Reg. No:								
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INTERNAL ASSESSMENT TEST - I

Class	: III BCA A&B.	Date: 20.02.18
Paper Code	: SCA8S62	Time: 10:30–11:30
Title of the Paper	: CRYPTOGRAPHY	Max Marks: 30

Sec	٠ti	Λī	. 4
.71			-

				Section	$\mathbf{A}$		$[6 \times 1 = 6]$
			[,	Answer A	<b>ALL</b> the questions	s]	
1.	have ac	ccess to t	he conten	t of a me	ssage		the intended recipients
2					c)integrity		ss control
2.			s, the mes b)active	_	tents are modified	l	
3.			modify				
5.					or may not	d)may	
4.					ned as		
	a)clear	text	h)nlain	text	c)code text	d)ciphe	er text
5.					y	ф	or tone
٠.					d)monoalphabe	tic substi	tution rules
6.							nbers are called as
	and		,	<i>U</i> 1	,		
	a)p,q	b)r,s	c)a,b	d)n,g			
			Section I	3			$[2 \times 7 = 14]$
		[/	Answer A	LL the qu	uestions]		
7.	a)	Explai	n principl	es of secu	urity[ <b>OR</b> ]		
	b)	What i	is virus? E	Explain its	s types		
8.	a)	Explai	n the subs	station tec	chniques in crypto	graphy	[ OR ]
	b)	Explai	n key ran	ge and ke	ey size		
			Sec	ction C			$[1 \times 10 = 10]$
		[A	Answer Al	NY ONE	question]		_
9.	write	in detail	the types	of attack			
					on in detail		

Reg. No:
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### G.T.N.ARTS COLLEGE (Autonomous) (Affiliated to Madurai Kamaraj University) (Accredited by NAAC with 'B' Grade) EVEN SEMESTER [2017-18]

INTERNAL ASSESSMENT TEST - I

Class : III BCA A&B. Date: 20.02.18 Paper Code : SCA8S62 Time: 10:30–11:30 Title of the Paper : **CRYPTOGRAPHY** Max Marks: 30

			г	Section		ional	$[6 \times 1 = 6]$
			L	Answer A	ALL the quest	ionsj	
1.						sender and	the intended recipients
		access to			-		1) 1
2					entication c)ii itents are modi		d)access control
2.				_	d)none	iicu	
3.		m					
	a)does	not	b)does	c)may	or may not	d)may	
4.					ned as		
_					c)code text	d)ciph	er text
5.					y s d)monoalph	abatic cubeti	tution rules
6.			-				nbers are called as
	and						
	a)p,q	b)r,s	c)a,b	d)n,g			
			Section 1	R			$[2 \times 7 = 14]$
		ΓA			uestions]		[2 K / - I I]
7.	. a)				urity[ <b>OR</b> ]		
	b)		s virus? I				
8.		-			chniques in cry	ptography	[ OR ]
	b)	Explai	n key ran	ge and ke	ey size		
			Sec	ction C			$[1 \times 10 = 10]$
		ſΑ			[ question]		[1 X 10 - 10]
					• •		

- 9. write in detail the types of attack
- 10. Explain encryption and decryption in detail

Reg. No:
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INTERNAL ASSESSMENT TEST - I

Class	: I BCA A&B.	Date: 20.02.18
Paper Code	: 17UCAS21	Time: 10:30-11:30
Title of the Paper	: Computer Architecture And Logic Design	Max Marks: 30

CI-			٠		
Se	c	П	M	n	$\rho$

 $[6 \times 1 = 6]$ 

[Answer **ALL** the questions]

			[Allsv	vei ALL the	questions	
1.	The o	peration o	f a switch is _			
	a)stab	le b)trista	ible c)n	nonostable	d)bistab	le
2.	Conve	ert 13 to b	inary			
	a) 110	1	b)1100	c)1101		d)1111
3.		a	lgebra deals w	ith binary vai	riables and	l logic operations
	a)Boo	lean	b)numerical	c)binar	y d)logic	
4.	The ba	asic circui	t for storing in	formation in	a digital r	nachine is called
	a)logic	c design	c)toggle	c)flip-f	lop	d)both a and c
5.	ALU s	stands for				
			d Logic Unit			l Unit
	c)Arit	hmetic lo	aded unit	d)all th	e above	
6.	The 2s	s complen	nent of 001011	0 is		_
	a)110	1001	b)0101010	c)0010	111	d)1101000
			Section B			$[2 \times 7 = 14]$
		[A	Answer <b>ALL</b> tl	he questions l		[2 1.7 1.]
7.	a)	_				lication and division [ OR ]
,.	b)		n negative nun		эн, нас.р	
8.			n the design of		[OR]	
٠.	b)	-	n half adder in		[ 021]	
			C4	C		F1 10 101
		ГА	Section	_	1	$[1 \times 10 = 10]$
		[A	Inswer ANY C	INE question	IJ	

- 9. Explain binary coded decimal number system
- 10. Explain decoders



## G.T.N.ARTS COLLEGE (Autonomous) (Affiliated to Madurai Kamaraj University) (Accredited by NAAC with 'B' Grade) EVEN SEMESTER [2017-18]

INTERNAL ASSESSMENT TEST - I

Class: I BCA A&B.Date : 20.02.18Paper Code: 17UCAS21Time : 10:30–11:30Title of the Paper: Computer Architecture And Logic DesignMax Marks : 30

				ion A er ALL the question	$[6 \times 1 = 6]$
1.			of a switch isstable c)mo	onostable d)bi	stable
2.		nvert 13 to 1101		c)1101	d)1111
3.					and logic operations
4.	Th		cuit for storing info		gic al machine is called d)both a and c
5.	ΑI	LU stands for	or	b)Access Log	
6.	c)A	Arithmetic 1	loaded unit	d)all the above is	ve e
			b)0101010	c)0010111	d)1101000
			Section B [Answer ALL the	e questions]	$[2 \times 7 = 14]$
7			ain binary additior ain negative numb		Itiplication and division [ OR ]
8	3. a	ı) Expl	•	RS flip flop [OI	<b>R</b> ]
			Section C [Answer ANY ON		$[1 \times 10 = 10]$

- 9. Explain binary coded decimal number system
- 10. Explain decoders

Reg. No:	1	7	U	C	A		



INTERNAL ASSESSMENT TEST - I

Class : **I BCA A&B.** Date: 21.02.18 Paper Code : 17UCAC21 Time: 9-10 AM Title of the Paper : **OPP WITH C++** Max Marks: 30

Section	A
Section	A

 $[6 \times 1 = 6]$ 

[Answer ALL the questions]						
1.	1 is the process by which one object can acquire the properties of					
another object.	. 1	,	1 1	•		
a) class	b) object	c) inheritar	ice d) po	lymorphism		
	is the mechanism th					
manipulates and	keeps both safe fro	m outside interferer	nce and misuse	2.		
a) inheritance b) polymorphism c) class d) encapsulation						
3. The classes de	3. The classes derived from the base are usually referred to asclasses.					
a) deri	ved b) base	c) parent	d) chil	d		
4. When accessing	ig member of a class	given a pointer to a	n object use th	ie		
	of the dot operator.					
	<b>b</b> )→					
	g which one is point			·		
	<b>b</b> ) .*		<b>&gt;</b> *			
	is essentially a					
	ence b) pointer	r c) argument	d) operate			
	Section B			$[2 \times 7 = 14]$		
	nswer <b>ALL</b> the ques					
	Explain the basic st			[ OR ]		
	Discuss about static					
8. a)	Write in detail abou	ut Parameterized co	nstructor	[ OR ]		
b)	Discuss about copy	constructor				
S	<b>Section C</b> $[1 \times 10 = 10]$					
[Answer ANY ONE question]						
t 1						
9. Write a c++ program for function overloading						
10 Write a c++ program for swapping two numbers using friend function						

10. Write a c++ program for swapping two numbers using friend function.

Reg. No:	1	7	U	C	A				
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#### G.T.N.ARTS COLLEGE (Autonomous) (Affiliated to Madurai Kamaraj University) (Accredited by NAAC with 'B' Grade) EVEN SEMESTER [2017-18]

INTERNAL ASSESSMENT TEST - I

Class : **I BCA A&B.** Date: 21.02.18 Paper Code : 17UCAC21 Time: 9-10 AM Title of the Paper : OPP WITH C++ Max Marks: 30

### Section A

 $[6 \times 1 = 6]$ 

[Answer **ALL** the questions]

1		is the proc	eec by w	hich one object	t can ac	nnira tha	nronertie	os of another
objec		is the proc	ess by w	men one object	can ac	quire une	e propertie	s of another
		s b) obj	ect	c) inherita	nce	d) pol	ymorphisi	n
		is the mec				and the	data it m	anipulates and
keeps		safe from outsid						
		eritance b)		•			-	_
3. Th		es derived from						_classes.
4 ***		ved b) b						
		essing member		s given a pointe	er to an o	object us	se the	
opera	itor ins	tead of the dot of		~) *		1/ <b>/</b> *		
5 In 1	ha fall			c). *				
3.111	не юп	owing which or		c) <del>→</del>			·•	
6 A (1	1)	is esse	y • entially a	n implicit point	u) . ter	,		
0.71(1		ence b) p				operato	or	
	<i>u)</i> 10101	Section		c) argument	α,	орегию	[2 x 7 =	= 141
				e questions]			[= /	,
7.	a)	Explain the b			ogram		[OR]	
	b)	_		nember function		il		
8.	a)	Write in deta	il about I	Parameterized of	construc	tor	[ OR ]	
	b)	Discuss abou	t copy co	onstructor				
			Castian (				Γ1 <b></b> 1	0 – 101
	Section C [Answer ANY ONE question]						[1 X 1	0 = 10
		LAHSWCI	1111 O	question]				

- 9. Write a c++ program for function overloading
- 10. Write a c++ program for swapping two numbers using friend function.

