance of each types.	Managem and Dem of financ	erits. e – Ty	Types pes of	Periods: 9 Investmen Balance S	ganising, ation Me t – Evalu heet –	erits and	CO2
Directing, Coo Demerits – Typ UNIT-III Need for Final Investment – accounting and UNIT-IV	rdinating pes of (Ov Industr nce — Typ Preparat d significa Produc	Controlling - Scope of vnership) of a firm Merits ial Finance pes of finance - Sources ion of Trading, Profit a nice of each types.	Managem and Dem of financ nd loss	erits. e – Ty Accour	pes of	Periods: 9 Investment Balance S Periods: 9	ganising, ation Me) t – Evalu heet –	uation of types of	
Directing, Coo Demerits – Typ UNIT-III Need for Final Investment – accounting and UNIT-IV Theory of Prod	rdinating pes of (Ov Industr nce – Typ Preparat d significa Produc duction F	Controlling - Scope of vinership) of a firm Merits ial Finance pes of finance - Sources ion of Trading, Profit a ince of each types. tion Management Function - Types of Prod	Managem and Dem of financ nd loss A uction M	nent – erits. e – Ty Accour erits a	pes of and and nd De	Periods: 9 Investment Balance S Periods: 9 merits — Pr	ganising, ation Me t – Evalu heet – i	uation of types of	CO3
Directing, Coo Demerits – Typ UNIT-III Need for Final Investment – accounting and UNIT-IV Theory of Pro- Routing – Sche	rdinating pes of (Ov Industr nce — Typ Preparat d significa Produc duction F eduling —	Controlling - Scope of venership) of a firm Merits ial Finance oes of finance - Sources ion of Trading, Profit a nace of each types. tion Management Function - Types of Prod Material Control Concept	Managem and Dem of financ nd loss A uction M	nent – erits. e – Ty Accour erits a	pes of and and nd De	Periods: 9 Investment Balance S Periods: 9 merits — Pr	ganising, ation Me t – Evalu heet – i	uation of types of	CO3
Directing, Coo Demerits – Typ UNIT-III Need for Final Investment – accounting and UNIT-IV Theory of Pro- Routing – Sche Inspection and	rdinating pes of (Overline) Industrence — Type Preparate disignificate Produce duction Feduling — Dispatch	Controlling - Scope of venership) of a firm Merits ial Finance bes of finance - Sources ion of Trading, Profit a nace of each types. tion Management function - Types of Prod Material Control Concept ness.	Managem and Dem of financ nd loss A uction M	nent – erits. e – Ty Accour erits a	pes of and and nd De	Periods: 9 Investment Balance S Periods: 9 merits — Pressurement	ganising, ation Me t – Evalu heet – t rocess Pla of Produ	uation of types of	CO3
Directing, Coo Demerits – Typ UNIT-III Need for Final Investment – accounting and UNIT-IV Theory of Prod Routing – Sche Inspection and UNIT-V	rdinating pes of (Ov Industr nce — Typ Preparate disignificate Product duction Feduling — Dispatch Market	Controlling - Scope of venership) of a firm Merits ial Finance ses of finance - Sources sion of Trading, Profit a since of each types. Ition Management Function - Types of Prod Material Control Concept ses. Iting Management	Managem and Dem of financ nd loss A uction M ts of Prod	erits. e – Ty Accour erits a uctivit	pes of nt and nd De y – Me	Periods: 9 Periods: 9 Periods: 9 merits — Pressurement Periods: 9	ganising, ation Me t – Evalu sheet – t occess Pla of Produ	uation of types of anning – uctivity –	CO3
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Directing, Coo Demerits – Typ UNIT-III Need for Final Investment – accounting and UNIT-IV Theory of Prod Routing – Sche Inspection and UNIT-V Core Concepts Markets – Price	rdinating pes of (Over Industrate — Type Preparate designificate duction Feduling — Dispatch Market ing and reference in the market in the mar	Controlling - Scope of venership) of a firm Merits ial Finance Des of finance - Sources ion of Trading, Profit a nace of each types. Ition Management Function - Types of Prod Material Control Concept ness. Iting Management Setting -O Needs - Wants related factors - Channels	of finance of finance of loss of uction Materials of Products of Products of Demai	erits. e — Ty Accour erits a uctivit	pes of and De y — Me	Periods: 9 Investment Balance S Periods: 9 merits — Pressurement Periods: 9 g Vs Selling	ganising, ation Me t - Evalu heet - 1 cocess Pla of Produ	uation of types of anning – uctivity –	CO3
