-			ineering College, Ludh formation Technology	iana	700	-
Program		B.Tech.(IT	Semester	1		-
Subject (BSC-105	Subject Title	Chemi	strv	2000
The Control of the Co	nester Test (MST)	2	Course Coordinator(s)	Dr An Mande Dr.Ra	nanpreet kaur eep kaur jvir kaur Bhalla	
Max. Ma	arks	24	Time Duration	The state of the s	30 minutes	
Date of N		07Nov, 2023	Roll Number	T Hou	- Communication	
Note: At	tempt all questions	TOTAL PROPERTY.		1-11		
Q. No.	dempt an questions	Questio	on	19.4	COs, RBT level	Marks
Q1	Define the term Eu importance.	tectic point used in	Pb-Ag system & give its	199	CO3, L1	2
Q2	Differentiate betwee		H=CH-CH ₃ and V-Visible spectroscopy	A TIES	CO2, L4	4
Q3	Explain the differe	nt modes of vibratio	ons in IR spectroscopy.		CO2, L2	4
Q4	Draw a neat labelle		f Water system & Calcul	ate 'F'	CO3, L2	4
Q5	Auxochrome caus	es bathochromic sh	ift justify the statement.		CO2, L5	4
Q6	(a) CH ₃ CHCle (iii) Evaluate the The vibrational fre	high resolution HNN COCH ₃ (b) CHCl ₂ (following statement, equency of carbonyl D-CH ₃ = 1715 cm ⁻¹	group in CH ₃ CHO = 17-	45 cm ⁻¹	CO2,L5	6+2
	Outcomes (CO will be able to			- 13-11	-17-15-1	
1	Understand important 1	Properties of simple and co	mplex molecules and apply it to	explain the be	haviour of materi	als.
2	Identification of molecu	les based on their excitation	n in different molecular orbitals		marin a	
		ram and use it in industry			THE PARTY OF	
4	applications		teristics of surface water, drinking		te water and in inc	dustrial
5			namic functions with electrochen		3 10-6 100	
6	Understand the basic co	incept of different types of	interactions in molecules and us	ait to avalain	their stereochemi	stry and

RBT Classification		Thir ing Levels	(LOTS)	Higher Or	der Thinking	g Levels (HOTS)
RBT Level Number	LI	L2	L.3	L4	L5	L6
RBT Level Name	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating

6	4	3	2	,	-	Course (,	96		05	Q4		Q3	92		QI	Q. No.	Note: At	Date of MST	Max. Marks	Mid Seme	Subject Code	Program
Understand how to dec	Evaluate integrals of v	Apply techniques of multiple integrals in engineering problems	Sketch basic cartesian, parametric and polar curves	engineering problems.	I Indentiand and apply	Course Outcomes (CO) Students will be able to	the rectangle bound	Verify Stoke's thee	Prove that :	If $u = tan^{-1} \frac{y^2}{x}$, then	Find the volume bounded by the cylinder $x^2 + y^2 = 4$ and the planes $y + z = 4$ and $z =$	J (x2	Solve the double in	Determine the directional derivative of $2xy + y^2$ at point $(1, -1)$ in the direction of $i + 2j$?	Show that $\left(\frac{\partial \omega}{\partial y}\right)^2 + \frac{1}{r^2} \left(\frac{\partial \omega}{\partial \theta}\right)^2 = \left(\frac{\partial f}{\partial x}\right)^2 + \left(\frac{\partial f}{\partial y}\right)^2$	If $w = f(x,y)$, $x = r\cos\theta$, $y = r\sin\theta$		Note: Attempt all questions	IST	rks	Mid Semester Test (MST) No.	ode	
ompose the periodic f	to integrate knowledge	umple integrals in one	parametric and polar	construction of the conference	concepts of vector call		ted by the lines x =	orem for $\vec{F} = (x^2 +$	$x^2 \frac{\partial^2 u}{\partial x^2} + 2xy \frac{\partial^2 u}{\partial x \partial y} + y^2 \frac{\partial^2 u}{\partial y^2}$	cn	unded by the cylir he planes $y + z =$	$(+y^2)^{\frac{3}{2}} dxdy$ over	tegral by changin	tional derivative of $(1,-1)$ in the direction	$+\frac{1}{r^2}\left(\frac{\partial\omega}{\partial\theta}\right)^2-\left(\frac{\partial f}{\partial x}\right)^2$	$cos\theta$, $y = rsin\theta$	Question		06-11-2023	24	2nd	BSC-104	B.Tech (CSE,IT)
Understand how to decompose the periodic functions in series of sine and cosine	Evaluate integrals of vector point functions over time, surface and contains to engineering problems	incering propietts	curves	and an account to account account	Independent and apply concepts of vector calculus, differential equations and calculus of complex functions to		the rectangle bounded by the lines $x = a$, $x = -a$, $y = 0$ and $y = b$.	Verify Stoke's theorem for $\vec{F} = (x^2 + y^2)i - 2xy\hat{j}$, taken around	$\frac{\partial^2 u}{\partial y} + y^2 \frac{\partial^2 u}{\partial y^2} = -\sin^2 u \sin^2 u$		$= 4 \ and \ z = 0.$	$\int (x^2 + y^2)^{\frac{1}{2}} dxdy over the circle x^2 + y^2 = 1.$	Solve the double integral by changing into polar coordinates	of ection of $l+2j$?	$+\left(\frac{\partial f}{\partial y}\right)^2$.		ion		Roll Number	Time Duration	Course Coordinator(s)	Subject Title	h (CSE,IT) Semester
ne	lus to engineering problem			and the state of the state of the state of	alculus of complex function			CO4, L5		CO5, L5	CO3, L3		CO3, L3	CO1,L4		CO5, L3	level			I hour 30 minutes	Prof Gagandeep Kaur Prof Neeraj Kumar Prof Jaskıran Kaur	Mathematics II	
	N. S.	-		on em	on sad			00		4	4		4	2		2	Marks				ur,		

