VIVEKANA	NDA COLLEGE	, TIRUVEDAKAM W	/EST - 6252	34
[DEPARTMENT	OF COMPUTER SCI	ENCE	
Course Code: 10CT12	Programme:	B.Sc.,	CIA: I 7	<u>Cest</u>
Date: 26.07.2019	Major:	COMP.SCIENCE	Semest	ter: I
Time: 2Hrs	Year:	Ι	Maxim	um: 50 Marks
Course Title:	DIGITAL PR	RICNCIPLES AND CO	OMPUTER C	RGANIZATION
	S	ECTION-A		
Answer all questions			(10X1	=10)
1. The Octal Number 645 in p	ower of 8 is equal t	0		CO1
A) 450 B) 451	C) 421	D) 501		
2. Representation of a hexaded	cimal number 6DE	in power of 16 is as:		CO1
A) $6 * 16^2 + 13 * 16^1 -$	$+ 14 * 16^{0}$	B)6 * $16^2 + 12 * 16^1$	$+ 13 * 16^{0}$	
C) $6^* 16^2 + 11 * 16^1 + 16^2 + 11 * 16^2 + 10^2$	$14 * 16^{0}$	D)6 * $16^2 + 14 * 16^1$	$+ 15 * 16^{0}$	
3. Convert in to decimal : 214	₈ =?			CO1
A) 140 ₁₀	B) 141 ₁₀ C) 1	42 ₁₀ D)130 ₁₀		
4. The excess-3 code for 597 i	s given by	_		CO1
A) 100011000111	B) 100011001	010 C) 01011001	0111 D) 010110101101
5. The Boolean equation of Al	ND gate is	_		CO1
A) A+B	B)(A.B)'	C)(A+B)' D)A.B		
6 .There arecells in 4-	variable K-map			CO1
A) 12	B) 14	C) 16	D) 18	
7. In negative logic binary '0'	stands for	voltage		CO1
A) low	B)middle	C) high	D) none of the	e above
8 .Multiplexer circuit has	inputs but onl	youtput		CO2
A) one, one	B) many , many	C) one, many	D) many, one	
9. Which of the following is n	ot a hexa-decimal n	number?		CO1
A) F	B)H	C)A	D) D	
10. The ASCII code for \$ is		0.0100011	D \0100100	CO1
A)100001	B)0100000	C)0100011	D)0100100	
	C.			
A name and EN/E anadiana	S .	ECTION-B	(5)	10)
Answer any FIVE questions	of a number		(5A2=	(10) CO1
12. Write a short notes an basi	ol a number.			C01
13. Write the logic circuit for	the Boolean equation	$v_{\rm N} V = \Lambda' B C + \Lambda B' C$		CO1
14 Convert the following bin	ary to octal	JII I - A DC + AD C		C01
a)100110101011	h)00	1110010011		001
15 Convert the $1011 11_2$ to eq	vivalent decimal nu	mber		CO1
16 Convert the 5678 Excess-	s code			CO1
17. Convert the following BC	D to decimal			CO1
a)01000010	b)10	00100101100011		
	S	ECTION-C		
Answer any THREE question	ons			(3X6=18)
18. Draw and explain for the M	NOR gate			CO1
19. Write a any five basic law	s and Boolean alge	bra		CO1
20. Explain the four variable H	K-map			CO1
21. Write a short notes on mul	tiplexer			CO2
22(i) Convert the 278.258 ₁₀	to binary number			CO1
(ii)Convert the BC2H to d	ecimal number			
	S	ECTION-D		
Answer any ONE question				(1X12=12)
23. Explain the basic logic gat	es with neat circuit			CO1
24. Explain the De-multiplexe	r with neat sketch			CO2