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Directing, Coo Demerits – Typ UNIT-III Need for Finan Investment – accounting and UNIT-IV Theory of Proc Routing – Sche Inspection and UNIT-V Core Concepts Markets – Pric Research Vs M Lecture Period Reference Boo 1. Varshney N	rdinating pes of (Over Industration Preparated Signification Production Production Production Market ing and rearketing arketing is: 45	Controlling - Scope of vinership) of a firm Merits ial Finance Des of finance - Sources tion of Trading, Profit a since of each types. Ition Management Function - Types of Prod Material Control Concept ies. Iting Management Reting -0 Needs - Wants elated factors - Channels Research. Tutorial Periods: - Ti, Managerial Economics,	Managem and Dem of finance nd loss of loss of Prod — Demais of Distribution of Distribution of Practical Practical Section of Distribution o	erits. e – Ty Accour erits a uctivity al Perio	pes of and De y – Me Proi	Periods: 9 Investment Balance S Periods: 9 merits — Pressurement Periods: 9 g Vs Selling motion Adv	ganising, ation Me t – Evalu cheet – f cocess Pla of Produ g – Produ	uation of types of anning – uctivity – ucts and – Market	CO3
Directing, Coo Demerits – Typ UNIT-III Need for Finan Investment – accounting and UNIT-IV Theory of Proc Routing – Sche Inspection and UNIT-V Core Concepts Markets – Pric Research Vs M Lecture Period Reference Boo 1. Varshney N 2. Dutt & Sur	rdinating pes of (Over Industrate — Type Preparate disignificate duction Feduling — Dispatch Marketing and rearketing sets 45 pks	Controlling - Scope of vinership) of a firm Merits ial Finance oes of finance - Sources ion of Trading, Profit a ince of each types. Ition Management ince - Types of Prod Material Control Concept ies. Iting Management ince - Channels Research. Tutorial Periods: - Ti, Managerial Economics, and an Economy, S Chand & Store of the support of the sup	Managem and Dem of finance nd loss of Production Managem uction Mass of Production Mass of Distribution Mass of Distribution Mass of Practical Mass of Production Mass of Practical Mass	erits. e – Ty Accour erits a uctivit al Perio & Co, I / Delhi	pes of and De y — Mearketin — Proposes: -	Periods: 9 Investment Balance S Periods: 9 merits — Pressurement Periods: 9 g Vs Selling motion Adv T elhi, 2011.	ganising, ation Me t - Evalu heet - f cocess Pla of Produ g - Produ ertising -	uation of types of anning – uctivity – ucts and – Market	CO3
Directing, Coo Demerits – Typ UNIT-III Need for Finan Investment – accounting and UNIT-IV Theory of Prod Routing – Sche Inspection and UNIT-V Core Concepts Markets – Pric Research Vs M Lecture Period Reference Boo 1. Varshney N 2. Dutt & Sur	rdinating pes of (Over Industrate — Type Preparate disignificate duction Feduling — Dispatch Marketing and rearketing sets 45 pks	Controlling - Scope of vinership) of a firm Merits ial Finance Des of finance - Sources tion of Trading, Profit a since of each types. Ition Management Function - Types of Prod Material Control Concept ies. Iting Management Reting -0 Needs - Wants elated factors - Channels Research. Tutorial Periods: - Ti, Managerial Economics,	Managem and Dem of finance nd loss of Production Managem uction Mass of Production Mass of Distribution Mass of Distribution Mass of Practical Mass of Production Mass of Practical Mass	erits. e – Ty Accour erits a uctivit al Perio & Co, I / Delhi	pes of and De y — Mearketin — Proposes: -	Periods: 9 Investment Balance S Periods: 9 merits — Pressurement Periods: 9 g Vs Selling motion Adv T elhi, 2011.	ganising, ation Me t - Evalu heet - f cocess Pla of Produ g - Produ ertising -	uation of types of anning – uctivity – ucts and – Market	CO3