		Department of Applied Sciences B Tech (CSE IT) Semests	Semester		
Subject Code	de	HSMC-101	Subject Title	English	
Mid Semester Test (MST) No.	ster Test	2	Coordinator(s)	Ms. Puncet Narar Ms. Nisha Ms. Manjot Kaur	Narang
Max. Marks	ks	24	Time Duration	1 hour 30 minutes	ninutes
Date of MST	ST	4.11.2023	Roll Number		
Note: Att	Note: Attempt all questions	ns			
Q. No.		Question		RBT level	MISTK
	identifi i	dentify the southern structures		CO4, L3	2
4	a) The	The girl is making a cake in the kitchen. He bought his sister a doll.			
02	The rapid readin	The rapid reading techniques of scanning and skimming prepare the reader for intensive	eader for intensive	CO2, L5	2
03	Underline the dep	reading."Justify Underline the dependent clause in each of the following sentences. Also identify whether each of the dependent clause is a noun clause or an adjective clause or an adverb clause.	so identify whether each dverb clause.	CO4, L3	4
	a) The co you on the co	The boy who is playing outside is my brother. It I make a promise. I will keep it. You may go wherever you like. I never believed what people said about him.			
2	Discuss various	Discussivations reading strategies which play important role in-fulfilling different reading	ng different reading	CO2, L3	4
05	Compose a para	Composes paragraph on the following topic.	150 mists	CO5,L6	4
Q6	Assume that you Company, Salt (Model: Scan) Bangalore But	Has Internet Made Society Better? Assume that you are Ramosh Malik, the Purchase Manager of Alpha Engineering Assume that you are Ramosh Malik, the Purchase Manager of Alpha Engineering Company, Salt Lake City, Kolkata. Your company sent an order for fifteen HP Scanners Company, Salt Lake City, Kolkata Your company sent an order for Ramosh Sales and Marketing of National Bangalore. But you received only 12 scanners.	of Alpha Engineering der for fifteen HP Scanners tronics City, Hosur Road, and Marketing of National	C06, L6	20
Course	Course Outcomes (CO) Students will be able to Grisp !	be able to Grasp the significance of effective communication in English at work places.	ork places.		
U LU	Property Pro	Heative intening skills and reading skills for adaptine and processional new thoughts and ideas in an organised form in written form a grammatical competence in English through lessons on English language usage automatic sorting styles while expressing themselves in written form in English.	m nglish language usage. en form in English.		
RBT	RBT Classification	Lower Order Thinking Levels (LOTS)	Higher Order Thinking Levels (HO13)	Thinking Levels (HO13)	10

