Guru Nanak Dev Engineering College, Ludhiana

G	Department of	Information Technology	The same of the sa
	B.Tech.(IT)	Semester	3
Program	ESIT-101	Subject Title	DCLD
Subject Code Mid Semester Test (MST)	1	Course Coordinator(s)	Harpreet Kaur
No.	24	Time Duration	1 hour 30 minutes
Max. Marks Date of MST		Roll Number	

Q. No.	Question Question	COs, RBT level	Marks
01	Justify the use of Gray codesin Digital electronics.	CO2, L2	2
Q1 Q2	Explain De Morgan's theorem.	CO2, L4	2
Q3	What are Universal gates? Realize following gates using	CO3, L3	2+2
40	Universal gates		
	a) Ex-OR b) OR		
Q4 ·	Describe SOP and POS forms? How to convert one form to	CO2, L4	4
	another.		
Q5	Convert following:	CO1, L4	2+2
	a) $(218.6)_{10} = ()_{16}$		
	b) $(110100.1101)_2 = ()_8$		
Q6	a) Minimize following Boolean function using K-Map.	CO2,CO3,	4+4
	f = m(1,4,5,6,11,12,13,14)	L5	
	b) Minimize following Boolean function using Boolean		
	laws		100000
	F = AB + (AC)' + AB'C(AB + C)		

Course Outcomes (CO) Students will be able to

1	To understand and examine the structure of various number systems and its application in digital design
2	Utilize knowledge of number systems, codes and Boolean algebra to the analysis and design of digital logic circuits
3	Formulate and employ a Karnaugh Map to reduce Boolean expressions and logic circuits to their simplest forms
4	Identify concepts and terminology of digital logic circuits
5	Ability to understand, analyze and design various combinational and sequential circuits
6	To develop skill to build, and troubleshoot digital circuit

RBT Classification		hinking Levels (I	LOTS)	Higher Ord (HOTS)	ler Thinking	Levels
RBT Level Number	L1	L2	L3	L4	L5	L6
RBT Level Name	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating

		Guru Nanak Dev Department o						
Program		B.Tech.(IT)	Semeste		3			
Subject C	Code	ESIT-101 Subject Title			Control of the Contro	DCLD		
	ester Test (MST)	2				Harpreet Kaur		
Max. Mai	rks	24 Time Duration		1 hor	ir 30 minutes			
Date of MST			Roll Nu		1 110			
Note: Atte	empt all questions							
Q. No.			stion			COs, RBT level	Mark	
Q1	Differentiate Co	ombinational an	d Sequenti	al circuits.		CO5, L2	2	
Q2]	Describe Race a remove it.	around condition	n in JK Fli _l	Flop and H	How to	CO5, L4	2	
8	ireas of Encode					CO5, L2	3+1	
Q4 I	llustrate the ne	ed and working	of Carry L	ook ahead A	Adder.	CO5, L3	4	
	and implement	erence between SR Flip Flop.				CO5, L4	2+2	
Q6	Design 2 bit Sy	nchronous Up c	hronous Up counter using JK flip flop.			CO5,	8	
Course O Students v	utcomes (CO) will be able to				A A	CO6, L5		
1	To understand and	d examine the stru	cture of vario	ous number s	vstems an	d its application	on in	
of	digital logic circui	of number systems	s, codes and	Boolean alge	bra to the	analysis and	design	
Fo	rmulate and empl	oy a Karnaugh M	ap to reduce	Boolean eyr	ressions	and la		
Idei	ir simplest forms	dtorminal		- Touri CA		and logic circ	uits to	
Abil	ity to understand	d terminology of	digital logic	circuits				
Tod	evelon skill to he	, analyze and des	ign various	combination	al and sed	quential circu	ite	
			isot digital	circuit		, and circu	163	
T ssification	Lower Order	Thinking Levels	(LOTS)	Higher Or	der Thin	king Levels (НОТО	
Level aber	L1	L2	L3	L4 .	L5			
Level	Remembering	Understanding				1	.6	