Directing, Coo Demerits – Typ UNIT-III Need for Final Investment – accounting and UNIT-IV Theory of Prod Routing – Sche Inspection and UNIT-V Core Concepts Markets – Pric Research Vs M Lecture Period Reference Boo 1. Varshney N 2. Dutt & Sur 3. Pandey I.M	rdinating pes of (Over Industrate — Type Preparate designificate duction of Market ing and rearketing series 45 mes and aram, Information of Market ing and rearketing series 45 mes and aram, Information of Market ing and rearketing series 45 mes and aram, Information of Market ing and rearketing series 45 mes and aram, Information of Market ing and rearketing series 45 mes and aram, Information of Market ing and rearketing series 45 mes and aram, Information of Market ing and rearketing series 45 mes and	Controlling - Scope of vinership) of a firm Merits ial Finance oes of finance - Sources ion of Trading, Profit a ince of each types. Ition Management ince - Types of Prod Material Control Concept ies. Iting Management ince - Channels Research. Tutorial Periods: - Ti, Managerial Economics, and an Economy, S Chand & Store of the support of the sup	Managem and Dem of finance of finance of loss of loss of Production Materials of Production Materials of Distribution of Distribution of Los	erits. e – Ty Accour erits a uctivity al Perio & Co, I Delhi Easter	pes of and De y — Me Proi	Periods: 9 Investment Balance S Periods: 9 merits — Pressurement Periods: 9 g Vs Selling motion Adv T elhi, 2011. New Delhi,	ganising, ation Me at	uation of types of anning – uctivity – ucts and - Market ods: 45	CO3
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Department : (Computer Science and Engineering	Prograr	nme: E	3.Tech	. (CS)			
Semester : Fifth Course Category Code: PCC Sen							Semester Exam Type:	
Course Code	Course Name	Perio	ds / W	eek	Credit	Credit Maximum N		ks
Course Code	Course Name	L	Т	Р	С	CA	SE	TM
CS215	Platform Technologies	3	-	-	3	40	60	100
Prerequisite	Nil							
	CO1 Relate the basic concepts of	of program	ming la	anguag	ge with C#	ţ		
C	CO2 Develop programs using ob	oject orien	ted pro	gramr	ning conc	epts		
Course	CO3 Build window based applic	ations usin	g C#					
Outcome	CO4 Develop web based applica	ations usin	g .NET	Frame	work			
	CO5 Appraise the .net framewo	rk with its	advan	ced fea	atures			
UNIT-I	Introduction				Periods	: 9		
Introducing C#	, Understanding .NET, overview	of C#, Lit	erals,	Variak	oles, Data	a Types, Op	erators,	
checked and u	unchecked operators, Expressions,	Branching	g, Loop	oing, N	1ethods,	implicit and	explicit	
casting, Consta	ant, Arrays, Array Class, Array List, I	LINQ, Strin	g, Strir	ng Buil	der, Struc	ture, Enume	erations,	CO1
boxing and unl	ooxing.							
UNIT-II	Object Oriented Aspects Of C#				Periods	: 9		
Class, Objects	, Constructors and its types, inh	neritance,	prope	rties,	indexers,	index over	loading,	
polymorphism	, sealed class and methods, interf	ace, abstra	act clas	ss, abs	tract and	interface, o	perator	CO2
overloading, d	elegates, event handling, lambdas,	exception	handli	ng, Th	reading, (C# best pract	ices.	
UNIT-III	Application Development on .Ne	t			Periods	: 9		
Building windo	ows application, Creating our ow	n window	form	s with	events a	and controls	s, menu	
creation, inhe	riting window forms, SDI and M	1DI applica	ation,	Dialog	Box(Mo	dal and Mo	odeless),	соз
accessing data	with ADO.NET, Dataset, typed da	taset, Data	a Adap	ter, ha	andling ex	ceptions, va	alidating	
controls, trans	actions, connection pooling, windo	ws applica	tion co	nfigura	ation.			
UNIT-IV	Web Based Application Developr				Periods			·
-	web application with web forms,				_			
-	gement techniques, web.config, cr	eating we	b servi	ices, h	andling ti	ransaction, I	handling	CO4
exceptions.	Ţ				Ŧ			
UNIT-V	CLR And .Net Framework	Periods: 9						T
	ersioning, Attributes, reflection, vie	ewing meta	a data,	type	discovery	, reflection (on type,	CO5
marshalling, Re		<u>-</u>						
Lecture Period	<u>i</u>	Practic	al Perio	ods: -		Total Perio	ds: 45	
Reference Boo								
	hildt, The Complete Reference: C# 4	•		•		_ •		_
	Nagel, Bill Evjen, Jay Glynn, Karli	Watson a	ind M	organ	Skinner,	Professional	I C# 201	2 and
	ohn Wiley & Sons Inc., 2012.	_			· · · - ·			
3. Ian Griffith	s, Matthew Adams and Jesse Libert	ty, Progran	nming	C# 4.0,	Sixth Edi	tion, O'Reilly	y, 2010.	

- Ian Griffiths, Matthew Adams and Jesse Liberty, Programming C# 4.0, Sixth Edition, O'Reilly, 2010.