	A RELIEF TO THE REAL PROPERTY.	Departs	Engineering College, Ludhia	na	
Prog	gram	B.Tech.CSE, IT	nt of Applied Sciences	1 1 1 - C 15 C 1 - 1	
	ect Code	ESE-104		1	100
Test			Subject Title	Programming for Pr Solving	oblem
1		2	Course Coordinator(s)	Ranjodh Kaur, Sidd Jain, Gagneet Kaur, Sharma,Jaswant Sin Rani, Kuljit Kaur	Kapil
	. Marks	24	Time Duration	1 hour 30 minutes	
	of Test	16 th October, 2023	Roll Number	1 hour 50 minutes	
Note:	Attempt all question	ns. All assumptions mus	et be elected		
•	The state of the s	assumptions mus	A stated.		4
No.	Land Land		Question		M
21	Briefly illustrate se	mantia and lasis 1	21 4 1 1 6		1
22	What will be the ou	atput for the following of	rs with the help of examples.		2
	int $i=1, j=1$; int $a=$	0:	y = 4	Size of) 2
	int y; int x = 11; (y = sizeof(x++); printf("%i %i %	char c='A'; 6i", y, x,sizeof(c));	man	size of	
	double d = 10.5; printf(" %lu", size	and the same of	d cadal	web.	
	for(i=1;i<=3;i++)	-//	a Woman		
	for(j=1;j<=3;j++		1		
-11	if(++i == 2	j==2)	T.		-
	continue;	C-18 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
	Continue;	. 2	2		
	printf(" %d",i)		1 6	19	
1	printf(" %d",j) if(++i==4 j=	; 3	1114111	831	
Y	{	4 4			
	break;	5	4.11183	151	
	, }	Far		-2/	
	printf(" %d",i);				
	printf(" %d",j);				- 10
	return 0;				
- 14	}				
	Define flowchart. Co	nstruct a flowchart and	write an algorithm to find how	w many times the	
	are appears in the	mumber IV.			4
	Differentiate between			wamplac	-
		call by value and call I	by reference with the halp of	Additiones.	
	create a user-defined	function to find the sou	by reference with the help of e	mhor road through	4
1	the keyboard. Make u	ise of parameter passing	gare of any positive integer nu	mber read through	4
1	he keyboard. Make u Develop a menu drive	se of parameter passing en code that does the fo	uare of any positive integer nu g and return type concepts. Howing:	mber read through	4
1	he keyboard. Make u Develop a menu drive	se of parameter passing en code that does the fo	uare of any positive integer nu g and return type concepts. Howing:	mber read through	_
1	the keyboard. Make underly the heyboard. Make underly a menu drive fig. 1f 'A' is enter	use of parameter passing en code that does the fo ed, user-defined function	uare of any positive integer nu g and return type concepts. llowing: on 'isPalindrome' must be ab	mber read through	4
1	the keyboard. Make understood the heyboard. Make understood to the heyboard. Make understood the	use of parameter passing en code that does the fo ed, user-defined function ed by user is palindrome	uare of any positive integer nu g and return type concepts. llowing: on 'isPalindrome' must be ab	mber read through le find whether	4
1	he keyboard. Make u Develop a menu drive If 'A' is entere number entere If 'B' is entere	is the square of parameter passing on code that does the for ed, user-defined function by user is palindromed, user-defined function do, user-defined function do, user-defined function	uare of any positive integer nug and return type concepts. Illowing: on 'isPalindrome' must be able or not. on 'kgToPounds' must be able	le find whether	4
1	he keyboard. Make u Develop a menu drive If 'A' is entered If 'B' is entered kilograms to p	is a control of find the square of parameter passing on code that does the forced, user-defined function by user is palindromed, user-defined function on the code of the control of the code of the c	uare of any positive integer nu g and return type concepts. llowing: on 'isPalindrome' must be ab	le find whether	4
1	he keyboard. Make u Develop a menu drive If 'A' is enter number entere If 'B' is entere kilograms to p kilogram is eq	use of parameter passing on code that does the fored, user-defined function of by user is palindromed, user-defined function on the convergence of	uare of any positive integer nug and return type concepts. Illowing: on 'isPalindrome' must be able or not. on 'kgToPounds' must be able werted must be read through the	te find whether to convert te keyboard. (One	4
1	he keyboard. Make u Develop a menu drive If 'A' is entered umber entered If 'B' is entered kilograms to p kilogram is eque	use of parameter passing on code that does the fored, user-defined function of by user is palindromed, user-defined function on the convergence of	uare of any positive integer nug and return type concepts. Illowing: on 'isPalindrome' must be able or not. on 'kgToPounds' must be able	te find whether to convert te keyboard. (One	4
1	he keyboard. Make u Develop a menu drive If 'A' is entered If 'B' is entered kilograms to p kilogram is eq If any other 'comessage.	enterion to find the square of parameter passing en code that does the forced, user-defined function and by user is palindromed, user-defined function bounds, value to be conveyed to 2.204 pounds). The conveyed haracter' is entered, code as a conveyed to the conveyed to	uare of any positive integer nug and return type concepts. Illowing: on 'isPalindrome' must be able or not. on 'kgToPounds' must be able werted must be read through the	le find whether to convert te keyboard. (One ith a suitable	4