Reg. No:					
G.T.N.ARTS COLLEGE (Affiliated to Madurai Kam (Accredited by NAAC with EVEN SEMESTER [INTERNAL ASSESSMENT Class : III BCA A & B Paper Code : SCA8S63 Title of the Paper : EMBEDDED SYSTEM	(Autonomous) taraj University) th 'B' Grade) 2017-18]	n			
Section A	$[6 \times 1 = 6]$				
[Answer ALL the questions]					
The is the brain of the embedded software.     Processor	b) Hardware				
c) Timer	d) Software				
2. The is a software for controlling, receiving an					
from or to a device.					
a) Assembler	b) Kernel				
c) Loader	d) Device driver				
3. The is a standard bus that follows a commu	,				
multiple IC's	1				
a) USB	b) CAN				
c) I <sup>2</sup> C	d) PC1				
4. The communication in which a constant	t phase difference is maintained				
between the clocks that guide the transmitter and receiv	ver .				
a) Synchronous	b) DMA				
c) ISO- synchronous	d) Asynchronous				
5. The is a timing device that resets the system					
a) Reset	b) Watch dog timer				
c) Power up timer	d) Hardware timer				
6. DDR stands for	1) Data Discation Business				
a) Data Determination Register	b) Data Direction Register				
c) Dynamic Data Register Section B	d) Double data register				
[Answer <b>ALL</b> the question	$[2 \times 7 = 14]$				
7. a) Compare <b>Microprocessor vs. Microcontroller</b>	. [OR]				
b) Explain the classification and skills required for e	——————————————————————————————————————				
8. a) Explain the <b>UART</b> in detail	[ OR ]				
b) What are the characteristics of synchronous comm					
•					
Section C	$[1 \times 10 = 10]$				
[Answer ANY ONE questi	on]				
9. Explain the <b>design process</b> in embedded system.					

10. What are the various **Memories** used in embedded system?

Reg. No:						
G.T.N.ARTS COLLEG (Affiliated to Madurai K: (Accredited by NAAC EVEN SEMESTEI INTERNAL ASSESSM Class Paper Code Title of the Paper : EMBEDDED SYSTEM	amaraj with 'B R [2017	University) 3' Grade) -18]				
-						
Section A [Answer ALL the	auestions]	$[6 \times 1 = 6]$				
1. The is the brain of the embedded software						
a) Processor	b)	Hardware				
c) Timer	d)	Software				
2. Theis a software for controlling, receiving	g and sen	ding a byte or a stream of bytes				
from or to a device.						
a) Assembler	b)	Kernel				
c) Loader	. d)	Device driver				
3. Theis a standard bus that follows a commultiple IC's	nmunicatio	on protocol and is used between				
a) USB	b)	CAN				
c) I <sup>2</sup> C	d)	PC1				
4. The communication in which a cons	,					
between the clocks that guide the transmitter and rec						
a) Synchronous	b)	DMA				
c) ISO- synchronous	d)	Asynchronous				
5. The is a timing device that resets the sys						
a) Reset	b)	Watch dog timer				
c) Power up timer	d)	Hardware timer				
6. DDR stands for	<b>b</b> )	Data Direction Register				
<ul><li>a) Data Determination Register</li><li>c) Dynamic Data Register</li></ul>	b) d)	Data Direction Register Double data register				
Section B	u)	$[2 \times 7 = 14]$				
[Answer ALL the ques	stionsl	[2 1 7 11]				
7. a) Compare Microprocessor vs. Microcontroller . [OR]						
b) Explain the classification and skills required for embedded system.						
8. a) Explain the <b>UART</b> in detail [OR]						
b) What are the characteristics of synchronous co	ommunica	tion?				
Section C		$[1 \times 10 = 10]$				

[Answer ANY ONE question]

- 9. Explain the **design process** in embedded system.

10. What are the various **Memories** used in embedded system?

Reg. No:	В	5	S	1	1	1	



INTERNAL ASSESSMENT TEST - I

Class : III BCA A&B
Paper Code : SCA8S61 Time : 12-1 PM
Title of the Paper : BIOMETRICS Max Marks : 30

	Section	A	$[6 \times 1 = 6]$	
	[Answer A	LL the questions]		
1. Authen	tication mechanism verifies	S		
a)	The Column	The Column b) The code		
c)	The identity	d) The automation.		
2. The FAR captures errors in which the system accepts the illegitimate				
a)	Attacks	b) power		
- /	matches	d) passwords		
3. FTER s				
	a) Failure To Enroll Rate	,		
	c) False Transfer Error Ra	te d) False To l	Enroll Rate	
4. The	_ is analogous to the Dewa	y decimal system that c	classifies books and	
journals.				
	a) Henry System	b) FBI		
	c) Single finger flat scann			
5. In a sing	gle-finger flat scanners,		or a luminescent panel	
	a) Optical	b) Thermal		
	c) Capacitive	d) Ultrasonio		
6 is	an example of a commercia	•		
	a) veri voice	b) voice XM	<b>I</b> L	
	c) DTW	d) HHM		
	Section B		$[2 \times 7 = 14]$	
	[Answer <b>ALL</b> the qu	estions]		
7. a)	Write a note on trial and e	rror attacks	[ OR ]	
b)	Explain biometric charact	eristics and traits		
8. a)	Write about Hand geomet	ry biometrics	[ OR ]	
b )	Write short notes on voice	verification		
	Section C		$[1 \times 10 = 10]$	
	[Answer ANY ONE	question]		

9. Describe about a) Subverting the system b) Economics of authentication

10. Explain a) Finger Print Cards b) Manual matching of fingerprints



## G.T.N.ARTS COLLEGE (Autonomous) (Affiliated to Madurai Kamaraj University) (Accredited by NAAC with 'B' Grade) EVEN SEMESTER [2017-18]

INTERNAL ASSESSMENT TEST – I

Class : III BCA A&B
Paper Code :SCA8S61 Time :12-1 PM
Title of the Paper : BIOMETRICS Max Marks : 30

	Sect	ion A	$[6 \times 1 = 6]$
	[Answer A	LL the questions]	
1.Authen	tication mechanism verifies		
b)	The Column	b) The code	
c)	The identity	d) The automation.	
.The FA	R captures errors in which the	ne system accepts the i	llegitimate
b)	Attacks	b) power	
c)	matches	d) passwords	
FTER	stands for		
	a) Failure To Enroll Rate	b) Failure To	Error Rate
	c) False Transfer Error Ra	ite d) False To	Enroll Rate
. The	is analogous to the Dewa	y decimal system that	classifies books and
ournals.			
	a) Henry System	b) FBI	
	c) Single finger flat scann	er d) AFIS	
. In a si	ngle-finger flat scanners,	technology uses LE	D or a luminescent pane
	a) Optical	b) Thermal	
	c) Capacitive	d) Ultrasoni	c
·	is an example of a commerci	ial voice verification sy	ystem
	a) veri voice	b) voice XN	ML
	c) DTW	d) HHM	
	Section B		$[2 \times 7 = 14]$
	[Answer <b>ALL</b> the qu	lestions]	
a)	Write a note on trial and e	rror attacks	[ OR ]
b)	Explain biometric character	eristics and traits	
. a)	Write about Hand geomet	ry biometrics	[ OR ]
b )	Write short notes on voice	verification	
	Section C		$[1 \times 10 = 10]$
	Section C		[

10. Explain a) Finger Print Cards b) Manual matching of fingerprints

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G.T.N.ARTS COLLEGE (Autonomous) (Affiliated to Madurai Kamaraj University) (Accredited by NAAC with 'B' Grade) EVEN SEMESTER [2017-18]						
Class : III BCA A & B Paper Code : SCA8C62 Title of the Paper : COMPUTER NETWORK	Date: 19.02.18 Time: 12 – 1 pm Max Marks: 30					
Section A	$[6 \times 1 = 6]$					
[Answer <b>ALL</b> the qu	estions]					
1. A set of layer and protocol is called a	,					
a) Interface	b) Protocol Stack					
c) Network Architecture	d) None					
2. WAN stands for						
a) Wireless Area Network b) Wire and Network						
c) Wide Area Network d) Wire Accessible Network						
3. The is concerned with transmitting raw bits over a communication channel.						
a) Data link layer b) Network layer						
c) Physical layer	d) Application Layer					
4. The transmission and reception are achieved by mea						
a) unguided	b) guided					
c) point to point	d) both a and c					
5. In a fibre optic cable the core is surrounded by a se	cond layer of glass called					
a) Yoke	b) Clad					
c) Cap	d) pipe					
6Convert analog signal into digital signal an	, 11					
a) Modem	b) Echo Suppressor					
c) Echo cancellers	d) both a and b					
Section B	$[2 \times 7 = 14]$					
[Answer <b>ALL</b> the question						
7. a) Discuss LAN and its possible topologies	[OR]					
b) Describe the ATM Reference model.						
8. a) Discuss the Radio transmission and Microwave	e transmission.[ OR ]					
b) Explain in detail about the fiber optics transmission media.						
<b>Section C</b> $[1 \times 10 = 10]$						
[Answer ANY ONE question]						
9. Explain OSI reference model in detail.						
10. Discuss Communication Satellites.						