 Paul Deitel and Harvey Deitel, C# 6 for Programmers, Sixth Edition, Deitel® Developer Series, 2016.

Department :	Comput	er Science and Engineering	Progra	nme: E	3.Tech	. (CS)				
Semester :		Course Category Code: PCC Semester Exam						pe: TY		
Course Code	Course Name Periods / Week Credit Maximum Ma								rks -	
Course Code	Cours	e Name	L	Т	Р	С	CA	SE	TM	
CS216	Comp	uter Networks	-	-	3	40	60	100		
Prerequisite	Nil									
	CO1	Demonstrate the software a	nd hardv	vare re	quirer	ments of a	network			
	CO2	Select the appropriate MAC	protocol	for a g	iven n	etwork				
Course	CO3	Evaluation of networking co	nditions	of a ne	etwork					
Outcome	CO4	Propose the solutions to imp	orove the	e end to	o end _l	performan	ce of the n	etwork.		
	CO5	Select various networking application	protocol	s requ	iired f	or the de	evelopment	t of a no	etwork	
UNIT-I	Physi	cal Layer				Periods:	9			
		- Network Hardware – Softv	ware – R	eferen	ce Mo	<u>i</u>		Basis For		
		nsmission Media – Wireless							CO1	
		Modulation – Baseband Tran				Ü	•			
Unit-II		Link Layer				Periods:	9			
Data Link Laye	er – Des	ign Issues – Services - Fram	ing - Err	or Con	trol - F	low Contr	ol - Error D	Detection		
and Correctio	n Code	s – Hamming Code – Cyclic	Redund	ancy C	heck -	- Data Lin	k Layer Pr	otocols -		
Simplex Proto	col – Sl	ding Window Protocols. Med	dium Acc	ess Co	ntrol S	Sublayer –	Channel A	Allocation		
Problem – Mu	ıltiple A	ccess Protocols – ALOHA – C	SMA Pro	tocols	- Colli	sion-Free I	Protocols -	Wireless	CO2	
LAND Dunteral	E+hor				Sublay	or Drotos		ا. ا ما ما		
		net MAC Sublayer Protocol			•			•		
		net MAC Sublayer Protocol : Bridges - Learning Bridges -			•			•		
Switching - L Gateways.	Ises of I	Bridges - Learning Bridges -			•	idges, Swi	tches, Rou	•		
Switching - U Gateways. Unit-III	Ses of Setw	Bridges - Learning Bridges - ork Layer	Repeato	ers, Hu	ıbs, Br	idges, Swi	tches, Rou	ters, and		
Switching - L Gateways. Unit-III Network Laye	Netw	Bridges - Learning Bridges - ork Layer sign Issues — Routing Algori	Repeato	The C	ıbs, Br Optima	idges, Swi Periods: lity Princip	tches, Rou 9 ple - Short	ters, and		
Switching - L Gateways. Unit-III Network Layer Algorithm - Fl	Netword Description	Bridges - Learning Bridges - ork Layer sign Issues — Routing Algori - Distance Vector Routing - Li	Repeate thms - nk State	The C	ptima Con	Periods: lity Principagestion Co	tches, Rou 9 ole - Short ontrol – Ap	ters, and test Path proaches	CO3	
Switching - L Gateways. Unit-III Network Layer Algorithm - Fl - Traffic-Awar	Network - Descriptions - Description	Bridges - Learning Bridges - ork Layer sign Issues — Routing Algori - Distance Vector Routing - Ling ng - Admission Control - Traf	Repeato thms - nk State ffic Throt	The C Routing -	ptima Con	Periods: lity Principagestion Co	tches, Rou 9 ole - Short ontrol – Ap	ters, and test Path proaches		
Switching - L Gateways. Unit-III Network Laye Algorithm - FI - Traffic-Awar Tunneling - In	Network Designation Network Ne	Bridges - Learning Bridges - ork Layer sign Issues — Routing Algori - Distance Vector Routing - Ling ng - Admission Control - Train ork Routing - IPv4 - IP Addres	Repeato thms - nk State ffic Throt	The C Routing -	ptima Con	Periods: lity Principagestion Co	tches, Rou 9 ole - Short ontrol – Ap – Internety	ters, and test Path proaches		