Program	n		Engineering College, Luent of Applied Sciences	Idhiana	
		Directi.CoE, II	Semester	1	
		ESE-104	Subject Title	Program	
(MSE) N		2	Course	Programming for Problem	Solving
	Marks of MSE Attempt all question The elements of arrangement of the detailed function, described functio		Coordinator(s)	Ranjodh Kaur, Siddharth Gagneet Kaur, Kapil Sharma, Jaswant Singh, Si	
Max. M	arks	24	Time Duration	Kuljit Kaur	
Date of		09th November, 202	3 Poll Number	1 hour 30 minutes	1
Note: At	tempt all questions	s. All assumptions must	be clearly stated.		
Q. No.			Ouestion		MM
Q1	The elements of	an array are given 32, 5	1, 27, 85, 66, 23, 13, 57.	Identify and write the	2
	arrangement of e	elements after first pass of	of the bubble sort method		
-Q2	How does a poin	iter store the memory ad	dress of a variable? Give	example.	2
Q3	Compare in deta	il selection sort with ins	ertion sort algorithm.	Services Resident	4
Q4	Provide a detaile	ed explanation of the rec	ursive process with the h	elp of a user-defined	4
				solve a specific problem.	
Q5 .			ply them. Matrices can e	ither be square or	4
War way		te a program for this tas			
Q6			with managing student re		8
				ds: studentID, name, age,	
			the user to perform the fo		
			age, grade) for 'n' student	s (where 'n' is determined by	
			: 41		
		the details of all students			
	c) Find and	display the student(s) w	in the nighest grade.		
	In your program,	, implement functions fo	or each of these tasks.		

(HOTS)