		Guru	Nanak Dev En	gineering C	ollege, Lud	niana				
		Γ	Department of I	nformation	Technology	V				
Program	1	B.Tech.		Semester	0,	3 rd				
Subject	Code	PCIT-10	01 5	Subject Title Data Struct		Structures				
•				subject Titi		Data S	Data Structures			
Mid Sen	nester Ex	am 1	(Course Coordinator(s)		Parmir	adhwa			
(MSE) N	No.	Aug-De	c, 2023				Parminder Kaur Wadh			
Max. M	arks	24		Time Durat	ion	1 hour	1 hour 30 minutes			
Note: At	ttempt all	questions				1 11001				
Hote. A	ttempt an	questions		Uni	v Roll No					
Q. No.			Questi		v Kon No			Man		
~~			Questi	OII			COs, RBT level	Mark		
(Q.1.)	Interpre	et the efficiency	y of binary searc	h algorithm.			CO1, L2	2		
02										
Q.2.	Create	the following c	circular queue :-				CO2, L6	2		
		-100 -2		66 90	30					
				30 30	30					
1										
(Q.3,)	Illustra	ite the methods	to implement pr	iority queue.			CO2, L3	4		
(Q.4.)	Demor	nstrate the way	s of representing	a multidim	ensional arra	av in the	CO3, L3	4		
		ry of the comp					, , , , ,			
Q.5)	Design	n a recursive al	gorithm to solve	Fower of Har	noi problem		CO6, L6	4		
			to implement the							
Q:6.	(i)		t have "data" part			naracter	CO2, L6	8		
			'next" part to stor							
			er variable "HEA							
	1	node.								
			, 'M', 'E', 'S',	'B', 'O', 'N	l', 'D' in Li	inked list				
			upy nine differer							
			ntent of the linke		user.		-			
Course O		(CO) Students v	STATE OF THE PARTY							
				Janau naina I	Dia O notation	2				
CO1 CO2			lgorithms for effic algorithms to sol							
				•						
CO3			ructures to solve n	nulti-disciplin	ary projects.					
CO4 CO5		ne templates for	rious data structur	es						
CO6	Demonst	trate the reusabi	lity of data structu	res for imple	menting comp	olex iterati	ve problems			
								TC		
RBT		ower Order Tl	ninking Levels (L	018)	Higher Ord	ier I ninki	ng Levels (HO	(13)		
Classifica RBT Lev	THE RESERVE OF THE PERSON NAMED IN COLUMN 1	L1	L2	L3	1.4	L5	L	6		
RBT Lev		emembering	Understanding	Applying	Analyzing	Evaluatii	ng Creating			
EDI LEV	CI IN	Cinoniooning				1				

RBT Level Name

Prog	ram	B.Tech.(IT)	v Engineering College, Lud Semester	3 rd				
-	ect Code	PCIT-101	Subject Title	Data Structures				
MSE	Control by the Control of the Contro	MSE-2, Aug-Dec, 2023	Course Coordinator	Er. Parminder K	Caur Wac	lhwa		
	. Marks	24	Time Duration	1 hour 30 minute				
Q. No.			iestion		COs, RBT level	Marks		
Q.1.	Demonstrat $f(n)$ to search	e how the depth of a Binary sh an item in it (where <i>n</i> are th	Search Tree effects the ave e number of items).	erage running time	CO1, L3	2		
Q.2.	Appraise th	e efficiency of open-hashing a	as a technique to resolve co		CO2, L5	2		
Q.3)	Consider the	e following graph and find the	minimum path from Node	e A to Node E.	CO3, L3			
Q.4.	Demonstrat following u to create sh		lying the shell sort algo der (use <i>Donald Shell's ch</i>	rithm to sort the hoice of increment	CO6, L3	4		
Q.5.	operations a	ne following AVL search tree. are applied one after the other 0 (ii) Insert 14 (iii) Insert 88	(not independently). (iv) Delete 22 (v) Delete		CO3, L6			
			3	33,	0			
su fo Re H(Su eff tec	lippose the Fillowing hash ecords: P (k): 2 http://pose.the.r.	Q R A B C V	Y W X D F 11 14 14 15 table T in the above o	rder. Evaluate the collision resolution	CO2, L5	8		