Switching - L Gateways. Unit-III Network Layer Algorithm - Fl - Traffic-Awar Tunneling - Int Unit-IV	Netwer – Descooling e Routing ternetw	Bridges - Learning Bridges - ork Layer sign Issues — Routing Algori - Distance Vector Routing - Ling ng - Admission Control - Trafork Routing - IPv4 - IP Addres port Layer	Repeato thms - nk State ffic Throt ses – IPv	The C Routing ttling -	optima Con Load	Periods: lity Principagestion Co Shedding Periods:	9 ole - Short ontrol – Ap – Internety	ters, and test Path proaches working -		
Switching - L Gateways. Unit-III Network Layer Algorithm - Fl - Traffic-Awar Tunneling - Int Unit-IV Transport Lay	Network - States of Metwork - States of Metwor	Ork Layer Sign Issues – Routing Algori - Distance Vector Routing - Ling ork Routing - IPv4 - IP Addres port Layer Services - Berkeley Sockets	Repeato thms - nk State ffic Throt ses – IPv -Examp	The C Routing - ttling - 6.	optima g. Con Load	Periods: lity Principagestion Co Shedding Periods: ts of Tra	9 ole - Short ontrol – Ap – Interneto 9 nsport Pro	test Path proaches working -		
Switching - L Gateways. Unit-III Network Layer Algorithm - FI - Traffic-Awar Tunneling - Int Unit-IV Transport Lay Addressing - C	Netwer – Descriptions of the Netwer – Stanford of the Netwerland o	Ork Layer Sign Issues – Routing Algori - Distance Vector Routing - Ling - Admission Control - Trans Ork Routing - IPv4 - IP Addres Port Layer Services - Berkeley Sockets On Establishment - Connection	Repeate thms - nk State ffic Throt ses – IPv -Examp on Releas	The C Routing - ttling - 6. le – E	optima g. Con Load Elemen w Con	Periods: lity Principagestion Co Shedding Periods: its of Tra trol and Bu	9 ole - Short ontrol - Ap - Internety 9 nsport Pro	ters, and test Path proaches working - otocols — DP — TCP:		
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Semester : Fifth			Course			Semester Exam Typ			
Course Code	Cours	se Name		ds / W	·	Credit		Maximum Marks	
			L	Т	Р	С	CA	SE	TM
CS217	1	mata Theory and oiler Design	3	1	-	4	40	60	100
Prerequisite	Nil	mer Design			<u> </u>	<u> </u>		<u> </u>	<u> </u>
rierequisite	IVII	Understand the equivalence	n hotwoo	non	dotorn	ainictic fin	ito stato au	ıtomata a	nd
	CO1	deterministic finite state au	tomata						
Course	CO2	Understand the equivalence pushdown automata	e betweer	n conte	ext-fre	e gramma	irs and non	ı-determir	nistic
Outcome	соз	Appreciate the power of the describes computation, effe	_				automato	n, that	
	CO4	Able to design and impleme	ent the ph	ases o	f com	oilers			
	CO5	Understand and apply code			······································		on technia	iues	
UNIT-I		Automata and Regular Expr				Periods:		1	
_		nd Regular expressions, Dete		and N	lon-De	<u>.i</u>		utomata	
Finite Automa	ta with	ε-moves, Equivalence of NF	A and DF	۹, Min	imizat	ion of Fin	ite Automa	-	CO:
way Finite Aut	T	Moore and Mealy machines,		ons of	Finite	Automata) .		
UNIT-II		mars, PDA and Turing Mach				Periods:			- -
•	-	Properties of regular sets, Pu			_	_	_		
Grammars – D	Perivation	on trees, Ambiguous and una	ambiguou	s gram	nmars	,Chomsky	Normal Fo	orms and	CO
Greibach Norr	nal For	ms. Pushdown Automata and	d Context	-Free I	Langua	ages. Turir	ng machine	es (TM) –	CO
Turing Machin	e const	ructions – Storage in finite co	ntrol – Va	ariatio	ns of T	Ms.			
UNIT-III	Phase	es of Compiler and Lexical An	alyzer			Periods:	12		
Compilers - A	nalysis	of the source program - The	phases o	of a co	mpile	r - Cousin	s of the co	ompiler -	
Compiler cons	tructio	n tools - Lexical Analysis - T	he role o	f the I	lexical	analyzer	Input bu	uffering -	CO
Specification of	of toker	s - Recognition of tokens -A l	language	for spe	ecifyin	g lexical a	nalyzers - I	Design of	CO
a lexical analy:	zer.								