VIVEKANA	NDA COLLEGE	, TIRUVEDAKAM W	/EST - 625234	
		OF COMPUTER SCI		
Course Code: 10C131	Programme:	B.Sc.,	CIA: I Test	
Date: 23.07.2019	Major:	COMP.SCIENCE	Semester: II	
Time: 2Hrs	Year:	II	Maximum: 5	0 Marks
Course Title:	COMPUTER (DRGANISATION WIT	TH PARALLEL PR	ROCESSING
	S	ECTION-A		
Answer all questions				(10X1=10)
1 computers are the b	inary number syste	m.		CO1
A. Analog. B. Supe	er. C. Ir	ntra. D. Digital.		
2. The of the co	mputer consists of	physical entity of the dev	vice.	CO1
A. software. B. mide	lleware. C. h	ardware. D. firmware.		001
3. A sequence of instructions	tor the computer is	called		COI
A. hardware. B. prog	ram. C. d	ata. D. instruction		001
4. The manipulation of binary	information is done	e by logic circuits called	•	COI
A. DIOCKS. B. gales	$S. \qquad \qquad C. Synamic C.$	undols. D. lunctions.		CO1
5. If both inputs A and B are e	equal to 1 III AND g	ale, the output is	<u>_</u> .	COI
A. Zero. D. one. 6 Instructions which won't ar	C. u	on t cale. D. onary.		CO1
Δ Redundant instruction	ions B) F	ventions		COI
C) Comments	D) A	Assembler Directives		
7. The directive used to perfor	m initialization before	ore the execution of the o	code is	CO2
A) Reserve	B) Store	C) Data word	D) EOU	002
8. A circuit is a co	nnected arrangemen	nt of logic gates with a se	et of inputs and output	ts.CO2
A. arithmetic.	B. logic.	C. combinational.	D. shift.	
9. A is a combinat	ional circuit that for	rms sum of 3 input bits.		CO2
A. half adder.	B. full adder.	C. BCD adder.	D. composite adder.	
10. Minterm is also called	·			CO2
A. standard product.	B. standard sum.	C. union.	D. difference.	
	~			
	S.	ECTION-B		
Answer any FIVE questions	ation 9		CO1	(5X2=10)
12 Define AL U2			COL	
12. DefineALU?	nal number?			
14 Difference between hardwa	are and software?		C01	
15 How to convert hexadecim	al number to binary	number:	001	
(i)AE8F (ii) B3I)A	number.	CO1	
16.Define CPU?			CO2	
17. Define Indirect Addressing	g Mode?		CO2	
·	S	ECTION-C		
Answer any THREE question	ons			(3X6=18)
18. Discuss about the function	al units?		CO1	
19.Explain the Bus Structure?			CO1	
20.To write Arithmetic opera	tions using Binary 1	numbers?	CO1	
21.Briefly explain Number Re	presentation.		CO2	
22.Explain the Addressing Mo	ode?		CO2	
	C			
A newor any ONE Augetian	5.	ECHUN-D		(1¥12-12)
23 Discuss the basic operation	al concepts?		COI	(1714-14)
	ui vonvopus.			

23.Discuss the basic operational concepts?24.Explain the Instruction formats?

CO2

VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST - 625234

	DEPARTMENT	OF COMPUTER SC	IENCE	
Course Code: 10CT32	Programme:	B.Sc	CIA: I Test	
Date: 26.07.2019	Maior:	COMP.SCIENCE	Semester: I	II
Time: 2Hrs	Year:	II	Maximum:	50 Marks
Course Title:		COMPUTER (GRAPHICS	
	S	ECTION – A		
ANSWER THE FOLLOW	NG:		(10	x 1 = 10)
1is used in designing of	f buildings, automo	biles, aircrafts, textiles, c	computers and spacec	rafts
a) Presentation graphi	cs b) compute	r art c) CAD d) image I	Processing	CO1
2 environments used to	determine how the	operators of a vehicle an	re affected by certain	motions
a)Wireframe display	b) Virtual Reality	y c) operating system	d) Architectural CA	ADCO1
3 is an example for a pa	aint brush program	Mathamatica d) I w	mana	CO1
<i>device is used to proc</i>	U) MS WOLU C) I	the specially designed signed	niena oftware to produce au	tomatic
computer art	fuce painting through	gli a specially designed s	onware to produce au	nomane
a) Inkiet printer	b) Pen plotter c) S	tvlus d) camera		CO1
5. Film animation requires	no. of frames per	r second for an animated	movement sequence	
a) 24	b) 36 c) 2	0 d) 30	1	CO1
6 is a process of trans	forming an object o	r a person into another ir	n image processing tee	chnology
a) Morphing	b) Motion Capture	c) Animation d) Sur	rface rendering	CO1
7 is used to improve	picture quality			GO 4
a) image processing	b) color codes	c) 2D animation	d) persistence	COI
a) Phosphorescence	b) Resolution	a) Persistence	d) Aspect Patio	
9 Each screen points are refe	rred as	c) reisistence	u) Aspect Ratio	COI
a) Pixmap	b) Bitmap	c) Scan line	d) Pixel	CO1
10. Calculators uses ty	pe of display for ou	itput		
a) Plasma panel	b) LED	c) LCD	d) CRT	CO1
	SEC'	$\Gamma ION - B$	(=	3 10 \
ANSWER ANY FIVE OF 1	HE FOLLOWIN	G: d Docionina?	(5 x	2 = 10)
12 Give any two examples for	s of Computer art soft	u Designing :		
13. What is meant by Morphi	ng?	ware:		CO1
14. List any two types of visu	alization technique	s?		C01
15. List the two methods to p	roduce color display	y in CRT?		CO1
16. Distinguish emissive and	non-emissive displa	ays with suitable exampl	es for each?	CO1
17. What is the purpose of Di	gitizers?			CO1
	CI.			
	S E THE EOLLOY	ECTION – C	()	(-10)
18 Brief a note on any three	applications of com	uvo: nuter granhics in various	(3 X s field in the industry	0 = 10
19. Summarize the working of	of a Refresh CRT w	ith a neat diagram?	, noro in the industry !	CO1
20. Critically analyze the wor	king of Color CRT	monitors?		CO1
21. Discuss about Raster Scar	n Display Processon	?		CO1
22. Bring out the standards av	vailable for graphics	s software today?		CO1