	Gu		ngineering College, Ludhia	ша		
		TOTAL PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROP	Information Technology		•	
Progr		B.Tech.(IT)	Semester	3		
Subje	ect Code	PCIT-102	Subject Title	Object Oriented Programming using O		ng C++
Mid S No.	Semester Test (MSE)	2nd	Course Coordinator(s)	Prof. I	Harjot Kaur Sachin Bagg	
	Marks	24	Time Duration	AND DESCRIPTION OF THE PERSON NAMED IN	30 minutes	
	of MSE	9 th November, 2023	Roll Number	1 Hour	50 mmates	
Note:	Attempt all questions					
Q. No.		Questio			COs, RBT level	Marks
	division by zero error.		use of a try-catch block to ha		CO2, L3	2
Q2	What are the basic steps	to open and close	a file using file streams in C	++.	CO4, L2	2
in	Write the output of the fol #include <iostream> class MyClass { public: static int count; int id; MyClass() { id = count; count++; } void display() { cout << "Object with } int MyClass::count = 1; int main() { MyClass obj1; MyClass obj2; MyClass obj3; obj1.display(); obj2.display();</iostream>				CO1, L3	4
	obj3.display(); return 0;					

	"I and "call by reference"	CO4, L2	7
Q4	Elaborate at least four differences between "call by value" and "call by reference" with reference to the functions used in the program.	CO2, L6	4
Q5	Design a C++ program that models to state of the calculator to perform operations like addition, subtraction,		
Q6	Develop a C++ program to create a simple application for managing different types of vehicles. Define a base class "Vehicle" with attributes like name, speed, and a of vehicles.	CO6, CO3, L6	8
	virtual function "displayInfo" that displays the basic information. Then, derive two classes, "Car" and "Bike," from the base class, each with their own unique attributes and override the "displayInfo" function in each derived class to provide specific information about the vehicle type. In your program's main function, create objects of both the "Car" and "Bike" classes, and use a loop to display the information of each vehicle using the base class pointer.		
	dents will be able to	1	
i	Understand the basic concepts of classes, objects and methods as well as basic pobject-oriented programming.		
2	Create object oriented design based on the characteristics of an object-oriented language: data abstraction and information hiding, overloading and dynamic bit messages to the methods.	numg of the	
	Apply the concepts of inheritance and relationship among different objects to g		
	Investigate the concept of strings, File Handling and Exception handling of Spe		iming
ASSESSED BY	1 - wing OODs avaging and Project	S.	
	Function on a Multi-disciplinary team by using OOPs experiments and Projects Demonstrate real world applications based on the concepts of OOP in C++		

RBT Classification	Lower Order	ower Order Thinking Levels (LOTS) Higher Order Thinking Levels (I				
RBT Level Number	L1	L2	L3	L4	L5	L6
RBT Level Name	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating

		Guru Nanak Dev Er	ngineering College, Luc	dniana			
		Department of	Information Technolog	3		1 Progr	amming
		B.Tech.(IT)	Semester	- 0	bject (Oriented Progr	0
Progra	m Code	PCIT-102	Subject Title	119	sing C	++	Drof
Subject					of Sac	hin Bagga and	Pioi.
	mester Test (MST) No.	1	Course Coordinato	r(s)	Harjot Kaur 1 hour 30 minutes		
Mid Se	mester lest (1.22)			11			
	. 1	24	Time Duration	1	nour 5		
Max. M	larks	27 September 2023	Roll Number				
Date of	MSI						
- A	ttempt all questions					COs, RBT	Mark
Note: A	diempi an queen-	Questio	n			level	
Q. No.						CO6, L2	2
Q1	List some practical app	plications or scenarios w	here declaring and init	tializing array	ys in	CO0, L2	
Q1	C++ would be a benefit	cial programming approa-	ch.			GO1 7.2	2
Q2	Given a C++ code snip	pet:				CO1, L3	
Q2	int main() {						
	int num1 = 10;						
	int num2 = 0 ;						
	int result = num1 /	num2;					
	std::cout<< "Resul	t: " << result << std::end	1;				
	return 0;						
	}						
4	Identify and explain any	y syntax errors or logical	errors that you will find	d in the code.			
)3	Elahoratethe principles	of structured and ob	piect-oriented developr	ment impact	the	CO1, L2	4
	1	y of software projects in		none impact		001,22	
		a pyramid pattern with u		rowe		CO1, L6	4
		ce of member functions			ic by	CO5, L4	4
		in which you thoroughly				CO3, L4	7
					moer		
		collectively enhance the			and	CO2, L6	8
	Degion a menu-ariven	program that encompass	es all functionalities: S			CO2, L6	0
			Liles warm defined front				
1	prime number checking	. (Make use of concepts	like user-defined functi	ions for the s	tated		
l t	prime number checking two tasks, parameter pas	. (Make use of concepts	like user-defined functi	ions for the s	tated		
ourse Ou	prime number checking two tasks, parameter past atcomes (CO)	. (Make use of concepts	like user-defined functi	ions for the s	tated		
ourse Ou	prime number checking two tasks, parameter pas	. (Make use of concepts	like user-defined functi	ions for the s	tated		
ourse Ou adents wi	prime number checking two tasks, parameter past tcomes (CO) ill be able to	. (Make use of concepts ssing)					
ourse Ou idents wi	prime number checking two tasks, parameter past atcomes (CO) all be able to Understand the basic co	. (Make use of concepts				of object-orien	ted
purse Ou udents wi	prime number checking two tasks, parameter passitcomes (CO) ill be able to Understand the basic coprogramming.	. (Make use of concepts ssing)	s and methods as well a	as basic princ	ciples o		
ourse Ou dents wi	prime number checking two tasks, parameter passificomes (CO) and the control of t	. (Make use of concepts ssing) ncepts of classes, object lesign based on the chara	s and methods as well a	as basic princ	ciples o	ing language:	
purse Ou udents wi	prime number checking two tasks, parameter passificomes (CO) all be able to Understand the basic corogramming. Create object-oriented distraction and informat	. (Make use of concepts ssing) ncepts of classes, object lesign based on the charation hiding, overloading a	s and methods as well a acteristics of an object- and dynamic binding o	as basic princ oriented prog f the messag	gramm es to th	ing language: one methods.	data
purse Ou udents wi	prime number checking two tasks, parameter past atcomes (CO) all be able to Understand the basic corogramming. Create object-oriented distraction and informat Apply the concepts of in	. (Make use of concepts ssing) ncepts of classes, object lesign based on the charation hiding, overloading wheritance and relationsh	s and methods as well a acteristics of an object- and dynamic binding o	as basic princ oriented prog f the messag	gramm es to th	ing language: one methods.	data
purse Ou udents wi	prime number checking two tasks, parameter passet tcomes (CO) all be able to Understand the basic corrogramming. Create object-oriented of bstraction and informat Apply the concepts of inferentiation and aggre	ncepts of classes, object lesign based on the chara ion hiding, overloading a theritance and relationsh gation.	s and methods as well a acteristics of an object- and dynamic binding on the among different obj	as basic princ oriented prog f the messag ects to gener	ciples of grammes to the ate the	ing language: one methods. hierarchies like	data
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purse Ou udents wi p a g II	prime number checking two tasks, parameter passificomes (CO) all be able to Understand the basic corogramming. Create object-oriented distraction and informat Apply the concepts of information and aggreenvestigate the concept of unction on Multi-discippemonstrate real world a	design based on the charation hiding, overloading anheritance and relationsh gation. If strings, File Handling of the charation hiding, overloading anheritance and relationsh gation. If strings, File Handling of the charations based on the charations based on the characteristics.	s and methods as well a acteristics of an object- and dynamic binding or aip among different object and Exception handling OPs experiments and Presconcepts of OOP in Concepts	oriented prog f the messag ects to gener g of Specific rojects.	grammes to the ate the	ing language: one methods. hierarchies like	data ee
purse Ou dents wi	prime number checking two tasks, parameter passificomes (CO) all be able to Understand the basic corogramming. Create object-oriented distraction and informat Apply the concepts of inteneralization and aggreenvestigate the concept of unction on Multi-discippermonstrate real world a Lower Order	esign based on the charation hiding, overloading anheritance and relationsh gation. f strings, File Handling	s and methods as well a acteristics of an object- and dynamic binding or aip among different object and Exception handling OPs experiments and Presconcepts of OOP in Concepts	oriented prog f the messag ects to gener g of Specific rojects.	grammes to the ate the	ing language: one methods. hierarchies like	data ee
purse Ou dents wi	prime number checking two tasks, parameter passificomes (CO) all be able to Understand the basic corogramming. Create object-oriented distraction and informat Apply the concepts of inteneralization and aggrent envestigate the concept of unction on Multi-discippemonstrate real world a Lower Order	design based on the charation hiding, overloading anheritance and relationsh gation. If strings, File Handling of the charation hiding, overloading anheritance and relationsh gation. If strings, File Handling of the charations based on the charations based on the characteristics.	s and methods as well a acteristics of an object- and dynamic binding or aip among different object and Exception handling OPs experiments and Presconcepts of OOP in Concepts	oriented prog f the messag ects to gener g of Specific rojects.	grammes to the ate the	ing language: one methods. hierarchies like	data ee
purse Ou dents wi p dents wi p dents wi RE assification	prime number checking two tasks, parameter passificomes (CO) all be able to Understand the basic corrogramming. Create object-oriented distraction and informat Apply the concepts of interenalization and aggreenvestigate the concept of unction on Multi-discip Demonstrate real world a Lower Order BT on	encepts of classes, object lesign based on the charation hiding, overloading anheritance and relationsh gation. If strings, File Handling clinary team by using Ocapplications based on the Thinking Levels (LOT)	s and methods as well a acteristics of an object- and dynamic binding or and Exception handling OPS experiments and Preconcepts of OOP in Concepts Higher	oriented prog f the messag ects to gener g of Specific rojects.	grammes to the ate the	ing language: one methods. hierarchies like	data ee
Durse Ou Judents wi p G a Judents wi p G A B G RE A A C C C C C C C C C C C	prime number checking two tasks, parameter passificomes (CO) all be able to Understand the basic corogramming. Create object-oriented distraction and informat Apply the concepts of inteneralization and aggrent envestigate the concept of unction on Multi-discippemonstrate real world a Lower Order	design based on the charation hiding, overloading anheritance and relationsh gation. If strings, File Handling of the charation hiding, overloading anheritance and relationsh gation. If strings, File Handling of the charations based on the charations based on the characteristics.	s and methods as well a acteristics of an object- and dynamic binding or aip among different object and Exception handling OPs experiments and Presconcepts of OOP in Concepts	oriented prog f the messag ects to gener g of Specific rojects.	grammes to the ate the	ing language: one methods. hierarchies like amming Proble Levels (HOTS)	data ee
purse Ou dents wi p dents wi p dents wi p RE assification T Level mber	prime number checking two tasks, parameter passificomes (CO) all be able to Understand the basic coorogramming. Create object-oriented distraction and informat Apply the concepts of interestigate the concept of unction on Multi-disciplemonstrate real world a Lower Order ST on L1	design based on the charation hiding, overloading anheritance and relationsh gation. If strings, File Handling clinary team by using OC applications based on the Thinking Levels (LOT)	s and methods as well a acteristics of an object- and dynamic binding or aip among different object- and Exception handling OPs experiments and Preconcepts of OOP in C S) Higher	oriented prog f the messag ects to gener g of Specific rojects.	grammes to the ate the Programmes Trogrammes	ing language: one methods. hierarchies like amming Proble Levels (HOTS)	data ce cm
Durse Ou Judents wi p G a Judents wi p G A B G RE A A C C C C C C C C C C C	prime number checking two tasks, parameter passificomes (CO) all be able to Understand the basic corrogramming. Create object-oriented distraction and informat Apply the concepts of interenalization and aggreenvestigate the concept of unction on Multi-discip Demonstrate real world a Lower Order BT on	encepts of classes, object lesign based on the charation hiding, overloading anheritance and relationsh gation. If strings, File Handling clinary team by using Ocapplications based on the Thinking Levels (LOT)	s and methods as well a acteristics of an object- and dynamic binding or aip among different object- and Exception handling OPs experiments and Preconcepts of OOP in C S) Higher	oriented prog f the messag ects to gener g of Specific rojects.	grammes to the ate the Programmes Trogrammes	ing language: one methods. hierarchies like amming Proble Levels (HOTS	data ce cm