	S			Q3 1			4			-)/	02	0]	80	Z			
	Design a menu driven code that does the following: If 'I' is entered, user-defined function 'add' must be able to numbers using a user-defined function If '2' is entered, user-defined function 'multiplication' must multiplication table of positive integer numbers from I to numbers from I to numbers from I to numbers form I to numbers from I to number	"Initialization is always out of the loop", this statement given in double quotes is true for which loop(s); compare and contrast the identified loop(s) with other loop(s) in	Civen a number N and a digit D. Write a program to find how many times the digit of N and B should be read through the keybord diagram. D appears in the number N. (For example N is 13314, D is 3, answer will be 2. Value D are positive).	What goes behind the scene when you attempt to get an output for	} printf(" %d",i); printf(" %d",j); printf(" %d",j);	break; }	printf(" %d",i); printf(" %d",j); if(++i==4 \(\ j==5 \)	printf("in continue"); continue;	$\inf_{i} (i == 2 & \& i == 2)$	for(j=1;j<=3;j++)	int i=1,j=1; for(i=1,i=2;:	What will be the output for the following code snippet:	Differentiate between algo	Giorgan	Note: Attempt all mestions an	No. No. Max. Marks	Subject Code	
	does the following fined function 'add fined function 'mul med function 'mul sitive integer numbered, code must be	he loop", this states contrast the identif	D. Write a program or example N is 13:	hen you attempt to		TO THE STATE OF TH						r the following cod	orithm and pseudoc	All assumptions must be clearly stated Question	28th September, 2023	1 24	ESE-104	B.Tech.CSE, IT
1 18 W	a menu driven code that does the following: If 'I' is entered, user-defined function 'add' must be able to add two positive numbers using a user-defined function If '2' is entered, user-defined function 'multiplication' must be able to print multiplication table of positive integer numbers from 1 to n. If any other integer is entered, code must be able to terminate with a suitable message.	ment given in double quotes ied loop(s) with other loop(s	steps with the help of diagram to find how many times the 314, D is 3, answer will be 2, and case must be processed if	get an output fam.								e snippet:	Differentiate between algorithm and pseudocode with the half	be clearly stated.	Roll Number	Course Coordinator(s)	Subject Title	B. Tech. CSE, 1T Semester
	sitive L6 8	is true CO4, 4	code in CO2. 4 m. L2 digit CO4. 4 Value L3	1	1-						E	COI,	RBT	COs MM	1 hour 30 minutes	Ranjodh Kaur, Siddharth Jain, Gagneet Kaur, Kapil Sharma,Jaswant Singh,Sita Rani, Kuljit Kaur	Programming for Problem	

	105	Guru Nanak Dev Engineering Call	ngineering Con				Subje
Program		Departmen	Department of Applied Science	ence	12		Cours
Subject Code	Code	B. I ech. (CSE, IT)	Semester	The state of the s	-		Coord
Mid Ser	Mid Semester Test (MST)	1st	Subject Title		Mathematics II		
NA.			Course Coordinator(s)		Dr. Gagandeep Kaur, Mr. Neeraj	aur,	Time
Date of Merks	arks	24	Time		Ms. Jaskiran Kaur		MIIION
Date Of	ISI	25-09-2023	Roll Number		l hour 30 minutes		
Note: A	Note: Attempt all questions						
O. No.		:400.10					
01		Housan	uo		COs,	Marks	
	shell the region of integration and evaluate $\int_0^2 \int_0^{y^2} e^{y} dx dy$.	integration and ev	aluate $\int_0^2 \int_0^{y^2} e^{\frac{x}{y}} dy$	rdy.	CO3, L3	2	noddns pu
05	Check whether the curve $r = a \sin 3\theta$ passes through pole? Also find tangents at the pole if there exists any.	$urve \ r = a \sin 3\theta p$ f there exists any.	asses through pol	le? Also find		2	ation.
03	Trace the curve $x^3 + v^3$	$+v^3=3arv$			L2,L4		them.
04		Jany, a =			CO2, L3	4	ions.
	Change the order of integration in $\int_0^1 \int_{x^2}^{2-x} xy dy dx$ and hence evaluate the same.	ntegration in $\int_0^1 \int_{x^2}^2$	xy dydx and h	ience evaluate		4	using im
65	Obtain the half range sine series for the function $f(x)=x^2$ in the interval $0 \le x \le 3$.	sine series for the	function $f(x)=x^2$	in the interval	CO6, L5	4	lowing sitn
90	Expand the Fourier series for the function 50.0 1	ries for the function					about a
	interval $(-\pi,\pi)$		n (x)= cos x m tl	he	CO6, L3,L5	∞	ere is no sc
Students w	Course Outcomes (CO) Students will be able to						v chidente
	Understand and apply concepts of vector calculus differential	concepts of vector	calculus differen	loito -			Singering C
0	complex functions to engineering problems.	ngineering probler	ns.	iiiiai equation	is and calculus of	T	
	Apply techniques of	, parametric and po	olar curves .			T	
	Evaluate integrals of vector point functions over line surface and	ector point function	engineering prob	lems.			tion suita
5	Substantiate the ability to integrate knowledge and ideas of multivariable calculus to engineering problems.	to integrate knowl	edge and ideas of	multivariable	e calculus to	_	rrect subj
9	Understand how to decompose the periodic functions in series of sine and cosine	ompose the period	ic functions in ser	ies of sine an	d cosine .		-
							e the corre
RBT Classification	1	Lower Order Thinking Levels (LOTS)	Higher (Order Thinking	Higher Order Thinking Levels (HOTS)		Cill in the
RBT Level	17	12	L3 L4	LS	97	T	Fill III the