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Reg. No:				



INTERNAL ASSESSMENT TEST - I

Class : III BCA A & B Date: 19.02.18

Paper Code : SCA8C62 Time: 12 – 1 pm

Title of the Paper : COMPUTER NETWORK Max Marks: 30

Section A	$[6 \times 1 = 6]$
[Answer <b>ALL</b> the questions]	

	[	-1
1. A set of layer and protocol is	s called a	_
1. 11 set of layer and protocol is	, tuntu u	-
a) Intenface		

a) Interfaceb) Protocol Stackc) Network Architectured) None

c) Network Architecture2. WAN stands for

- a) Wireless Area Network b) Wire and Network
- c) Wide Area Network d) Wire Accessible Network
- 3. The \_\_\_\_\_ is concerned with transmitting raw bits over a communication channel.
  - a) Data link layer

b) Network layer

c) Physical layer

- d) Application Layer
- 4. The transmission and reception are achieved by means of an antenna, is called \_\_\_\_\_ media
  - a) unguided

b) guided

c) point to point

- d) both a and c
- 5. In a fibre optic cable the core is surrounded by a second layer of glass called
  - a) Yoke

b) Clad

c) Cap

- d) pipe
- 6. \_\_\_\_\_Convert analog signal into digital signal and vice versa.
  - a) Modem

Echo cancellers

b) Echo Suppressord) both a and b

[OR]

### Section B

 $[2 \times 7 = 14]$ 

#### [Answer **ALL** the questions]

- 7. a) Discuss LAN and its possible topologies
- b) Describe the ATM Reference model.
- 8. a) Discuss the Radio transmission and Microwave transmission.[ **OR** ]
  - b) Explain in detail about the fiber optics transmission media.

### **Section C** $[1 \times 10 = 10]$

### [Answer ANY ONE question]

- 9. Explain OSI reference model in detail.
- 10. Discuss Communication Satellites.

Reg. No:	Reg. No:			
G.T.N.ARTS COLLEGE (Autonomous)  Madurai Kamaraj University)  (Accredited by NAAC with 'B' Grade)  EVEN SEMESTER [FEB, 2018]  INTERNAL ASSESSMENT TEST - I  Class Paper Code : SCA8C61 : SCA8C61 Title of the Paper  SOFTWARE ENGINEERING  Max Marks: 30	G.T.N.ARTS COLLEGE (Autonomous)  (Affiliated to Madurai Kamaraj University)  (Accredited by NAAC with 'B' Grade)  EVEN SEMESTER [FEB, 2018]  INTERNAL ASSESSMENT TEST - I  Class : III BCA A & B Date: 22-02-20  Paper Code : SCA8C61 Time: 12-1 p.  Title of the Paper : SOFTWARE ENGINEERING Max Marks: 30	.m		
Section A [6 x 1 = 6]	Section A $[6 \times 1 = 6]$			
[Answer <b>ALL</b> the questions]  1. Enhancing the capabilities of the product is one of the activity in Software	[Answer <b>ALL</b> the questions]  1. Enhancing the capabilities of the product is one of the activity in Software			
a) quality b) reliability	a) quality b) reliability			
c) maintenance d)design	c) maintenance d)design			
2 system often involve real-time processing ,telecommunications and multitasking.	2 system often involve real-time processing ,telecommunications and multitas	sking.		
a) Small b) Large	a) Small b) Large			
c) Very Large d) Extremely Large	c) Very Large d) Extremely Large			
3 method is bottom-up estimation tool.	3 method is bottom-up estimation tool.			
a) Expert Judgment b) Group consensus	a) Expert Judgment b) Group consensus			
c) Work breakdown structures d) LOC	c) Work breakdown structures d) LOC			
4. Theteam structure provide opportunity for each team member to	4. Theteam structure provide opportunity for each team member to			
contribute to decisions	contribute to decisions			
a) Democratic b) Chief programmer	a) Democratic b) Chief programmer			
c) Hierarchical d) All the above	c) Hierarchical d) All the above			
5. Boehm suggests that maintenance effort can be estimated by use of	5. Boehm suggests that maintenance effort can be estimated by use of			
a) Adaptability b) Effort estimation	a) Adaptability b) Effort estimation			
c) Activity ratio d) FSP	c) Activity ratio d) FSP			
6. COCOMO model expands to	6. COCOMO model expands to			
a) Constructive Cost Model b) Cost computer Model	a) Constructive Cost Model b) Cost computer Model			
c) Cost Constructive Model  Grating B  Computer Cost Model	c) Cost Constructive Model d) Computer Cost Model	1.41		
Section B $[2 \times 7 = 14]$	Section B $[2 \times 7 =$	14]		
[Answer <b>ALL</b> the questions] 7. a) Explain the Project size categories in Software Engineering [ <b>OR</b> ]	[Answer ALL the questions]			
b) Explain the Managerial issues in Software Engineering	7. a) Explain the Project size categories in Software Engineering [ <b>OR</b> ]			
o) Explain the Managerial Issues in Software Engineering	b) Explain the Managerial issues in Software Engineering			

#### **Section C** $[1 \times 10 = 10]$

[Answer ANY ONE question]

9. Explain Quality and Productivity Factors of a Software Product

8. a)Explain the Staffing Level Estimation [ **OR** ]

b)Explain the Software Cost Factors in detail

10. Describe the State Oriented Notations of Specification Techniques

b)Explain the Software Cost Factors in detail	
Section C	$[1 \times 10 = 10]$
[Answer ANY ONE question]	
Evaloin Quality and Braductivity Factors of a Software Braduct	

9. Explain Quality and Productivity Factors of a Software Product

8. a)Explain the Staffing Level Estimation [ **OR** ]

10. Describe the State Oriented Notations of Specification Techniques



INTERNAL ASSESSMENT TEST - I

Class	: II B.C.A.	Date: 22-02-2018
Paper Code	: SCAGC42	Time : <b>12- 1 pm</b>
Title of the Paper	: COMPUTER GRAPHICS	<b>Max Marks</b> : <b>30</b>

Title	of th	e Paper : COMPUTER GRAPHICS		Max Marks: 30
		Section A		$[6 \times 1 = 6]$
		[Answer <b>ALL</b> the quest	tions	
1	Αp	hosphor with low persistence is useful for		
	a)	good resolution	b)	refresh rate
	c)	animation	d)	static pictures
2	The	purpose of is to free the cpu from the gr	aphi	
	a)		b)	display processor
	c)	frame buffer	d)	raster scan generator
3	Pic	ure definition is stored in memory area called t	he _	
	a)	frame buffer	b)	vertical retrace
	c)	bitmap	d)	pixmap
4	If (	x,y) is inside the circle boundary, then fcircle(x	к,у) i	S.
	a)	< 0		=0
	c)	> 0		<b>≠</b> 0
5		maximum number of points that cn be display		
		esolution		persistance
		spect ratio		pixel
6	The	interactive painting package use algorith	m	
	a)	scan line polygon fill	b)	flood fill
	c)	odd even rule	d)	boundary fill
		Section B		$[2 \times 7 = 14]$
		[Answer <b>ALL</b> the questions]		
7.	a)	Describe the working of Cathode Ray Tube.		[ OR ]
	b)	Give brief note on Random Scan Systems		
8.	a)	Describe DDA Algorithm to generate straight	line	es. [OR]
	b)	Explain the boundary fill algorithm in detail		
		Section C		$[1 \times 10 = 10]$
		[Answer ANY ONE question]		[1.10 10]
9. V	Vhat :	are the various applications of computer graphic	cs	
		an algorithm to draw ellipse	-5	



### G.T.N.ARTS COLLEGE (Autonomous) (Affiliated to Madurai Kamaraj University) (Accredited by NAAC with 'B' Grade) EVEN SEMESTER [FEB, 2018]

| INTERNAL ASSESSMENT TEST - I
| Class | : II B.C.A. | Date : 22-02-2018 |
| Paper Code | : SCAGC42 | Time : 12-1 pm