UNIT-IV	Synta	x Analysis and Syntax-Direct	ed Transl	ation		Periods:	12		
The role of th	e parse	r - Context-free grammars -	Top-dowr	parsi	ng - Bo	ottom-up	parsing - C	perator-	<u> </u>
	•	- automatic construction of	•	•	_	•		•	
	_	ntax-directed definitions -Cor		•	•	•		•	CO
•	•	ns -L-attributed definitions - A		•			•		
UNIT-V		mediate Code Generation and				Periods:			<u>.L</u>
	<u>L</u>	es-Declarations -Assignment				<u> </u>		atching -	T
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		ns - The DAG representation	_			_	_		CO!
		r allocation and assignmen						-	-50.
Generating co	_			اناط		CCP11	Jp		
Lecture Period	•••••	Tutorial Periods: 15	Practica	al Perio	ods		Total Peri	ods: 60	<u> </u>
Reference Boo		i aconan choas. 15	i ractic	a C. II	-uJ	<u>İ</u>	. Otal i Cili		
		and Jeffrey D. Ullman, Introd	luction to	Autor	nata T	heory La	ngilages an	nd Compu	tatio
	•	rson Publishers, 2007.	idetion to	AULUI	nata 1	neory, Lai	iguages di	ia compu	tatiOi
2. Alfred V.	Aho, M	onica S. Lam, Ravi Sethi and	Jeffrey D	. Ullma	an, Co	mpilers: P	rinciples, 1	Technique	s, an
Tools, Sec	ond Edi	tion, Pearson Education, Inc,	2006.						
3. Michael Si	pser, In	troduction to the Theory of C	Computati	ons, T	homsc	n Learnin	g, 1997.		
1 John C 14	artin In	traduction to Languages and	the Thee	a, of C		: TN/	11 2002		

4. John C. Martin, Introduction to Languages and the Theory of Computation, TMH, 2003.

CS218 Platform Technologies Laboratory Prerequisite Nil CO1	Department : 0	Programme: B.Tech. (CS)								
Course Code Course Name L T P C CA SE TM Prerequisite Nil Course Outcome Course Outcome CO3 Apply object oriented concepts to write C# programs CO4 Develop and analyze web based applications through C# Co4 Develop and analyze web based application development Programs using basic concepts like arrays, LINQ, strings, enumeration, etc. C Class, constructers, properties, indexers Inheritance, Polymorphism Delegates, Exception handling Multi-threading 3. Develop window based applications to understand and demonstrate: Windows application for any automation process Menu, SDI and MDI concepts with essential components Database connectivity with ADO Data validation 4. Developing web based applications to understand: Web Application using ASP.Net C Creation of Web services Accessing data from XML resources Reflection Remoting Lecture Periods: - Tutorial Periods: - Practical Periods: 45 Total Periods: 45 Reference Books	Semester : I	Course Category Code: PCC Semester Exam T								
CS218 Platform Technologies 3 1.5 40 60 100 Prerequisite Nil CO1 Able to develop programs using c# language constructs CO2 Apply object oriented concepts to write C# programs CO3 Build window applications using .net framework using C# CO4 Develop and analyze web based applications through C# CO5 Grasp .net advanced concepts through application development Programming Using C# 1. Programs using basic concepts like arrays, LINQ, strings, enumeration, etc. C 2. Programs using the following concepts: Class, constructers, properties, indexers Inheritance, Polymorphism Delegates, Exception handling Multi-threading Multi-threading C 3. Develop window based applications to understand and demonstrate: Windows application for any automation process Menu, SDI and MDI concepts with essential components C Database connectivity with ADO Data validation Developing web based applications to understand: Web Application using ASP.Net C Creation of Web services Accessing data from XML resources Accessing data from XML resources Reflection Remoting Remoting C Cotation of Web services Accessing data from XML resources Reflection Remoting Remoting Remoting Remoting Reflection Remoting Remoting Reflection Remoting Reflection Remoting Remoting	Course Code	Course l	Name	Per	iods /	Week	Credit	Ma	ximum N	1arks
Laboratory	Course Coue	Course	varrie	L	Т	P	С	CA	SE	TM
Prerequisite Nil CO1 Able to develop programs using c# language constructs COurse Outcome CO2 Apply object oriented concepts to write C# programs CO3 Build window applications using .net framework using C# CO4 Develop and analyze web based application development Programming Using C# 1. Programs using basic concepts like arrays, LINQ, strings, enumeration, etc. 2. Programs using the following concepts: Class, constructers, properties, indexers Inheritance, Polymorphism Delegates, Exception handling Multi-threading 3. Develop window based applications to understand and demonstrate: Windows application for any automation process Menu, SDI and MDI concepts with essential components Database connectivity with ADO Data validation 4. Developing web based applications to understand: Web Application using ASP.Net Creation of Web services Accessing data from XML resources Programs using to learn advanced concepts: Assemblies Reflection Remoting Lecture Periods: - Tutorial Periods: - Practical Periods: 45 Total Periods: 45 Reference Books	CS218	1	_	_	_	3	1.5	40	60	100