SECTION – D

ANSWER ANY ONE OF THE FOLLOWING:

 $(1 \times 12 = 12)$

23. Compare and criticize the working of Random Scan Displays and Flat Panel Displays?24. Explain with a neat diagram the architecture and basic operation of a raster scan system?CO1

VIVEKANA	ANDA COLLEGE	, TIRUVEDAKAM WES	Т - 625234
	DEPARTMENT	OF COMPUTER SCIEN	СЕ
Course Code: 10CT51	Programme:	B.Sc.,	CIA: I Test
Date: 24.07.2019	Major:	COMP.SCIENCE	Semester: V
Time: 2Hrs	Year:	III	Maximum: 50 Marks
Course Title:		COMPUTER NETV	VORKS
	SF	ECTION – A	
ANSWER ALL THE QUES	TIONS:		$(10 \times 1 = 10)$
1. Interconnection of compute	ers using transmissio	on medium is called	
a) Routing b) Inter	net c) Network	d) e-commerce	
2. A computer on the network	shares resources for	or others to use, then it is call	ed as a
a) Client b) Serve	er c) mainfrar	ne d) workstation	
3. Sending packets to a group	of stations is know	n as	
a) Broadcasting	b) multicasting	c) Unicasting d)	point-to –point
4mechanism is used to	resolve conflicts b	etween two or more compute	ers to send data
a) LIFO b) Arbi	tration c) ce	entralized d) decentr	alized
5is an switching eleme	ent in a network		
a) Repeater	b) Amplifiers	c) Router d) Bluetoo	th
6system uses connecti	on oriented service		
a) Telephone	b) Postal c) D	NS d) Telegraph	
7 are set of operations p	performed by the use	er process to a access a service	ce
a) Trapping	b) Primitives	c) IP routing d) d	encoding
8. Number of layers present in	n OSI protocol stack	c is	
a) 5 b) 6	c) 4	d) 7	
9. TCP is a layer protoco	bl		
a) Network b) Tran	sport c) Data Linl	k d) Application	
10 layer in the OSI is co	oncerned with synta	x and semantics of data	
a) Application	b) Presentation	c) Data link d) Networl	K
	SI	CCTION – B	
ANSWER ANY FIVE OF T	HE FOLLOWING		$(5 \times 2 = 10)$
11. Define Network Architect	ure and give its type	es?	

- 12. Give any two advantages of client server system using a LAN?
- 13. Give two reasons for using Layered Protocol stack?
- 14. What is meant by Arbitration mechanism in network?
- 15. What are the difference between connection oriented and connectionless service?
- 16. Which layer of the OSI handles the following:
 - a) Dividing the transmitted bit stream into frames
 - b) Determine which route through a subnet to use

17. Classify the types of networks based on the transmission technology?

SECTION – C

ANSWER ANY THREE OF THE FOLLOWING

- 18. Brief a note on uses of networks?
- 19. Write a summary on protocol hierarchies in networks?
- 20. Identify the design issues in the layers of the network?
- 21. Compare the characteristics of LAN and WAN?
- 22. Explain the characteristics of connection oriented and connection less service?

SECTION – D

ANSWER ANY ONE OF THE FOLLOWING

- 23. Enumerate on the characteristics of OSI Reference model?
- 24. Analyze the layers of TCP / IP reference model?