Title of the Paper : COMPUTER GRAPHICS Max Marks : 30

1111	e or u	le Paper : COMPUTER GRAPHICS		Wax Warks: 30
		Continu		[6-1-6]
		<b>Section A</b> [Answer <b>ALL</b> the qu	nections	$[6 \times 1 = 6]$
1	Λ -	hosphor with low persistence is useful for _		1
1	a)	good resolution		refresh rate
	c)	animation	d)	static pictures
2	,	e purpose of is to free the cpu from the	/	*
2	a)	video controller	b)	
	c)	frame buffer	d)	raster scan generator
3		ture definition is stored in memory area calle	,	raster sean generator
5	a)	frame buffer	b)	vertical retrace
	c)	bitmap	d)	pixmap
4	,	(x,y) is inside the circle boundary, then fcirc		
•	a)			= 0
	c)		,	<b>≠</b> 0
5	,	e maximum number of points that cn be disp	,	•
		resolution		persistance
	c) a	aspect ratio		pixel
6		interactive painting package use algor		
	a)	scan line polygon fill	b)	flood fill
	c)	odd even rule	d)	boundary fill
		Section B		$[2 \times 7 = 14]$
		[Answer <b>ALL</b> the questions]		
7.	a)	Describe the working of Cathode Ray Tub	e.	[ OR ]
	b)	Give brief note on Random Scan Systems		
8.	a)	Describe DDA Algorithm to generate strai	ight line	es. [OR]
	b)	Explain the boundary fill algorithm in deta		
		Section C		$[1 \times 10 = 10]$
		[Answer ANY ONE question]		[
9. V	What :	are the various applications of computer graph	phics	
		an algorithm to draw ellipse	L	

Reg. No:				

Date 19-02-18

Time: 1:30-2:30pm



Class

Paper Code

### G.T.N.ARTS COLLEGE (Autonomous) (Affiliated to Madurai Kamaraj University) (Accredited by NAAC with 'B' Grade) EVEN SEMESTER [2017-18]

INTERNAL ASSESSMENT TEST - I

: II BCA A & B

: SCAGC41

Title of the Paper : Data Structures and Computer Algorithm Max Marks : 30				
Section A		$[6 \times 1 = 6]$		
[Answer <b>ALL</b> the q	uestions	]		
1. The provides only the operations, hidir	ng the in	plementation details.		
a) DT	b)	DATA		
c) ADT	d)	SYMBOL		
2. In linked list, we can traverse in	n reverse	direction.		
a) single	b)	doubly		
c) circular	d)	node		
3. The Addressing function of a 2D array stored in co	olumn m	ajor order is		
a) $b+(i*col+j)*e$	b)	b+(i*row+j)*e		
c) $b+(j*row+i)*e$	d)	b+(j*col+i)*e		
4. An expression is said to be if the operator follows the operands.				
a) prefix	b)	infix		
c) a &b	d)	postfix		
5. In a nested parenthesis the paren	thesis ha	as higher precedence.		
. a) outer	b)	inner		
c) top	d)	bottom		
6. In queue, insertion are done at the end of	f the que	ue.		
. a) reverse	b)	rear		
c) left	d)	right		
Section B		$[2 \times 7 = 14]$		
[Answer <b>ALL</b> the questions]				
7. a) Write about storage representation of <b>2D Array</b>	y.	[ OR ]		
b) Explain the various special types of Matrices.				
8. a) Explain the <b>ADT stack</b> .		[ OR ]		
b) Discuss about the linked list implementation of a queue with any 2 operations.				
<b>Section C</b> $[1 \times 10 = 10]$				
[Answer ANY ONE question]				

b) delete a node.

9. Write algorithum and c program for the following operation on a DLL

a) Insert an element after node M

10. Explain the **Infix**, **Prefix and Postfix** Expressions.

Reg. No:				
Neg. Mu:				
0				



# G.T.N.ARTS COLLEGE (Autonomous) (Affiliated to Madurai Kamaraj University) (Accredited by NAAC with 'B' Grade) EVEN SEMESTER [2017-18] INTERNAL ASSESSMENT TEST - I

Class	: II BCA A & B	Date: 19-02-18
Paper Code	: SCAGC41	Time: 1:30-2:30pm
Title of the Paper	: Data Structures and C	omputer Algorithm Max Marks : 30

Section A		$[6 \times 1 = 6]$			
[Answer Al	LL the questions	]			
1. The provides only the operation	ns, hiding the im	plementation details.			
a) DT	b)	DATA			
c) ADT	d)	SYMBOL			
2. In linked list, we can tr	averse in reverse	e direction.			
a) single	b)	doubly			
c) circular	d)	node			
3. The Addressing function of a 2D array stor					
a) $b+(i*col+j)*e$	b)	b+(i*row+j)*e			
c) $b+(j*row+i)*e$	d)	b+(j*col+i)*e			
4. An expression is said to be	if the operato	r follows the operands.			
a) prefix	b)	infix			
c) a &b	d)	postfix			
5. In a nested parenthesis the	parenthesis ha	as higher precedence.			
. a) outer	b)	inner			
c) top	d)	bottom			
6. In queue, insertion are done at the	_ end of the que	ue.			
. a) reverse	b)	rear			
c) left	d)	right			
Section 1	В	$[2 \times 7 = 14]$			
[Answer ALL t					
7. a) Write about storage representation of 2	•	[ <b>OR</b> ]			
b) Explain the various special types of Ma	atrices.				
8. a) Explain the <b>ADT stack</b> . [OR]					
b) Discuss about the linked list implementation of a queue with any 2 operations.					
Section		$[1 \times 10 = 10]$			
[Answer ANY C					
9. Write algorithum and c program for the f					
	b) delete a r	node.			
10 Explain the <b>Infix. Prefix and Postfix</b> Ex	pressions				

Reg. No:				
0				



INTERNAL ASSESSMENT TEST - I

Class : III BCA A & B Date: 21.02.18

Paper Code : SCA8A62 Time: 12 - 1 pm

Title of the Paper : DIGITAL IMAGE PROCESSING Max Marks: 30

		Section A			$[6 \times 1 = 6]$				
		[Answer ALL the ques	stions	]					
1. A		level process is characterized by the fact t	hat be	oth its inputs a	nd outputs are				
imag	es.								
	a) Low b) Mid								
	c) High d) Very high								
2. Tr	ansis	tor was invented at Bell lab in							
	a)	1940	b)	1948					
	c)	1950	d)	1958					
3. CA	AT st	ands for Computerized Tomography.							
	a)	Axe	b)	Axis					
	c)	Axial	d)	Angle					
4		vision is called photopic vision.		C					
	a) Retina b) Cones								
	c) Rods d) Fovea								
5. Frequency is measured in									
	a) Meters b) Microns								
	c)	Volts	d)	Hertz					
6		rays are so dangerous to living organisms.	,						
	a)	Gamma	b)	X-rays					
	c)	Ultraviolet	d)	Visible					
		Section B			$[2 \times 7 = 14]$				
		[Answer <b>ALL</b> the question	ns]						
7. a)	Wh		OR]						
		and explain the components of an Image Prod		g System.					
		aw and Explain Structure of an eye. [OR]		<i>.</i>					
		at do you mean by Image Acquisition? Explain	n it us	sing sensors.					
,		Section C		C	$[1 \times 10 = 10]$				
		[Answer ANY ONE question	on]		,				
9. W	hat a	are the fundamental steps involved in Digital Is		Processing.					
		nn overview of Light and Electromagnetic Spe							

Reg. No:				
				l



### G.T.N.ARTS COLLEGE (Autonomous) (Affiliated to Madurai Kamaraj University) (Accredited by NAAC with 'B' Grade) EVEN SEMESTER [2017-18]

INTERNAL ASSESSMENT TEST – I

Class : III BCA A & B Date: 21.02.18

Paper Code : SCA8A62 Time: 12 – 1 pm

Title of the Paper : DIGITAL IMAGE PROCESSING Max Marks: 30

Title of the Paper : DIGITAL IMAGE PROCE	SSING		Max Marks: 30
Section A			$[6 \times 1 = 6]$
[Answer <b>ALL</b> the	questions	]	
1. A level process is characterized by the f	act that b	oth its inputs ar	nd outputs are
images.			
a) Low	b)	Mid	
c) High	d)	Very high	
2. Transistor was invented at Bell lab in			
a) 1940	b)	1948	
c) 1950	d)	1958	
3. CAT stands for Computerized Tomograp	hy.		
a) Axe	b)	Axis	
c) Axial	d)	Angle	
4 vision is called photopic vision.			
a) Retina	b)	Cones	
c) Rods	d)	Fovea	
5. Frequency is measured in			
a) Meters	b)	Microns	
c) Volts	d)	Hertz	
6 rays are so dangerous to living organisms	S.		
a) Gamma	b)	X-rays	
c) Ultraviolet	d)	Visible	
Section B			$[2 \times 7 = 14]$
[Answer ALL the que	stions]		
7. a) What is Digital Image Processing	[ OR ]		
b) List and explain the components of an Image	Processin	g System.	
8. a) Draw and Explain Structure of an eye. [OR]			
b) What do you mean by Image Acquisition? Ex	plain it u	sing sensor strij	ps.
Section C			$[1 \times 10 = 10]$
[Answer ANY ONE qu	estion]		
9. What are the fundamental steps involved in Digi			
10. Give an overview of Light and Electromagnetic	Spectrun	1.	