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Course Outcome CO2	Prerequisite	 								
CO3 Build window applications using .net framework using C# CO4 Develop and analyze web based applications through C# CO5 Grasp .net advanced concepts through application development Programming Using C# 1. Programs using basic concepts like arrays, LINQ, strings, enumeration, etc. 2. Programs using the following concepts:		CO1	Able to develop program	s using	c# lar	nguage c	onstructs			
Outcome CO3 Build window applications using .net framework using C# CO4 Develop and analyze web based applications through C# CO5 Grasp .net advanced concepts through application development Programming Using C# 1. Programs using basic concepts like arrays, LINQ, strings, enumeration, etc. 2. Programs using the following concepts:	Course	CO2	Apply object oriented cor	ncepts	to wr	ite C# pro	ograms			
CO4 Develop and analyze web based applications through C# CO5 Grasp .net advanced concepts through application development Programming Using C# 1. Programs using basic concepts like arrays, LINQ, strings, enumeration, etc. Ci 2. Programs using the following concepts: • Class, constructers, properties, indexers • Inheritance, Polymorphism • Delegates, Exception handling • Multi-threading 3. Develop window based applications to understand and demonstrate: • Windows application for any automation process • Menu, SDI and MDI concepts with essential components • Database connectivity with ADO • Data validation 4. Developing web based applications to understand: • Web Application using ASP.Net • Creation of Web services • Accessing data from XML resources 5. Programs using to learn advanced concepts: • Assemblies • Reflection • Remoting Lecture Periods: - Tutorial Periods: - Practical Periods: 45 Total Periods: 45 Reference Books		CO3	Build window application	ıs using	g .net i	framewo	rk using (C#		
Programming Using C# 1. Programs using basic concepts like arrays, LINQ, strings, enumeration, etc. 2. Programs using the following concepts:	Outcome	CO4	Develop and analyze web	based	d appli	cations t	hrough C	:#		
1. Programs using basic concepts like arrays, LINQ, strings, enumeration, etc. 2. Programs using the following concepts:		CO5	Grasp .net advanced con	cepts t	hroug	h applica	ition dev	elopment		
2. Programs using the following concepts: Class, constructers, properties, indexers Inheritance, Polymorphism Delegates, Exception handling Multi-threading 3. Develop window based applications to understand and demonstrate: Windows application for any automation process Menu, SDI and MDI concepts with essential components Database connectivity with ADO Data validation 4. Developing web based applications to understand: Web Application using ASP.Net Creation of Web services Accessing data from XML resources 5. Programs using to learn advanced concepts: Assemblies Reflection Remoting Lecture Periods: Tutorial Periods: - Practical Periods: 45 Reference Books	Programming	Using C#								
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3. Develop window based applications to understand and demonstrate: • Windows application for any automation process • Menu, SDI and MDI concepts with essential components • Database connectivity with ADO • Data validation 4. Developing web based applications to understand: • Web Application using ASP.Net • Creation of Web services • Accessing data from XML resources 5. Programs using to learn advanced concepts: • Assemblies • Reflection • Remoting Lecture Periods: - Tutorial Periods: - Practical Periods: 45 Reference Books	 Delega 	ites, Exce	otion handling							CO
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The Chert School The Complete Reference: Lag to 1313 Ministry Am 7117			Complete Reference: C# 1	Λ Tata		row Hill	2012			

- 3. Ian Griffiths, Matthew Adams and Jesse Liberty, Programming C# 4.0, Sixth Edition, O'Reilly, 2010.
- 4. Paul Deitel and Harvey Deitel, C# 6 for Programmers, Sixth Edition, Deitel® Developer Series, 2016.