 $(1 \times 12 = 12)$

 $(3 \times 6 = 18)$

VIVEKAN	ANDA COLLEO	E, TIRUVEDA	KAM WEST	Ր - 625234	
	DEPARTMEN [']	T OF COMPUTI	ER SCIENC)E	
Course Code: 10CT52	Programme:	B.Sc.,		CIA: I Test	
Date: 25.07.2019	Major:	COMP.SCIE	NCE	Semester: V	
Time: 2Hrs	Year:	III		Maximum: 50) Marks
Course Title:		JAVA I	PROGRAMI	MING	
	-	SECTION-A			
Answer all questions		2201101(11			(10X1=10)
1) Object Oriented Programm	ning language wa	s developed by			× ,
a) Microsoft b) Sun	Microsystems	c) Oracle	d) IBM		
2) What is jdb?					
a) Compiler b) Ass	sembler	c) Debugger	d) Editor		
3) Data types in java under v	arious categories	are			
a) Primitive	b)	Non-Primitive			
c) Primitive and Non-Prim	itive d)	All of the above			
4) The Ranges of the Short v	alues on				
a) -32,767 to 32,768	b)	-32,768 to 32,767			
c) -31,767 to 31,768	d)	-31,767 to 31,768			
5) In the Bitwise OR operato	r is defined as		1\ A		
	c)	~	d) ^		
6) Consider the following ev	aluation statemen	$t x = a - b/3 + c^{*}2 - 1, w$	here a=9,b=1	2,c=3	
a) 11 b) 10	C)	9	d)-10		
7) The Java completer produce	es an intermediate	$_{\rm LDV}$			
a) J v IVI D) Byte	code c)	JDK	u) JKE		
a) $\log(a \text{ AND})$ b) Bitu	$\frac{1}{1}$			55	
9) For loop is	(ISCAND C)	AND	u) ADDRE	55	
a) Entry b) Exit	c)	Entry-Exit	d) none		
10) = is denoted as	0)	Lift y LAR	u) none		
a) Conditional b) Assi	gnment c)	Relational	d) logic		
	,		, 0		
		SECTION-B			
Answer any FIVE questions	5				(5X2=10)
11) Any two difference betwee	en with JAVA ar	nd C++?			
12) Define variable.					
13) Expand JVM, JDK					
14) Define Method					
15) What is OOP's?					
16) Define Polymorphism					
1/) Define Keywords		SECTION C			
A newer ony TUDEE questi		SECTION-C			$(2V_{-10})$
18) Explain about SIMPLE I	UIIS E & NESTED EI	SE IE statements v	with axomples		(3A0=18)
19) Discuss about Data types	& Variables with	examples?	vitii examples	`	
20) How Java differ from C	and C_{++}	examples:			
21) Explain about Iava Envi	ronment				
22) Write short notes on 1.	Class and Declar	ing objects.			
2.	Methods	8			
		SECTION-D			
Answer any one					(1X12=12)
23) Briefly explain about bas	sic concepts of OO	OPs with examples	?		·

24) Explain about FOR, WHILE & DO statements with examples?

VIVEKAN	ANDA COLLEGI	E, TIRUVEDAKAM V	WEST - 6252	234
Course Code: 10EP1A	DEFACTMENT Drogramme	B Sc		rest
Date: 26 07 2019	Maior	COMP SCIENCE	Semes	ter V
Time: 20:07.2015	V02+		Mavim	um: 50 Marks
Course Title:	1 Ca1.	SOFTWARE EN	GINEERING	uiii. Jo marks
	1		dinbbinind	
Answer ALL Questions	51	ECTION – A		$(1 \times 1 - 10)$
1 Software acts as				$(\mathbf{I} \times \mathbf{I} - \mathbf{I} 0)$
a. product. b. vehi	 cle for delivering a	product. c. bot	h a and b.	d. None.
2. Software delivers the most	important product a	as .		
a. information.	b. data.	c. vehicle.	d. fact.	
3. The software that resides w	vithin a product or s	ystem is called		
a. application software	е.	b. system software.		
c. embedded software		d. artificial intelliger	ice software.	
4. Water fall model is sometime	mes called as a	·•		
a. Lifecycle.	b. V-process mode	l. c. Ordered model.	d. Classic	life cycle.
5. Software engineering is a _	·			
a. Information technol	logy.	b. Computer technol	ogy.	
c. Layered technology		d. Software technolo	gy.	
6. The foundation for softwar	e engineering is	1		1 4 1 - 1
a. process layer.	b. methods	layer. c. tools layer.		d. task layer.
2. Methods	h Tools	c Process d Ou	ality focus	
8 Requirement analysis resul	ts in the specification	on of software's	charac	teristics
a operational	b. basic.	c. essential	d. useful	
9. When the model is analyze	d. try to minimize			
a. cohesion.	b. coupling.	c. functions.	d. complexity	· .
10. A data object can be	entity		1 5	
a. external.	b. internal.	c. eternal.	d. single.	
	SI	ECTION – B		
Answer Any FIVE Question	15			(5*2=10)
11. Define software Engineer	ing.			
12. What are the characteristi	cs of software engin	neering?		
13. Write a goal of programm	ier reliability.	main		
15 Expand: SPS_MBO	ware application do	mam.		
16 Explain the communication	on activity			
17. Define planning activity	on activity.			
17. Define planning activity.				
	SI	ECTION – C		
Answer Any THREE Quest	ions:			(3*6=18)
18. What are the various proj	ect size categories?			
19. Discuss about the goal of	software engineerin	ng?		
20. How to plan an organizati	ion structure?			
21. Explain the prototype life	cycle model.			
22. Discuss about the program	n team structure.			
	CI	FCTION - D		
Answer Any ONF Augstion	. 51			$(1 \times 12 - 12)$
23. Explain about Question	•] productivity factor	rs.		(1 /1 14 - 14)
24. Discuss about the phase li	ife cycle model.			