	Reg. No:								
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INTERNAL ASSESSMENT TEST - II

Class	: III BCA A & B	Date: 16-4-18
Paper Code	: SCA8S63	Time: 1:30-2:30pm

Title of the Paper : **EMBEDDED SYSTEM** Max Marks: 30

	[6 x 1 = 6]						
		LL the questions					
1is a pipe be	etween two specific	ed sectrons at the					
a) Pipe b) Socket c) Port d) Mail boxes.							
2 means finding the reasons for fault.  a)Testing b) Debugging c) Emulator d) Error							
3. USB is a d		C) Elliulatoi	d) Error				
		a) Massassus	d) control bus				
a) Inter connecti	ing b) data	c) Memory	a) control bus				
4 Loops are used when ex							
a) Repeatedly	b) Rarely	c) Constantly	d) Fixed				
5. List is astru							
a) Data	d) Bus						
6 ISR and TASK are repr							
a) Same	b) Different	c) Routine	d) Data				
	Section	_	$[2 \times 7 = 14]$				
	[Answer <b>ALL</b>						
7. a) Explain the Embed			[ OR ]				
b) Write a note on var		es.					
8. a) Differentiate Task a			[ OR ]				
b) Explain the RTOS	services.						
	Section		$[1 \times 10 = 10]$				
	[Answer ANY]						
9. Explain the Program I	Models concepts in	n embedded systei	n.				
10. Explain in detail abou	t Inter Process Cor	nmunication.					

Reg.No:				



### G.T.N.ARTS COLLEGE (Autonomous) (Affiliated to Madurai Kamaraj University) (Accredited by NAAC with 'B' Grade) EVEN SEMESTER [2017-18]

INTERNAL ASSESSMENT TEST - II

Class : III BCA A & B Date: 16-4-18 Paper Code : SCA8S63 Time: 1:30-2:30pm Mov Morke : 20 . EMPEDDED CYCTEM

Thue of the Paper : EMBEDDED SISIEM		Max Marks: 30			
Section A [Answer ALL		[6 x 1 = 6]			
1is a pipe between two specified se	ectrons at the specific	ed sets.			
a) Pipe b) Socket c)	Port d) Ma	il boxes.			
2 means finding the reasons for fau a)Testing b) Debugging c) 3. USB is a device a) Inter connecting b) data c)  4 Loops are used when exciting a set of stateme	Emulator d) Erron (d) constants	itrol bus			
a) Repeatedly b) Rarely c)	Constantly d) Fix	ked			
5. List is astructure. a) Data b) Address c) Memory d) Bus 6 ISR and TASK are represents a) Same b) Different c) Routine d) Data					
Section B		$[2 \times 7 = 14]$			
[Answer <b>ALL</b> the	auestions]	[2 X I - 17]			
7. a) Explain the Embedded C,C++ and Java F	-	[ OR ]			
b) Write a note on various Data structures.		[ 021]			
8. a) Differentiate Task and Threads.		[ OR ]			
b) Explain the RTOS services.					
Section C [Answer ANY ON] 9. Explain the Program Models concepts in em 10. Explain in detail about Inter Process Common	bedded system.	$[1 \times 10 = 10]$			
20. England in detail dood intel 110ccss Collins	*************				



### G.T.N.ARTS COLLEGE (Autonomous) (Affiliated to Madurai Kamaraj University) (Accredited by NAAC with 'B' Grade) EVEN SEMESTER [2017-18]

Reg. No:

INTERNAL ASSESSMENT TEST

Class	: III BCA A & B	Date: 13.4.2018
Paper Code	: SCA8S62	Time: 1.30-2.30 pm

Class Paper Co Title of	ode the Paper	: III BCA A 6 : SCA8S62	& B	Tii Max Marks: <b>30</b>	Date: 13.4.2018 me: <b>1.30-2.30 pm</b>			
			Section A		$[6 \times 1 = 6]$			
	TC .1		Answer ALL the					
1.			ivolved in a lock -	<ul> <li>key mechanism is 4</li> </ul>	, the number of keys			
	needed is							
	a) 2 b	o) 4 c) 6	d) 8					
2.		increases	the redundancy of	of plain text				
	a) confusi	on b) diffus	sion c) both	d) neither confusion	n nor diffusion			
3.	The actual	l algorithm is th	e AES encryption	scheme is				
	a)blow fish b)IDEA c) Rijndael d) RC4							
4.	The RC5	block cipher mo	de is also called a	ıs				
	a) RC5 blo	ock cipher	b) RC5 – CBC	c) RC5-CBC pad d	) RC5-CTS			
5.	Symmetric	c key cryptograj	phy is tha	n asymmetric cryptog	graphy.			
	•			c) faster d)usual				
6.			re, we need the _		<b>,</b>			
	-			ic key c)receiver	's private key d)			
		public key	e) senser s puer	0)20001.02	s private neg			
	receiver s	public key						
			Section B		$[2 \times 7 = 14]$			
		[Ansv	wer <b>ALL</b> the ques	tions]				
7. a) Di	iscuss abou	it stream and blo	ock ciphers.	]	OR]			
				various algorithm mo	odes.			
		notes on IDEA.	[ OR ]					
b) W	hat is mon	o alphabetic cip	her? explain.					
			Section C		$[1 \times 10 = 10]$			
		[Anew	er ANY ONE qu	estion]	$[1 \ X \ 10 - 10]$			
9. Expla	ain RSA al		or rain or or qui	Conon				
		rations of AES						

Reg. No:				
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#### G.T.N.ARTS COLLEGE (Autonomous) (Affiliated to Madurai Kamaraj University) (Accredited by NAAC with 'B' Grade) EVEN SEMESTER [2017-18]

INTERNAL ASSESSMENT TEST - II

· III RCA A & R Class Date: 13.4.2018

Paper Code  Fitle of the	e : SCA8S62 Paper : CRYPTOGRAPHY	Max M	Time: 1.30-2.30 pm arks: 30
	Section [Answer A	ALL the questions]	$[6 \times 1 = 6]$
ne	the number of parties involved in eeded is		nism is 4, the number of keys
,	increases the redu	indancy of plain text	
	confusion b) diffusion		confusion nor diffusion
	he actual algorithm is the AES er		
	blow fish b)IDEA c) Rijno		
	he RC5 block cipher mode is also	*	
	RC5 block cipher b) RC5		
	ymmetric key cryptography is		÷
	always slower b) of the same sp		
	o verify a digital signature, we no		•
	Sender's private key b) senderceiver's public key	er's public key c	receiver's private key d)
	Section	в	$[2 \times 7 = 14]$
	[Answer ALL	the questions]	
	uss about stream and block ciphe		[ OR ]
	uss the advantages and dis advan		rithm modes.
	e short notes on IDEA. t is mono alphabetic cipher? expl	[ <b>OR</b> ] lain.	
	Section	ı C	$[1 \times 10 = 10]$

[Answer ANY ONE question]

- 9. Explain RSA algorithm.
- 10.Explain the operations of AES

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INTERNAL ASSESSMENT TEST - II

Class	: III BCA A&B	Date: 16.04.18
Paper Code	: SCA8S61	Time: <b>12-1PM</b>
Title of the Paper	: BIOMETRICS	Max Marks: 30

AFIS stands for     a) Automated Fingerprint Identification System	Max Marks : <b>30</b> [6 x 1 = 6]  level d)Minutia.
[Answer ALL the questions]  1. The first level of fingerprint examination is called a)Event b) Ridge c) Galton  2. AFIS stands for a) Automated Fingerprint Identification System	level
<ol> <li>The first level of fingerprint examination is called</li></ol>	
a)Event b) Ridge c) Galton  2. AFIS stands for a) Automated Fingerprint Identification System	
AFIS stands for     a) Automated Fingerprint Identification System	d)Minutia.
a) Automated Fingerprint Identification System	
a) Automated Fingerprint Identification System	
b) All Fingerprint Identification system	
c) All Force Interrupt System	
d) Automated Finger Identify Standarad	
3 is an example of a commercial voice verification	n system.
a) VoiceXML b) VeriVoice c) DT	,
4 biometric is captured without the willingness of the	ne subject.
a) Facial b) voice c) Iris d) Retina	
5. Retinal scanning is accomplished by illuminating the Retin	
intensity Light and imaging the patterns formed by th	
a) UV b) Infra Red c) Beam	,
6. The Human Iris is controlled by 2 muscles namely dilator a	
a) Spectator b) Sphincter c) Raterial	d)Monforsia.
Section B	$[2 \times 7 = 14]$
[Answer <b>ALL</b> the questions]	
7 a. How speaker recognition works.	[OR]
b. Write short notes on Fingerprint cards.	
8 a. Discuss on the facial recognition application.	[OR]
b. Explain the working principles of Signature Recognition	
Section C	$[1 \times 10 = 10]$
[Answer ANY ONE question]	[1 x 10 - 10]
f	
9. Explain the Iris Recognition Technology with its application	on.

Reg.No				



### G.T.N.ARTS COLLEGE (Autonomous) (Affiliated to Madurai Kamaraj University) (Accredited by NAAC with 'B' Grade) ODD SEMESTER [2017-18]

INTERNAL ASSESSMENT TEST - II

Class : III BCA A&B.