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	G	uru Nanak Dev E	ingineering College, Luc	niaria			
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	Depa	rtment of Inform	nation Technology Aug-	Dec 202.			
Progi	ram	B.Tech.(IT)	Semester		3rd		
Subje	ect Code	HSIMT-101	Subject Title	PPLE	Section A an	<u>d B</u>	
Mid S	Semester Test (MST)	2	Course	Dr. A	mit Kamra		
No.			Coordinator(s)	Dr. K	amaljit Kaur		
	Marks	24	Time Duration	1 hou	r 30 minutes		
Date	of MST		Roll Number				
Note:	Attempt all questions						
Q. No.		Questic			COs, RBT level	Marks	
1	Distinguish between t	rademarks and co	pyrights.		CO1,L1	2	
2	Point out the elements				CO2,L3	2	
3	Write the steps to obtain	ain Patent certifica	ate in India.		C01,L2	4	
1	Describe the Coding	Standards for DB	MS and Networks.		CO2,L3	4	
5	Illustrate various met	nods to avoid plag	iarism.		CO1,L6	4	
5		want to get its co	eft. Assume you have mad pyright. Discuss the proce a.		CO2,L6 CO3,L6	8	
	e Outcomes (CO) ts will be able to					-	
ota de l'i	Critically analyze a		naracteristics and emergin				
	Articulate and refleprofessions.	ect on the industr	ry expectations of compe	tence and	conduct in IT	related	
	Awareness of types	of ethical challen	iges and dilemmas confro	nting in I	T field		
	Ability to relate eth professionalism.	nical concepts and	I materials to ethical prob	lems in s	pecific professi	ons and	
	Interpret and under	stand the various of	chapters and sections unde	er Indian	IT Act2000		
			roperty rights and copyrig				