VIVEKAN	ANDA COLLEGE	E, TIRUVEDAKAM V	WEST - 625234	
	DEPARTMENT	OF COMPUTER SC	IENCE	
Course Code: 10SB31	Programme:	B.Sc.,	CIA: I Test	
Date: 20.07.2019	Major:	COMP.SCIENCE	Semester: II	l)5 Martra
Course Title	Iear:	II OPERATING	SVSTEM	25 Marks
		OI DIMIIII d	<u>51512M</u>	
	S	ECTION-A		
Answer all questions				(5 X 1=5)
1 is a processor the	nat manipulates and	perform arithmetic opera	ations	
A) ALU	B) CPU	C) Motherboard	D) Memory	
2. Software is a collection of	a			
A) Program	B) Data	C)Task	D) Both A&B	
3is a interface be	tween a computer us	ser and computer hardwa	are	
A) Devices	B) Control unit	C)Processor	D) Operating system	1
4 Process is wait	ing for some event			
A) Wait	B) Run	C) Execute	D) Ready	
5 type of os each t	ask is given some til	me to executed		
A) Betch OS	B) Distributed OS	C) Time sharing OS	D) Real time OS	
	S	ECTION-B		
Answer any TWO question	IS			(2 X 2=04)
6. Write a short notes on imp	portance of OS			· · · ·
7. What is Memory?				
8. What is meant by Run?				
9. Write short notes on devic	e management.			
	S	ECTION-C		
Answer any ONE question				(1 X 6=06)
10. Explain about the OS, fur	nction,objective ,type	es and needs with neat di	agram.	
11. Explain the OS process of	of a viewpoint			
	S	ECTION-D		
Answer any ONE question			(1X 1	l 0=10)
12. Explain the types of a op	erating system resou	rces manager		
13. Explain the basic concep	t and terminologhy f	for OS		
_ 1				

VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST - 625234

VIV DIMIN	DEPARTMENT	OF CC	MPUTER SCIENC	CE	201	
Course Code: 10SB51	Programme:	B.Sc.	•	CIA: I	Test	
Date: 20.07.2019	Major:	COM	P.SCIENCE	Seme	ster: V	
Time: 1Hr	Year:		III	Maxir	num: 50]	Marks
Course Title:		CO	MPETITIVE EXAN	I FOR	IT	
Answer all the questions						
1) One digit number some tin	nes called		14) A hospital has alv	ways		
A) Oncs B)Units C)Single Digit D)Nu	umber	A) Attendants	B) n	urses	
2) 637849 this is a number F	ace value (8)=?		C) emergency	D) d	octors	
A)800 B)80	C)8 D)88		15)find odd man out			
3) 637849 this is a number P	lace value (3)=?		A)Mouth	B)Ey	ye	
A)30000 B)3000	C)300 D)300	00000	C)liver	D)lu	ng	
4)2,5,10,17,26,??,50,??			16) Computers use th	elang	uage to pro	cess data.
A)36,65 B)36,63	C)37,66 D)37,	,65	A) Relational	B) me	gabyte	
5)9587-? =7429-4358			C) binary	D) Proc	cessing	
A)6516 B)6563	C)6662 D)65	14	17) Coffee :: cup:: so	up:?		
6) aa ba bb ab	aab		A) Chicken	B) app	etizer	
A)aaabb B)babab	C)bbaab D)bbl	baa	C) Plate	D) Boy	v1	
7)ba b aab a _ b			18) Man: Biography	: : Natio	n:?	
A)acbc B)acba	C)baba D)abb	ba	A) History	B) Geo	graphy	
8)Find the missing number for	or the given box?		C) People	D) lead	er	
	1		19) The brain of com	nuter svs	stem is	
5 9 5	-		A) ALU	B) Mer	norv	
4 7 7	-		C) CPU	D) Con	trol unit	
3 10 3			20) The 3^{rd} generation	n compu	ters manufa	ctured by
6 6 ?			(A) vacuum tubes	n compu	B) transisto	ore
A)9 B)3	C)11 D)8		C) micro processo	r	D)IC	15
9)Find the missing number for	or the given box?		21)Binding:Book	1	D)IC	
			A) display:museu	m	B) frame ni	cture
4 7 113			C) artisticarronder	.11	D) oriminal	iciuie
5 6 ?			22) look this series	7 1 0 9 1 1	D (11)	hot number
7 2 347	-		22) look this series :	/,10,8,11	1,9,12 W	nat number
A)93 B)161 C)117	3128		should come next?		C)12	D)12
10) CB-5 DISC-43 NEVER	2-9		A)/ D)IU		C)12	D)15
A)74 B)65 C)14	с–. D)48		23) A, E, I, $2, 0$		C	D)II
11) HEART- $@8531 \cdot EEAST$	D)+ 0 = #85/11 ·EARTHEST	Г—?	$A)A \qquad B)S$:- 9	C) U	D)U
A) $\#5/10831$ B)04	= #0941 ,1 ARTHES 5/1#831	1-:	24) Full form of URI	_ 18 <i>?</i>		
A) #341@831 D)@5	31@8/1		A)Uniform Resou	rce Loca	tor	
$12 \times 10^{-10} \times 10^{$	CTOP = 2		B)Uniform Resou	rce Link		
AVECUL DVE			C)Uniform Regist	ered Lin	K	
C)EVTCRO D)EV			D)Unified Resour	ce Link	. 1 1	
12) Find the missing I ETTE	RUIC D for the given her	0	25)1s	data tha	t has been o	rganized or
13 ring the missing LETTE		. <i>:</i>]	presented in a meaning	ngful wa	у.	
		-	A)Process	B) info	ormation	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		J	C) storage	D)softv	vare	
A)L B)S C)N	D)O					