Paper Code : SCA8S61 Time : 12-1 PM

Title of the Paper : BIOMETRICS Max Marks : 30

_	the ruper . Browner rupes	man mans. co
	Section A	$[6 \times 1 = 6]$
	[Answer <b>ALL</b> the questions]	
	1. The first level of fingerprint examination is called	level
	a)Event b) Ridge c) Galton	d)Minutia.
	2. AFIS stands for	
	a) Automated Fingerprint Identification System	
	b) All Fingerprint Identification system	
	c) All Force Interrupt System	
	d) Automated Finger Identify Standarad	
	3 is an example of a commercial voice verification	ion system.
		TW d) HHM
	4 biometric is captured without the willingness of	the subject.
	a) Facial b) voice c) Iris d) Retina	3
	5. Retinal scanning is accomplished by illuminating the Ret	ina with a low
	intensity Light and imaging the patterns formed by	the major blood vessels
	a) UV b) Infra Red c) Beam	
	6 The Human Iris is controlled by 2 muscles namely dilator	r and the
	a) Spectator b) Sphincter c) Raterial	
	Section B	$[2 \times 7 = 14]$
	[Answer ALL the questions]	[2 X / - 14]
	7 a. How speaker recognition works.	[OR]
	b. Write short notes on Fingerprint cards.	[OK]
	b. Write short notes on I mgerprint cards.	
	8 a. Discuss on the facial recognition application.	[OR]
	b. Explain the working principles of Signature Recognition	
	Section C	$[1 \times 10 = 10]$
	[Answer ANY ONE question]	[1 1 10 10]
	[ moner 12 (2 of 12 december)	
	9. Explain the Iris Recognition Technology with its applicat	ion.
	1	
	10. Describe the History and application of Keystroke dynar	mics.

Class Paper Code Title of the Paper	Reg. No: G.T.N.ARTS COLLEGE ( ffiliated to Madurai Kam (Accredited by NAAC wir EVEN SEMESTER [ INTERNAL ASSESSMEN : III BCA A & B : SCA8C62 : COMPUTER NETWORKS	araj University) th 'B' Grade) 2017-18]				
	Section A	$[6 \times 1 = 6]$				
1 DIF -(1-C	[Answer <b>ALL</b> the que	stions]				
<ol> <li>DLE stands for</li> <li>a) Data Link</li> <li>c) Data Link</li> </ol>		<ul><li>b) Data Link Enrouter</li><li>d) None</li></ul>				
<ul><li>a) Hamming</li><li>c) Error corre</li></ul>	ecting code	<ul><li>b) Checksum</li><li>d) Error Detecting codes</li></ul>				
3. Protocol in which called	n the sender sends one frame and the	en waits for an acknowledgement are				
a)A one bit sl c) Stop and V		b)Go back N d)Selective Repeat				
<ul><li>4. Ais a subse</li><li>a) Flooding</li><li>c) Spanning</li></ul>	t of the subnet that includes all the recode	b) Regions d) Packets				
	outing the routers are divided into	h) Daviers				
<ul><li>a) Blocks</li><li>c) Packets</li></ul>		b) Regions d) Flooding				
*	rotocol Distributed Unit Protocol Device Unit Section B	b) Transfer Protocol Data Unit d) Transport Protocol Data Unit [2 x 7 = 14]				
7 a) Evplain about	[Answer <b>ALL</b> the question t simplex stop and wait protocol.	OR]				
	tatic Channel Allocation in LANs at					
8. a) Describe the	design issues of Network Layer.	[OR]				
b) Explain						
,	lishing a connection sing connection.					

10.Discuss Shortest path routing.

Section C

9. Explain in detail about Error Detection and Error Correction

[Answer ANY ONE question]

_				
Reg. No:				



#### G.T.N.ARTS COLLEGE (Autonomous) (Affiliated to Madurai Kamaraj University)

(Accredited by NAAC with 'B' Grade) **EVEN SEMESTER [2017-18]** INTERNAL ASSESSMENT TEST - II

: III BCA A & B Date: 13.4.2018 Class Paper Code : SCA8C62 Time: 12-1 pm

#### Title of the Paper : **COMPUTER NETWORKS** Max Marks: 30 Section A $[6 \times 1 = 6]$ [Answer **ALL** the questions] 1. DLE stands for a) Data Link Encoder b) Data Link Enrouter c) Data Link Escape d) None 2. The number of bit positions in which two code words differ is called a) Hamming distance b) Checksum c) Error correcting code d) Error Detecting codes 3. Protocol in which the sender sends one frame and then waits for an acknowledgement are called a)A one bit sliding window b)Go back N c) Stop and Wait d)Selective Repeat 4. A is a subset of the subnet that includes all the routers but contains no loops. a) Flooding b) Regions c) Spanning code d) Packets 5. In Hierarchical routing the routers are divided into a) Blocks b) Regions c) Packets d) Flooding 6. TPDU means a) Transfer Protocol Distributed Unit b) Transfer Protocol Data Unit c) Transport Protocol Device Unit d) Transport Protocol Data Unit **Section B** $[2 \times 7 = 14]$ [Answer **ALL** the questions] 7. a) Explain about simplex stop and wait protocol. [OR] b) Explain the Static Channel Allocation in LANs and MANs. 8. a) Describe the design issues of Network Layer. [OR]

a) Establishing a connection b)Releasing connection.

> **Section C** [Answer ANY ONE question]

 $[1 \times 10 = 10]$ 

9. Explain in detail about Error Detection and Error Correction

10.Discuss Shortest path routing.

b) Explain

Reg. No:				R	eg. No:	
G.T.N.ARTS COLLEGE (Auto (Affiliated to Madurai Kamaraj (Accredited by NAAC with 'B' EVEN SEMESTER [ APRIL, INTERNAL ASSESSMENT TE Class : II B.C.A. Paper Code : SCAGC42 Title of the Paper : COMPUTER GRAPHICS	University) Grade) 2018]	Class Paper C Title of	(Affil (Ac )	T.N.ARTS COLLEGE (A iated to Madurai Kama ccredited by NAAC with EVEN SEMESTER [APINTERNAL ASSESSMEN' IB.C.A. CAGC42 OMPUTER GRAPHICS	araj Universi h 'B' Grade) RIL, 2018] T TEST – II	ity)
Section A  [Answer ALL the questions]  The is defined as the distance between the baseli a) Character size b) Te	[6 x 1 = 6]  ne and the capline characters.  ext size		he is def Character size	Section A [Answer ALL the quest fined as the distance between the		[6 x 1 = 6] capline characters.
c) Character Height d) Text Heigh A is accomplished by extending the outer boundar until they meet	t. ies of each of the two lines	2 A	Character Height is accompatil they meet	ht d) Text plished by extending the outer bo	Height. bundaries of each	of the two lines
	ound join rele join day location of pixel areas is	3 R	) Miter join ) Bevel join Laster objects can alled	a also be antialiased by shifting th	b) Round join d) circle join ne display location	of pixel areas is
a) Prefiltering b) Su c) Pixel phasing d) Li In an object is displaced a given distance and direct		a) c)	) Prefiltering ) Pixel phasing	t is displaced a given distance an		
5 A world coordinate area selected for display is called	anslation 	5 A		ate area selected for display is cal	b) Shear d) Translation lled b) view	
c) viewport d) m 6 The clipping region is commonly referred to as	ew apping ip port	6 T	) window ) viewport 'he clipping regio ) clipping windo	on is commonly referred to as w	d) mapping	
c) clip view d) view Section B	[2 x $7 = 14$ ]		clip view	Section B	d) viewport	$[2 \times 7 = 14]$
[Answer <b>ALL</b> the questions] 7. a) Give a short note about the character attributes . [6] b) Give brief note about Anti aliasing. 8. a) What is Transformation? Explain about Basic Trans	<del>-</del>	7. a) b) 8. a)	) Give a short: ) Give brief no	Answer ALL the questions] note about the character attribute on about Anti aliasing.  Instrumentation? Explain about Basic		[ OP ]
b) Explain about Cohen-Sutherland Line Clipping.		6. a,		t Cohen-Sutherland Line Clippin		
Section C [Answer ANY ONE question] 9. Explain briefly about Composite Transformation.	$[1 \times 10 = 10]$	9. E		Section C Answer ANY ONE question] out Composite Transformation.		$[1 \times 10 = 10]$

10. Write about Polygon Clipping.

10.

Write about Polygon Clipping.