Department : (rtment : Computer Science and Engineering			Programme: B.Tech. (CS)						
Semester :	: Fifth Course Category Code: PCC Semester Exam Type						e: LB			
Course Code	Course Name Periods / Week							ximum Marl	< S	
	Course Marrie			Т	Р	С	CA	SE	TM	
CS219	· †	outer Networks Laboratory	-	-	3	1.5	40	60	100	
Prerequisite	Nil									
	CO1	Apply the existing algorithm								
Course	CO2	Experiment with the networ			n enviro	nment				
Outcome	CO3	Experiment with socket pro								
	CO4	Develop various application								
	CO5	Design the necessary securit	.							
1. Impleme	ntation	of a Program For CRC and Ha	ammir	ng Cod	e for Err	or Handlin	g.		CO1	
2. Writing a	Code 1	or Simulating Sliding Window	/ Proto	ocols.					CO1	
of the Fo A) Sho B) Floc C) Link	llowing rtest Pa ding	(Using NS2/Glomosim/ Your Routing Protocols: oth Routing			J	,			CO2	
4. Impleme	ntation	of a socket program for Echo	/Ping	/Talk c	omman	ds.			CO3	
	of a So b. UD	cket between two Computers P	and I	Enable	File Tra	nsfer betw	een them	1.	соз	
6. Impleme	ntation	of a Program for Remote Cor	nman	d Exec	cution (T	wo M/Cs N	May Be Us	sed).	CO3	
7. Create a	Socket	For HTTP for Web Page Uploa	ad & D	ownlo	oad.				CO4	
8. Write a p	rogran	n to implement RCP. (Remote	Captu	ıre Scr	een)				CO4	
9. Impleme	entatio	n of Public Key Encryption.							CO5	
10. Implem	entatio	n of TELNET. (Remote Login)							CO4	
11. Implem	entatio	n of an Authentication algorit	hm to	acces	s a File.				CO5	
12. Simulat			•••••						CO5	
Lecture Period	ecture Periods: - Tutorial Periods: - Practical Periods: 45 Total Periods: 45							L		

Reference Books

- 1. Tanenbaum, A.S. and David J. Wetherall, Computer Networks, Fifth Edition, Prentice Hall, 2011.
- 2. Larry L. Peterson and Bruce S. Davie, Computer Networks- A System Approach, Fifth Edition, Elsevier, 2012.
- 3. Stallings, Data and Computer Communications, Tenth Edition, Prentice Hall Int. Ed., 2013.
- 4. James F. Kurose and Keith W. Ross, Computer Networking: A Top-Down Approach Featuring the Internet, Third Edition, Pearson Education, 2006.

Department : Humanities & Social Sciences			Programme: B.Tech.							
Semester : I	Fifth		Course	e Categ	gory Co	de: MCC	Semeste	r Exam Ty	pe: -	
Carrage Cada	C	o None	Perio	ds / W	/eek	Credit	Ма	aximum N	1arks	
Course Code	Cours	se Name	L	Т	Р	С	CA	SE	TM	
SH203		nce of Indian Traditional Vledge	3	-	-	_	-	-	-	
Prerequisite	Nil				·					
Course Outcome	CO1	Understand connect up a scientific perspective	nd explaii	n basic	s of Ind	dian traditi	onal knov	wledge in	modern	
UNIT-I						Periods: 2	!3			
Basic structure and holistic he		lian knowledge system, Mo re.	odern scie	ence ar	nd Indi	an knowle	dge syste	m, Yoga	CO1	
UNIT-II						Periods: 2	!2			
Philosophical t	raditio	n, Indian linguistic tradition,	Indian ar	tistic t	raditio	า.			CO1	
Lecture Period	e Periods: 45 Tutorial Periods: - Practical Periods: - Total Periods: 45							ds: 45		
Reference Boo	oks									
1. N. Sivaram		nan (Ed.) Culteral Heritage o	of India –	Course	e Mate	ral, Bharat	iya Vidya	Bhavan, I	Mumbai,	

- Fifth Edition, 2014.
- 2. Swami Jitatmanand, Modern Physics and Vedanta, Bharatiya Vidya Bhavan.
- 3. Fritz of Capra, Tao of Physics.
- 4. Yoga Sutra of Patanjali, Ramakrishna Mission, Kolkatta.
- 5. R.N. Jha, Science of Consciousness Psychotherapy and yoga Practices, Vidyanidhi Prakashan, Delhi 2016.
- 6. S.C Chaterjee and D.M Datta, An Introduction to Indian Philosophy, University of Calcutta, 1984.
- 7. Krishna Chaitanya, Arts of India, Abhinav Publications, 1987.