26) A/2, B/4, C/6, D/8 .?,? A) E/8, F/10 B) E/12, F/14 C) E/10, F/12 D) D/10, E/10 controls the way in which the 27) computer system functions and provides a means by which users can interact with the computer. A) The operating system B) The motherboard C) The platform D) Application software 28) Restaurant:: meal :: vending machine : ? A) lobby B) snack C) candy D) Change 29) FULL is the antonyms of A) Hollow B) Light C) Thin D) Empty 30) If ACTION is coded as ZXGRLM, then HEALTH will be coded as **B)TVZOGT** A) SVZOGS C)RUZPGR D)QVGOZQ 31)If you write down all the numbers from 1 to 100, then how many times do you write 3? A) 11 B) 18 C) 20 D)21 32) Given interchanges : Signs + and - , numbers 4 and 8. A) 4 + 8 - 12 = 12B) 4 - 8 + 12 = 0C) 8 + 4 - 12 = 2D) 8 - 4 + 12 = 833)Find out the two signs to be interchanged for making following equation correct 5 + 3 x 8 - 12 / 4 = 3 A) + and - B) + and / C) + and x D) - and / 34) If \times stands for 'addition', \div stands for 'subtraction', + stands for 'multiplication' and-stands for 'division', then $20 \times 8 \div 8 - 4 + 2 = ?$ A) 80 B) 25 C)24 D) 19 35) Select the correct set of symbols which will fit in the given equation? 5 0 3 5 = 20 A) x, x, x = B) -, +, x = C) x, +, xD) +, -, x 36)If Q means 'add to', J means 'multiply by', T means 'substract from' and K means 'divide by' then 30 K 2 Q 3 J 6 T 5 = ?A) 28 B) 18 C)31 D) 103 37) Given intercharges : Signs + and x and numbers 4 and 5 A) 5 x 4 + 20 = 40 B) $5 \times 4 + 20 = 85$ C) $5 \times 4 + 20 = 104$ D) 5 x 4 + 20 = 95 38)If \times means \div , - means \times , \div means + and + means- than $(3 - 15 \div 19) \times 8 + 6 = ?$ A) 8 **B**) 4 C) 10 D) 2

39) What is $7 + 7 \div 7 + 7 \times 7 - 7 = ?$ B) 42 **C**) 0 A) 50 D) 57 40) Can you Solve $7 + 7 \div 7 + 7 \times 7 + 7$ -**7** ÷ **7** + **7 x 7** =? A) 112 B) 56 C) 0 D) 98 41) Find the missing number in the following series? 3, 5, 5, 19, 7, 41, 9,? A) 91 B) 61 C) 79 D) 71 42) What should come in place of question mark (?) in the following number series? 156 272 132 ? 210 240 A) 196 B) 182 C) 199 D) 204 43) Look at this series: 201, 202, 204, 207, ... What number should come next? A) 205 B) 208 C) 210 D) 211 44) Which word does NOT belong with the others? A) GUITAR B) FLUTE C)VIOLIN D) CELLO 45) Which word does NOT belong with the others? A) COUCH B) RUG C) TABLE D) CHAIR 46) Look at this series: 3, 4, 7, 8, 11, 12, ... What number should come next? A) 7 B) 10 C) 15 D) 14 47) Look at this series: V, VIII, XI, XIV, __, XX,... What number should fill the blank? A) IX **B)XXIII** C) XV D) XVII 48) In a certain code language, WINDOW is coded as 452364, SHADE as 17839. Then HIDDEN is coded as? A) 763392 B) 753394 C) 765595 D) 756696 49) Arranging of data in a logical sequence called is A) Sorting B) classifying D) summarising C) reporting 50) A text is entered, using word processor by means of a A) Printer B) disk C) file D) keyboard