INTERNAL ASSESSMENT TEST - II

Class	: II BCA A & B	Date :17-4-18
Paper Code	: SCAGC41	Time: <b>12 - 1pm</b>
Title of the Paper	· Data Structures and Computer	Algorithm May Marks · 30

Section A		$[6 \times 1 = 6]$			
[Answer ALL the que					
1. A binary expression tree each internal node correspond	nds to				
a) Operand	b)	both a & c			
c) Operator	d)	string			
2. A threaded binary tree making all right child pointers	s point	to in order of the			
node if exists.					
a) successor	b)	previous			
c) predecessor	d)	next			
3. The sort picks an element as pivot.					
a) merge	b)	selection			
c) quick	d)				
4. The Strassen's method is to reduce the recursive calls					
a) 6	b)				
c) 4	d)	5			
5. The notation is used to define the upper					
. a) Big-Oh	b)	Big-Theta			
c) Big-Omega	d)	Alpha			
6. The algorithum sorts an array by repeatedly t	-				
. a) quick	b)	insertion			
c) merge	d)	selection			
Section B		$[2 \times 7 = 14]$			
[Answer <b>ALL</b> the questio					
7. a) Explain the Binary tree Traversals with an algorithm	thum.	[ OR ]			
b) Explain the Threaded trees.					
8. a) Explain the Performance Analysis.		. [OR]			
b) Discuss about Binary Search.					
Section C		$[1 \times 10 = 10]$			
[Answer ANY ONE question]					
9. Explain the prims and kruskal algorithum with examples.					
10. Explain the various sorting algorithums.(quick,merge&selection)					

Reg. No:				



### G.T.N.ARTS COLLEGE (Autonomous)

(Affiliated to Madurai Kamaraj University)
(Accredited by NAAC with 'B' Grade)
EVEN SEMESTER [2017-18]

INTERNAL ASSESSMENT TEST - II

Class : II BCA A & B Date : 17-4-18

Paper Code : SCAGC41 Time : 12 - 1pm

Title of the Paper : Data Structures and Computer Algorithm May Marks : 30

The of the Paper . Data Structures and Con	mputer	Algorithm Max Marks . 30
Section A		$[6 \times 1 = 6]$
[Answer <b>ALL</b> the q	uestions	
1. A binary expression tree each internal node corres		
a) Operand	b)	both a & c
c) Operator	d)	string
2. A threaded binary tree making all right child point	ters point	<u> </u>
node if exists.	•	
a) successor	b)	previous
c) predecessor	d)	next
3. The sort picks an element as pivot.	ĺ	
a) merge	b)	selection
c) quick	d)	bubble
4. The Strassen's method is to reduce the recursive c	alls to	·
a) 6	b)	7
c) 4	d)	5
5. The notation is used to define the up	pper bour	nd of an algorithm.
. a) Big-Oh	b)	Big-Theta
c) Big-Omega	d)	Alpha
6. The algorithum sorts an array by repeated	ly finding	g the minimum element.
. a) quick		insertion
c) merge	d)	selection
Section B		$[2 \times 7 = 14]$
[Answer <b>ALL</b> the ques	tions]	
7. a) Explain the Binary tree Traversals with an algo-	orithum.	[ OR ]
b) Explain the Threaded trees.		
8. a) Explain the Performance Analysis.		. [OR]
b) Discuss about Binary Search.		
Section C		$[1 \times 10 = 10]$
[Answer ANY ONE que	estion]	
9. Explain the prims and kruskal algorithum with ex	xamples.	
-	-	
10. Explain the various sorting algorithums.(quick,m	erge&sel	lection)

Reg. No:	Reg. No:				
G.T.N.ARTS COLLEGE (Autonomous)  Madurai Kamaraj University) (Accredited by NAAC with 'B' Grade)  EVEN SEMESTER [APRIL, 2018]  INTERNAL ASSESSMENT TEST - II  Class Paper Code : SCA8C61 : SCA8C61 Time: 12-1 p.m.  Title of the Paper : SOFTWARE ENGINEERING  Max Marks: 30	G.T.N.ARTS COLLEGE (Autonomous) (Affiliated to Madurai Kamaraj University) (Accredited by NAAC with 'B' Grade) EVEN SEMESTER [APRIL, 2018] INTERNAL ASSESSMENT TEST - II Class : III BCA A & B Date: 18-04-2018 Paper Code : SCA8C61 Time: 12-1 p.m Title of the Paper : SOFTWARE ENGINEERING Max Marks: 30				
<b>Section A</b> $[6 \times 1 = 6]$	<b>Section A</b> $[6 \times 1 = 6]$				
[Answer <b>ALL</b> the questions]	[Answer <b>ALL</b> the questions]				
1 of a data flow diagram specifies processing activities.	1 of a data flow diagram specifies processing activities.				
a) Nodes b) Arcs	a) Nodes b) Arcs				
c) Graph d) Tree	c) Graph d) Tree				
<ul><li>2 is a process of isolating and correcting the cause of known errors.</li><li>a) Testing</li><li>b) Debugging</li></ul>	2 is a process of isolating and correcting the cause of known errors.  a) Testing  b) Debugging				
c) Coding d) SQA	c) Coding d) SQA				
3. In coupling, one module relies on the internal working of another module.	3. In coupling, one module relies on the internal working of another module.				
a) Content b) Control	a) Content b) Control				
c) Stamp d) External	c) Stamp d) External				
4. The software requirements specification is based on	4. The software requirements specification is based on				
a) System definition b) Users manual	a) System definition b) Users manual				
c) Project plan d) Design	c) Project plan d) Design				
5. The board reviews and approves all change requests.	5. The board reviews and approves all change requests.				
a) Change control b) Review control	a) Change control b) Review control				
c) Control review d) Review change	c) Control review d) Review change				
6 is concerted with tracking and controlling of the work products that constitute a	6 is concerted with tracking and controlling of the work products that constitute a				
software product. a) SOA b) Verification	software product.				
a) SQA b) Verification c) Configuration Management d) Metrics	a) SQA b) Verification c) Configuration Management d) Metrics				
Section B $[2 \times 7 = 14]$	Section B $[2 \times 7 = 14]$				
[Answer <b>ALL</b> the questions]	[Answer <b>ALL</b> the questions]				
7. a) Explain the concept of Coupling and Cohesion [OR]	7. a) Explain the concept of Coupling and Cohesion [ <b>OR</b> ]				
b) Explain any one of the Design techniques.	b) Explain any one of the Design techniques.				
8. a) Write short notes on walkthroughs and Inspections [ <b>OR</b> ]	8. a) Write short notes on walkthroughs and Inspections [ <b>OR</b> ]				
b) Explain about Managerial aspects of Software Maintenance	b) Explain about Managerial aspects of Software Maintenance				
e, —	-/				
<b>Section C</b> $[1 \times 10 = 10]$	<b>Section C</b> $[1 \times 10 = 10]$				
[Answer ANY ONE question]	[Answer ANY ONE question]				
9. Explain briefly about Design Notations.	9. Explain briefly about Design Notations.				
10. Describe about the System Testing.	10. Describe about the System Testing.				

	Reg. No:					
Class	G.T.N.ARTS COLLEGE (Affiliated to Madurai Kama (Accredited by NAAC wit EVEN SEMESTER [2] INTERNAL ASSESSMEN : III BCA A & B	iraj Univers h 'B' Grade) 2017-18]	ity)			
Paper Code Title of the Paper	: SCA8A62 : DIGITAL IMAGE PROCESSIN	1G	Time: 12 – 1 pm Max Marks: 30			
1	Section A		$[6 \times 1 = 6]$			
	[Answer ALL the ques	tions]				
	formations have the basic form					
a) s=cr <sup>r</sup>		b) C=Sr <sup>r</sup>				
c) s=c log(1-		d) $s = L - 1 - r$				
	processing techniques are based on n	nanipulation in fo	urier transform of			
image		1) 5				
a) spatial b) Frequency						
c) Grey-leve		d) Thresholding	g			
3.If the function is under sampled then the phenomena called						
a) Aliasing b) Band limit						
c) Sample rate d) Pattern						
4. The termimage is used often to denote a 24-bit RGB color image.						
a) Full - color b) Pseudo - color						
c) Gray – level d) Binary						
5. Hue and saturation taken together are called a) Tristimulus b) Chromaticity						
,		b) Chromaticity	y			
c) Luminance d) Elegant  6 Most devices that denosit colored pigments on paper such as color printers and conjugate						
6. Most devices that deposit colored pigments on paper, such as color printers and copiers require data input.						
a) HSI	iata mput.	b) RGB				
c) CMY		d) CMYK				
C) CIVI I	Section B	u) CMTK	$[2 \times 7 = 14]$			
	[Answer <b>ALL</b> the question	sl	[2 A / - 14]			
7 a) Explain the h	nistogram processing.	[ OR ]				
b) Explain any two basic gray level transformations.						
8. a) Write short notes on Color Fundamentals. [OR]						
b) Discuss about intensity slicing in pseudo color image processing.						
,	,	<i>C</i> 1 <i>B</i> .				