RBT	Lower Order	Thinking Levels	(LOTS)	Higher Or	der Thinking	g Levels (HOTS)
Classification RBT Level	L1	L2	L3	L4	L5	L6
Number RBT Level Name	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating

			· · · · · · Callege Ludhia	na		
	Gı	iru Nanak Dev En	gineering College, Ludhia			
		Department of I	nformation Technology Semester	3		
Progra		B.Tech.(IT)	Subject Title	Enviro	onmental Scie	ences
Subjec	et Code	MCIT-101	Course Coordinator(s)		Sandeep Kaur	
Mid Se	emester Test (MST)	1	Course Coordinator (s)	Prof.	Avneet Kaur	
No.		0.1	Time Duration		r 30 minutes	
Max. N		24 25 th Sept., 2023	Roll Number			
Date of	f MST	25" Sept., 2023	Roll Number			
Note: A	Attempt all questions				COn	Marks
Q. No.		Questi	on		COs, RBT level	Mark
Q1	Describe an ecologi	cal pyramid?			CO1, L2	2
Q2	Examine the point a	and non-point source	ces of water and air pollution	on?	CO2, L5	2
Q3	Explain the concept	of ecological footp	orints through an example.		CO1, L3	4
Q4	Identify the ecosyste	em services provid	ed by forests?		CO3, L2	4
Q5	Contrast the link be	tween water scarcing	ty and food security.		CO4, L4	4
Qб	Write your view su	pporting the statem	t inventions made by huma ent. ng how ecological cycle has		CO5, L6	8
	disturbed due to clin					,
	Outcomes (CO)					
tudents	will be able to					
	Measure environme	ntal variables and i	interpret results.			
	Evaluate local, region	onal and global env	vironmental topics related t	o resou	rce use and	
	management.					
		environmental pro	oblems related to resource	use and	management	
			s of environmental problem			
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RBT Classification	Lower Order	Thinking Levels	(LOTS)	Higher Or	der Thinking	g Levels (HOTS)
RBT Level Number	L1	L2	L3	L4	L5	L6
RBT Level Name	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating

Describe threats to global biodiversity, their implications and potential solutions.

	Gı	ru Nanak Dev Ei	ngineering College, Ludhia	<u>na</u>		
		Department of	Intormation x comme So	12		
Progra	ım	B.Tech.(IT)	Semester	Enviro	onmental Scie	nces
Subjec		MCIT-101	Subject Title		Sandeep Kaur	
Mid Se	emester Test (MST)	2	Course Coordinator(s)		Avneet Kaur	
No.						
Max. N	Iarks	24	Time Duration	I hour	r 30 minutes	
Date of	MST	6 th November 2023	Roll Number			
Note: A	ttempt all questions					
Q. No.		Quest	ion		COs, RBT level	Marks
Q1	Explain environmer	ntal ethics?			CO1, L1	2
Q2	Analyze the factors procurement in gree	that how an organ on computing?	ization can promote sustaina	able	CO2, L4	2
Q3	Describe two major	techniques involv	ed in green computing.		CO3, L2	4
24	Identify the issues condisplaced groups.	oncerning the rese	ettlement and rehabilitation of	of	CO2, L2	4
25	Compare and contra environment.	st the impacts of	4G and 5G technology on		CO4, L4	4
6	Examine how inforn environment leading	nation technology to a sustainable t	influences business, society	and	CO2, L5	8
	outcomes (CO) will be able to					
	Measure environmen	tal variables and	interpret results			
	Evaluate local, region management.	nal and global env	vironmental topics related to	o resour	rce use and	
		environmental pr	oblems related to resource			
	Interpret the results of	of scientific studio	es of environmental problem	use and	management.	
	D '1 1	i scientific studie	their implications and potents,	15.		