VIVEKAN	ANDA COLLEGI	E, TIRUVEDAKAM WI	EST - 625234	
	DEPARTMENT	OF COMPUTER SCIE	CNCE	
Course Code: 10AT11	Programme:	B.Sc.,	CIA: I Test	
Date: 27.07.2019	Major:	COMP.SCIENCE	Semester: 1	0.35 1
Time: 2Hrs	Year:	I	Maximum: 5	0 Marks
Course Title:		DISCRETE MATH	IEMATICS	
	S	SECTION-A		
Answer all questions				(10X1=10)
1) An empty set is denoted by	У			CO1
a) Null b) { }	c) a & b	d) none		
2) If R is reflexive, symmetri	c and transitive the	n the relation is said to be	·	CO1
a) Binary relation b)	Compatibility relat	ion c) Equivalence relation	on d) Partial order	~~~
3) A finite non-empty set of s	ymbols is called	·		CO1
a) alphabet b) letter	c) string d) lar	iguage		001
4) One to one onto function is	also called	·		COI
a) bijective b) injective b) (22)	(12, 12) (2.6)	a) composite function $(0, 2)$ $(0, 12)$ (1)	(2,0)] $(1,2,2,3,1)$	
5) Let $R = \{(3, 3), (6, 6), (9, 9)\}$	9), (12,12), (3,6), (6	,3), (3, 9), (9, 3), (9, 12),(1	2,9) be a relation of	n the set $A=$
$\{5, 0, 9, 12\}$. The relation is _		b) reflexive and example	atria	COI
a) Kellexive and trans	sitive	d) Equivalence relation		
6) Individual Objects in a set	are called	u) Equivalence relation	1	CO1
a) Element b) set	c) list d) None	of above		COI
7) An edge with identical end	s is called	01 00000		CO5
A. complete graph	B. bipartite graph	 C. loops D. link		000
8) An edge with same ends is	called			CO5
A. complete graph	B. bipartite graph	C. loops D. link		
9) Any vertex having degree	one is called			CO5
A. Simple vertex	B. pendent vertex	C. regular vertex	D. complete vertex	
10) A graph that has neither s	elf-loops nor parall	el edges is called gra	ph.	CO5
A. regular B. sim	ole C. complete	e D. null		
	S	SECTION-B		
Answer any FIVE questions	5			(5X2=10)
11) Define graph				CO5
12) Write the types of Relation	ons			CO1
13) Define Sets				CO1
14) Write the Commutative	Law			COL
15) If $A = \{1, 2, 6, 7, 8\}$ $B = \{a, 16\}$	b,2,1,6} Find AUI	3, A/B		
16) Define Simple graph	lus sustan			CO5 CO1
17) write the usage of modu	ius operator	TECTION C		COI
A newor any THDEE quasti		DECTION-C		(3¥6-18)
18) Discuss about relation	5115			(3A0-10)
19) Define the following: i)	Complete Graph ii)	Pseudo Granh iii) Directe	d Granh	CO5
20) Draw the Venn diagram of	f De-Morgan's Lay	v	u Oraph	CO1
21) Prove that the $1+2+3+$	n = n(n+1)/2	•		CO1
22) Let f: $Z \rightarrow Z$ be a function	f(x)=2 the defined by $f(x)=2$	x+3. Let g:Z -> Z be a fund	ction defined by $g(x)$	= 3x+2.Find
i) fog ii) gof.		,	· · · · · · · · · · · · · · · · · · ·	CO1
	S	SECTION-D		
Answer any one	-			(1X12=12)
23) a) Let $\hat{A} = \{-5, -3, -2, -1\}$ B	$=\{-2,-1,0\}$ and C=	{-6,-4,-2}. Find A\(B\C) ar	nd $(A \mid B) \mid C$.	
b) Write about a) Diction	hary Order b) Cry	ptography c) Decryptio	n	CO1
24) Explain about Tree Trav	ersal and its types v	with example		CO5

24) Explain about Tree Traversal and its types with example

VIVEKAN	ANDA COLLEGE	, TIRUVEDAKAM	WEST - 6252	34
	DEPARTMENT	OF COMPUTER SC	IENCE	
Course Code: 10AT31	Programme:	B.Sc.,	CIA: I 7	ſest
Date: 27.07.2019	Major:	COMP.SCIENCE	Semes	ter: III
Time: 2Hrs	Year:		Maxim	um: 50 Marks
Course Title:		OPERATIONS	RESEARCH	
	S	ECTION-A		(10
Answer all the questions1) OR was coined in the year	r 1940 by			(10X1=10) CO1 K1
a) McClosky	b) Thefthen	c) both	d) none	
2) The assignment problem i	s a special case of	problem.		CO1 K1
a) Assignment	b) Transportation	c) graphical	d) none	
3) Iconic model is known as				CO1 K1
a) Physical	b) Chemical	c) biological	d) none	
4) Model abstra	ct in nature			CO1 K1
a) iconic	b) Analogue	c) Mathematical	d) none	
5) prescribes a	course of action of the	he problem		CO1 K1
a) Simulation model	b) Analogue Model	c) Prescriptive Mode	el d) none	
6) If number of rows and colum	nns equal to number of	fallocated zero's then the	problem is called	CO2 K1
a) Balanced	b) Unbalanced	c) optimum	d) not optimu	m
7) The unbalanced assignment	nt problem is said to	be		CO2 K1
a) rows=columns	b) rows≠columns	c) order of matrix=a	ssigning zero's	d)none
8) On travelling salesman pro	oblem staring city an	d ending city should be		CO2 K1
a) Same	b) not same	c) different	d) none	
9) Which method is used to s	solve Assignment pro	oblem		CO2 K1
a) Hungarian	b) MODI	c) VAM	d) LPP	
10) Another name of mathem	natical model is			CO2 K1
a) Static	b) symbolic	c) prescriptive	d) Simulation	