<ol><li>Most devices that deposit col</li></ol>	ored pigments on paper, such as	s color printers and copiers	require data input.		
equire data input.		_	a) HSI	b) RGB	
a) HSI	b) RC	BB	c) CMY	d) CMY	
c) CMY	d) CM	ſYK	Section	ı B	
	Section B	$[2 \times 7 = 14]$	[Answer ALI	the questions]	
[A	nswer <b>ALL</b> the questions]		7. a) Explain the histogram processing.	[0	
7. a) Explain the histogram pro	ocessing.	[ OR ]	b) Explain any two basic gray level tran	sformations.	
b) Explain any two basic gra	y level transformations.		8. a) Write short notes on Color Fundamen	ntals. [ C	
3. a) Write short notes on Color Fundamentals. [OR]			b) Discuss about intensity slicing in pseudo color image proce		
b) Discuss about intensity sl	icing in pseudo color image pro	cessing.			
•			Section	n C	
	Section C	$[1 \times 10 = 10]$	[Answer ANY	<b>ONE</b> question]	
[Ar	swer <b>ANY ONE</b> question]		9. Explain about Histogram Equalization.	•	
9. Explain about Histogram Eq	ualization.		10.Explain about Various Color Models.		
10.Explain about Various Color	Models.		-		
•					
			,		

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### G.T.N.ARTS COLLEGE (Autonomous)

(Affiliated to Madurai Kamaraj University) (Accredited by NAAC with 'B' Grade) **EVEN SEMESTER [2017-18]** 

INTERNAL ASSESSMENT TEST - II

Class : III BCA A & B Date: 17.4.2018 Paper Code : SCA8A62 Time: 12-1 pm Title of the Paper : **DIGITAL IMAGE PROCESSING** Max Marks: 30

#### Section A $[6 \times 1 = 6]$

[Answer **ALL** the questions]

- 1. Power-law transformations have the basic form b)  $C=Sr^r$ a) s=cr<sup>r</sup>
  - d) s = L 1 rc)  $s=c \log(1+r)$
- 2. -----domain processing techniques are based on manipulation in fourier transform of image
  - a) spatial b)Frequency
  - d) Thresholding c) Grey-level
- 3. If the function is under sampled then the phenomena called -----
  - b) Band limit a)Aliasing
  - c) Sample rate d) Pattern
- 4. The term ----- image is used often to denote a 24-bit RGB color image.
  - a) Full color b) Pseudo - color
  - c) Gray level d) Binary
- 5. Hue and saturation taken together are called -----
  - a) Tristimulus b) Chromaticity
  - d) Elegant c) Luminance
- 6. Most devices that deposit colored pigments on paper, such as color printers and copiers

  - Κ

 $[2 \times 7 = 14]$ 

- OR ]
- )R ]
  - ssing.

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G.T.N.ARTS COLLEGE (Autonor	nou	us)			

(Affiliated to Madurai Kamaraj University) (Accredited by NAAC with 'B' Grade) EVEN SEMESTER [2017-18]

INTERNAL ASSESSMENT TEST - II

Class	: I BCA A & B	Date: 16.4.2018
Paper Code	: 17UCAS21	Time: 10.30 – 11.30 am
Title of the Paper	: Digital Computer Architecture	Max Marks: 30

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 $[6 \times 1 = 6]$ 

[Answer **ALL** the questions]

1.	For n inputs in decoder, number of outputs are				
	a)n b)2n c)n/2 d	)2^n			
2.	. In DRAM, the address are	read as			
	a)Row address b)column	address c)both	d)none		
3.	. When bus traffic is too he	avy, its operation spe	ed is called as		
	a)bus – limited b)tristate	c)interface	d) cloud		
4.	. All input and output device	es that interface the sy	ystem is given a		
	a)device number b	)power c)data	d)bus		
5.	. A is an orde	red set characters hand	dled as a group		

d)ALU d)buses

Section B

6. the instruction used to read a word is

 $[2 \times 7 = 14]$ 

[Answer **ALL** the questions]

c)MB d)IC

- 7. a) What is Static memory. Explain it pin out [OR]
  - b)Explain about interrupts in I/O systems

a)control unit b)computer word

8. a)Explain the structure of magnetic tape [OR] b)Explain the branch instructions in detail

**Section C** 

 $[1 \times 10 = 10]$ 

[Answer **ANY ONE** question]

- 9. What is decoder? Explain its circuitry
- 10. What is memory mapped I/O

a)SET b)RESET



G.T.N.ARTS COLLEGE (Autonomous) (Affiliated to Madurai Kamaraj University) (Accredited by NAAC with 'B' Grade) EVEN SEMESTER [2017-18]

INTERNAL ASSESSMENT TEST - II

Class	: I BCA A & B	Date: 16.4.2018
Paper Code	: 17UCAS21	Time: 10.30 – 11.30 AM
Title of the Paper	: Digital Computer Architecture	Max Marks: 30

#### Section A

 $[6 \times 1 = 6]$ 

[Answer **ALL** the questions]

- 1. For n inputs in decoder, number of outputs are b)2n c)n/2 d) $2^n$ 
  - 2. In DRAM, the address are read as a)Row address b)column address c)both d)none
  - 3. When bus traffic is too heavy, its operation speed is called as a)bus – limited b)tristate c)interface d) cloud
  - 4. All input and output devices that interface the system is given a
  - a)device number b)power c)data d)bus 5. A is an ordered set characters handled as a group
  - a)control unit b)computer word d)ALU d)buses
  - 6. the instruction used to read a word is a)SET b)RESET c)MB d)IC

#### Section B

 $[2 \times 7 = 14]$ 

[Answer **ALL** the questions]

- 7. a) What is Static memory. Explain it pin out [OR]
  - b)Explain about interrupts in I/O systems
- 8. a)Explain the structure of magnetic tape [OR]
  - b)Explain the branch instructions in detail

#### **Section C** [Answer ANY ONE question]

- 9. What is decoder? Explain its circuitry
- 10. What is memory mapped I/O

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INTERNAL ASSESSMENT TEST – II

Class	: I BCA A&B.	Date: 17.04.18
Paper Code	: 17UCAC21	Time : <b>9-10am</b>
Title of the Paper	: OOPS WITH <b>CPP</b>	Max Marks: 30

ass	I BCA A&B.	Date: 17.04.18
per Co	ode : <b>17UCAC21</b>	Time: <b>9-10am</b>
tle of t	the Paper : OOPS WITH <b>CPP</b>	Max Marks: 30
	Section A	[6 x 1 = 6]
	[Answer <b>ALL</b> the question	ons]
1.	Operator also called the class n	nember access operator.
	a) Dot b) function call d) comma	d) pointer
2.	In the following which one is unary operator w	hile overloading
	a) () b) $\begin{bmatrix} 1 \\ 1 \end{bmatrix}$ c) $\Rightarrow$ d) .(c)	comma)
3.	The operator is normally used t	o access and modify a specific
	elements in an array.	• •
	$a) <> b) {} {} {} {} {} {} {} {} {} {} {} {} {} $	
4.	When a protected member is inherited in	
	the derived class.	-
	a) Protected b) auto c) public	d) private
5.	A member inherited in the private	mode derivation, becomes private in
	the derived class.	_
	a) Public b) private c) class	d) protected
6.	A(n) function is a member function	that is declared within a base class
	and redefined by a derived class.	
	a) Inline b) virtual c) friend	d) recursion
	Section B	$[2 \times 7 = 14]$
	[Answer <b>ALL</b> the questions]	
7. a)	·	[ OR ]
b.	Explain about single inheritance	
8. a)		nd function [OR]
b)	Discuss about basic stream class	
	Section C	$[1 \times 10 = 10]$
	[Answer ANY ONE question]	[1.1.10 10]
9.	Write a c++ program for unary operator overloa	ading
). 10.	Explain about build in manipulators with exam	
10.	Explain about band in mainpulators with exam	r.~

Reg.No



### G.T.N.ARTS COLLEGE (Autonomous) (Affiliated to Madurai Kamaraj University) (Accredited by NAAC with 'B' Grade) **ODD SEMESTER [2017-18]**

INTERNAL ASSESSMENT TEST - II

Class	: I BCA A&B.	Date: 17.04.18
Paper Code	: 17UCAC21	Time: 9-10am
Title of the Paper	: OOPS WITH CPP	Max Marks: 30

		Section A	$[6 \times 1 = 6]$		
		[Answer <b>ALL</b> the questions]			
1		Operator also called the class member access	operator.		
	b)Dot	b) function call d) comma d) pointe	er		
2.	In the follo	owing which one is unary operator while overloadin	g·		
	b) ()	b) [] c) $\rightarrow$ d) ,(comma)			
3.	The	operator is normally used to access and m	odify a specific		
elei	ments in an arr				
	b)<>	b) { } c) [ ] d) ( )			
4	When a pr	otected member is inherited in mode, it b	ecome protected in		
	the derived c	class.			
	b)Protected	b) auto c) public d) private			
5	A	member inherited in the private mode derivatio	n, becomes private i		
	the derived c	class.			
	b)Public	b) private c) class d) protected			
6	A(n)	function is a member function that is declared	d within a base class		
	and redefined	d by a derived class.			
	b)Inline	b) virtual c) friend d) recursion			
		Section B	$[2 \times 7 = 14]$		
		[Answer ALL the questions]			
7 a	a) Explain al	- ·	OR]		
		bout single inheritance	OK j		
	DAPIAMI a	bout single innertunce			
8.a	) Explain ab	out function overloading using friend function [	OR 1		
		out basic stream class	- 1		
	,				
		Section C	$[1 \times 10 = 10]$		
[Answer ANY ONE question]					
9.	Write a c+	+ program for unary operator overloading			
10		out build in manipulators with example			