RBT Classification	Lower Order	Thinking Levels	(LOTS)	Higher Or	der Thinking	g Levels (HOTS)
RBT Level Number	L1	L2	L3	L4	L5	L6
RBT Level Name	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating

		Suru Nanak Dev E	ngineering College, Ludhian	a		
		Department of	Information Technology	_	- A	
		B.Tech.	Semester	6		
Program	ode	PCIT-103	Subject Title	DCCN		
Subject C	oue	2	Course Coordinator		Kaur Kang	
(MST) No Max. Mar	eles	24	Time Duration	1hr 30 mir	ıs	
Date of M	ST		Roll Number			
Note: Att	empt all questions					
Q. No.	Onipo dia qualitati	. Que	stion		COs, RBT level	Marks
Q1	How does the framing people's perceptions framing effects in rea	and decision-mak	in media and communicating, and can you provide ex	ion impact kamples of	CO3, L1	2
Q2	Illustrate variations efficiency and relia	in the control oblity of data transployed to opti	fields of HDLC frames in an entwork, mize control field usage for	and what	CO4, L4	2
Q3	Discuss CSMA/CD.				CO4, L3	4
Q4	Write short note on a) ALOHA b) Ethernet			CO3, CO5, L2	4
Q5	Elaborate how error the context of moder		ection codes be effectively systems.	applied in	CO4, L4	4
Q6	Analyze and evaluate communication, take	e the complexition	es of the Data Link layer i all its roles and responsi and network performance		CO3, CO4, L5	8
	utcomes (CO)					
students w	rill be able to					
	CO1 Understand Netw	ork essentials, Netv	vork Architecture, TCP/IP and	OSI model.		
			ems in guided and unguided tr		nedia	

RBT Classification	Lower Order T	hinking Levels (L	OTS)	Higher Ord	der Thinking	Levels (HOTS)
RBT Level Number	L1	L2	L3	L4	L5	L6
RBT Level Name	Remembering	Understanding	Applying	Analyzing	Evaluating	Create

CO4 Contrast the design issues and working of protocols at different layers of TCP/IP and OSI models
CO5 Formulate the various congestion and routing algorithms CO6 Implement the concepts of N/W security
and protocols such as HTTP, FTP, Telnet, DNS

CO3 Illustrate multi - channel access protocols and IEEE 802standards for LAN and MAN

		Guru Nanak Dev Engine Department of Info	rmation Techn	ology		
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Program	The state of the s	B.Tech.(IT)	Sel	bject Title	PPLE for IT En	gineers
Subject		HSMIT-101		urse	Dr. Kamaljit Ka	aur
Subject	mester Test (MST)	1 1999	CO	ordinator(s)	and Dr. Amit K	Camra
	nester l'est (1415 x)		Co	Devetion	1 hour 30minu	tes
No.		24	The Table 1 To	me Duration	1 Hour some	
Max. M	arks	1 127 141 100				
		0000	Ro	oll Number		
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		al criteria to become a Pr	ofessional C	O1, L2		
Q1	Specify the genera	al chieffa to occome a 1 2				
				O2, L4	2	
00	In there any henef	it of using industry code	ot	U2, L4		
Q2	Is there any ochler					
	practice? Explain.	CITY - 14 seed to	ting green C	O4, L1	4	+
Q3	Signify the social	context of IT and evalua	tillig groon			
43	1	ne metrics				1
	Til 1	equired for effective fund	ctioning in a C	CO4, L3	TO SERVICE THE PARTY OF THE PAR	
Q4	Elaborate skills re	equired for effective zame	Supplied to	A 2015 A 2015		
	toom onwironmen	t and the second	July 10 to 1	CO3, L4	4	1
05	Define Ethics ? I	Differentiate between eth	ncal and	, DT		
Q5	1 1 1 man malat	od to II	A A A A A A A A A A A A A A A A A A A)
34.5	legal issues relati	e study as you get a job o	of a software C	CO2, L5	8	
Q6	Discuss as a case	e study as you get a job c				
		T : Justen What role Vol	n are maving			
	professional in I	I maustry. What fold you	a are property		超 的 無學學 一种	
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