SECTION-B

Answer any FIVE questions	(5X2=10)
11. Define OR	CO1 K1
12. Define Maximization in Assignment Problem. What is the procedure to solve it?	CO2 K1
13. Give the mathematical formulation of Assignment Problem	CO2 K1
14. Write about Physical Model	CO1 K1
15. Define Assignment Problem	CO1 K1
16. what are the methods to solve OR models name it	CO1 K1
17. Define Iconic Model	CO1 K1

SECTION-C

Answe	r any	y TH	REE	quest	tions	3
18. Dis	cuss	Scie	ntific	metho	ods i	n OR
19. Giv	ve ang	y 6 m	odels	s of O	R	
20. Sol	ve th	e ass	ignm	ent pr	oble	m
	(Oper	ators	5		
		.]	II	III	IV	\mathbf{V}
		A 8	3 4	2	6	1
]	B () 9	5	5	4
Machi	ne	C 3	8 8	9	2	6
]	D 4	4 3	1	0	3
]	E 9) 5	8	9	5
0 1 G 3						
21. So.	lve th	ne ass	signn	ient Pi	roble	em
•	MA	CH	INES			
		M1	M	2 M3	3 N	14
	J1	10	5	13	1	.5
JOBS	J2	3	9	18		3
	J 3	10	7	3	,	2
	J4	5	11	9	,	7
22. Giv	ve app	plicat	ions	of OR		

SECTION-D

Answer any ONE					(1X12=12)
23. Explain Hungarian algorithm	ithm m	ethod			CO2 K3
24. Solve the following assignment problem to find the maximum total expected sale					CO2 K3
	Are	a			
salesman	Ι	II	III	IV	
Α	60	50	40	30	

Α	60	50	40	30
В	40	30	20	15
С	40	20	35	10
D	30	30	25	20

VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST - 625234

DEPARTMENT OF COMPLITER SCIENCE								
Course Code: 10CT11	Programme:	B.Sc.,	CI	A: I Test				
Date: 23.07.2019	Maior:	COMP.SCIENCE	Se	emester: I				
Time: 2Hrs	Year:	Ι	M	aximum: 50 Marks				
Course Title:		PROGRAMM	IING IN	C				
	S	ECTION-A						
Answer all questions	b			(10X1=10)				
1. Find the incorrect backslas	h character from the	e following		CO1 K1				
a) \a b) \b								
2. Which function reading inf		CO1 K1						
a) printf() b) puts	() c) scanf()	d) put()						
3. The size of float data type i	S			CO1 K1				
a) 16bits b) 8bits	c) 32bits	d) 64bits						
4. Find the Assignment opera	tor from the follow:	ing		CO2 K1				
a) == b) >= $(1 + 1)^{-1}$	c) =	d) <=		CO1 V1				
5. The values of void data typ		d) 16		COLKI				
$\begin{array}{ccc} a) \text{ NOLL } & b) 1 \\ 6 & \text{ In str1+str2 means} \end{array}$	0) 8	u) 10		CO2 K1				
$\begin{array}{c} \textbf{A} \end{pmatrix} \begin{array}{c} \textbf{Combines two striv} \end{array}$	nσ B) add yalu	(\mathbf{C}) both (\mathbf{D}) no	ne	C02 KI				
7. The function $strcpv(s1,s2)$	in string h		inc .	CO2 K1				
A. copies s1 to s2.	B. copies s2 to s1.	C. appends s1 to end	of s2.	D. appends s2 to end of s1.				
8. Which is valid string functi	on?	11		CO2 K1				
A. strpbrk();	B. strlen();	C. strxfrm();		D. strcut();				
9. An array is a collection of	·			CO2 K1				
A. different data types	B. same data types.							
C. different data types		D. only one data typ	e.					
10. Arrays cannot be initialize			CO2 K1					
A. automatic.	B. external.	C. static.	D. dyna	imic.				
	S	ECTION-B						
Answer any FIVE questions	(5X2=1	.0)						
11. Define datatypes			CO1 K	CO1 K1				
12. How to declare a variable	give syntax with ex	kample	CO1 K	1				
13. Evaluate the expression x	=a-b/3+c*2-1		CO1 K	1				
14. Write about backslash cha	racter with exampl	e	CO1 K	1				
15. What are the character tes	ting function availa	ble in C?	CO1 K	1				
16. What are the commonly u	sed printf format co	odes in C?	COI K	1				
17. How to assign a value to t	he variable give sy	ntax with example	COLK	1				
SECTION-C								
Answer any THREE question	ons			(3X6=18)				
18. Write about Switch case s	CO1 K	2						
19. Explain Basic Structure of	CO1 K	2						
20. Explain the Basic Data ty	CO1 K	2						
21. Write short notes about to		2						
22. Explain input output statement in C with example COI K2								
SECTION-D								
Answer any ONE question			(1X12=	:12)				
23. Explain about C Tokens			CO1 K	CO1 K3				
24. Explain operators in C with	CO1 K	CO1 K3						