Seme Subje Cours Coord Time

cation	Lower Order T	Lower Order Thinking Levels (LOTS)	TS)	Higher Ord	Higher Order Thinking Levels (H	evels (HOTS)
tBT Level	17	17	13	14	LS	97
BT Level	Remembering	Understanding	Applying	Applying Analyzing	Evaluation	Constino

1	fessional effici		language usage	n in Enolish
	idemic and pro	ritten form.	ons on English	in written forr
	g skills for aca	ised form in w	h through less	ng themselves
	s and readin	in an organ	ce in English	ile expressi
	stening skill.	ts and ideas i	al competen	ng styles wh
	effective lis	heir though	grammatic	itable writi
	Acquire	Present t	Enhance	Utilise su
1				

				Ms. Puneet Narang Ms. Nisha	Jot Kaur	I hour 50 minutes		Marks	-	7 7	4				4	8x1					
e che		-	English	Ms. Puneet Ms. Nisha	Mis. Manjot Kaur	I nour 30		COs,	KB1 level	CO1, L2 CO1, L5	CO1 12	CO1,CO4, L4			CO2,L5	CO4, L5					ds (HOTS)
Fiv	Ludhiana S	Semester	Subject Title	Course Coordinator(s)	.,	Roll Number				end support to you	up. ication.	of them.	llowing situations.	here is no scope for		- 1	ose the correct	cet article) table correction)		guage usage. English.	Higher Order Thinking Levels (HOTS)
NC	Guru Nanak Dev Engineering College, Ludhiana Department of Applied Sciences	B. Tech.(CSE,IT)			24	1	uestions	Question	Describe the role of empathetic listening in a commission	How do upward channels of communication, available in your college, extend support to you as a student? Answer briefly when the communication as a student? Answer briefly when the communication as a student?	Indicate the critical difference between successful and ineffective communication.	Study the following statements and mark as true or false against each of them. a) Both Encoding and Decoding of message are also influenced by our emotions. b) Your communication will be very effective if you evaluacisely from a minimarian	Vocabulary and correct grammar. Identify the type of communication barrier that describes each of the following situations. C) Every time I have a meeting with Mr. Smith, I end up disagreeing with him about a particular issue.	 d) This room is horrible to work in. I am able to hear everyone around and there is no scope for privacy. 	What, in your opinion, are certain poor listening practices being followed by students during the classroom learning?	DO AS DIRECTED. 1) Vesterday, there was an accident ***-the corner of the street. (Fill in preposition suntawy, 2) In this power, the poet describes**-his childhood. (Fill in preposition suitably) 3) The woman, with all the dogs, (walk/walks) down my street.(Choose the correct subject verb combination)	4) The President, accompanied by his wife, (is/are) travelling to India. (Choose the correct subject –verb combination)	by the corporation page accordances a meaning divident ourinvestments, (Fill in the blanks with suitable pronounts) (6) He is pursuing his graduation from ¹²¹ university in New Delhi, (Fill in correct article) (7) The tickets are affordable. These just cost twenty dollars each. (Make suitable correction) (8) I call my mother only when I am sick. (Make suitable correction)	O) Grasp the significance of effective communication in English at work places. A commence of effective communication set stills for condemy and workerion.	Present their thoughts and ideas in an organised form in written form. The abstract grammatical competence in English through lessons on English language usage. Utilise suitable writing styles while expressing themselves in written form in English. Produce effectively different forms of professional writing.	
1	Dancasosse	Subject Code	Mid Semester Tost	(MST) No.	Marks Marks	Date of MST	Note: Attempt all questions					Study the fo	Vocabulary and Identify the ty C) Every time I particular issue.		(O5 What, in your opinion, the classroom learning?	DO AS DIRECTED. 1) Yesterday, there was 2) In this poem, the poem 2) The woman, with all verb combination)	4) The Presides subject -verk	blanks with s 6) He is pursu 7) The tickets 8) I call my m	Course Outcomes (CO) Students will be able to Grasp t		RBT Classification

Cen