Reg. No: | | | | | | | | |

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

Section A [6 x 1 = 6]
[Answer **ALL** the questions]

1. The principle of _____ensures that only the sender and the intended recipients have access to the content of a message
   a)Confidentiality b)authentication c)integrity d)access control
2. In _____ attacks, the message contents are modified
   a)passive b)active c)both d)none
3. A worm _____ modify a program
   a)doesnot b)does c)may or may not d)may
4. The codified language can be termed as _____
   a)clear text b)plain text c)code text d)cipher text
5. A polyalphabetic cipher uses many_____
   a)keys b)transpositions c)codes d)monoalphabetic substitution rules
6. In Diffie-Hellman key exchange protocol, the initial two numbers are called as ____ and _____
   a)p,q b)r,s c)a,b d)n,g

Section B [2 x 7 = 14]
[Answer **ALL** the questions]

7. a) Explain principles of security**[OR]**
   b) What is virus? Explain its types
8. a) Explain the substation techniques in cryptography **[OR]**
   b) Explain key range and key size

Section C [1 x 10 = 10]
[Answer **ANY ONE** question]

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

Reg. No: | | | | | | | | |

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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**

Section A [6 x 1 = 6]
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Section C [1 x 10 = 10]
[Answer **ANY ONE** question]

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EVEN SEMESTER [2017-18]
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**

Section A [6 x 1 = 6]
[Answer **ALL** the questions]

1. The operation of a switch is _____
   a)stable b)tristable c)monostable d)bistable
2. Convert 13 to binary
   a) 1101 b)1100 c)1101 d)1111
3. _____ algebra deals with binary variables and logic operations
   a)Boolean b)numerical c)binary d)logic
4. The basic circuit for storing information in a digital machine is called _____
   a)logic design c)toggle c)flip-flop d)both a and c
5. ALU stands for
   a)Arithmetic and Logic Unit b)Access Logical Unit
   c)Arithmetic loaded unit d)all the above
6. The 2s complement of 0010110 is _____
   a)1101001 b)0101010 c)0010111 d)1101000

Section B [2 x 7 = 14]
[Answer **ALL** the questions]

7. a) Explain binary addition, subtraction, multiplication and division **[OR]**
   b) Explain negative numbers
8. a) Explain the design of RS flip flop **[OR]**
   b) explain half adder in detail

Section C [1 x 10 = 10]
[Answer **ANY ONE** question]

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

Reg. No: | | | | | | | | |

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EVEN SEMESTER [2017-18]
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**

Section A [6 x 1 = 6]
[Answer **ALL** the questions]

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   a)stable b)tristable c)monostable d)bistable
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Section B [2 x 7 = 14]
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[Answer **ANY ONE** question]

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Reg. No: | 1 | 7 | U | C | A | | | | |

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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 x 1 = 6]
[Answer **ALL** the questions]

1._____ is the process by which one object can acquire the properties of another object.
a) class b) object **c) inheritance** d) polymorphism
2._____ is the mechanism that binds together code and the data it manipulates and keeps both safe from outside interference and misuse.
a) inheritance b) polymorphism c) class **d) encapsulation**
3. The classes derived from the base are usually referred to as _____classes.
a) derived b) base c) parent d) child
4.When accessing member of a class given a pointer to an object use the _____ operator instead of the dot operator.
a) :: **b)→** c). * d) →*
5.In the following which one is pointer- to- member operator_____.
a) **::** **b) .*** c)→ d)→*
6.A(n) _____ is essentially an implicit pointer.
a)reference b) pointer c) argument d) operator

Section B [2 x 7 = 14]
[Answer **ALL** the questions]

7. a) Explain the basic structure of c++ program **[OR]**
b) Discuss about static member function in detail
8. a) Write in detail about Parameterized constructor **[OR]**
b) Discuss about copy constructor

Section C [1 x 10 = 10]
[Answer **ANY ONE** question]

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

Reg. No: | 1 | 7 | U | C | A | | | | |

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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 x 1 = 6]
[Answer **ALL** the questions]

1._____ is the process by which one object can acquire the properties of another object.
a) class b) object c) inheritance d) polymorphism
2._____ is the mechanism that binds together code and the data it manipulates and keeps both safe from outside interference and misuse.
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Section B [2 x 7 = 14]
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EVEN SEMESTER [2017-18]
INTERNAL ASSESSMENT TEST – I

Class : **III BCA A & B** Date : **20-02-18**
Paper Code : **SCA8S63** Time : **1:30- 2:30pm**
Title of the Paper : **EMBEDDED SYSTEM** Max Marks : **30**

Section A [6 x 1 = 6]

[Answer **ALL** the questions]

1. The --------- is the brain of the embedded software.
   a) Processor b) Hardware
   c) Timer d) Software
2. The --------- is a software for controlling, receiving and sending a byte or a stream of bytes from or to a device.
   a) Assembler b) Kernel
   c) Loader d) Device driver
3. The ---------- is a standard bus that follows a communication protocol and is used between multiple IC's
   a) USB b) CAN
   c) I^2C d) PC1
4. The ---------- communication in which a constant phase difference is maintained between the clocks that guide the transmitter and receiver
   a) Synchronous b) DMA
   c) ISO- synchronous d) Asynchronous
5. The ---------- is a timing device that resets the system after a predefined time out.
   a) Reset b) Watch dog timer
   c) Power up timer d) Hardware timer
6. DDR stands for ----------.
   a) Data Determination Register b) Data Direction Register
   c) Dynamic Data Register d) Double data register

Section B [2 x 7 = 14]

[Answer **ALL** the questions]

7. a) Compare **Microprocessor vs. Microcontroller** . **[OR]**
   b) Explain the classification and skills required for embedded system.
8. a) Explain the **UART** in detail.. **[OR]**
   b) What are the characteristics of synchronous communication?

Section C [1 x 10 = 10]

[Answer **ANY ONE** question]

9. Explain the **design process** in embedded system.
10. What are the various **Memories** used in embedded system?

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EVEN SEMESTER [2017-18]
INTERNAL ASSESSMENT TEST – I

Class : **III BCA A & B** Date : **20-02-18**
Paper Code : **SCA8S63** Time : **1:30- 2:30pm**
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Section A [6 x 1 = 6]

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Reg. No: | B | 5 | S | 1 | 1 | 1 | | |

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EVEN SEMESTER [2017-18]
INTERNAL ASSESSMENT TEST – I

Class : **III BCA A&B** Date : **20.02.18**
Paper Code : **SCA8S61** Time : **12-1 PM**
Title of the Paper : **BIOMETRICS** Max Marks : **30**

Section A [6 x 1 = 6]
[Answer **ALL** the questions]

1. Authentication mechanism verifies _____.
   a) 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
   c) matches d) passwords
3. FTER stands for _____
   a) Failure To Enroll Rate b) Failure To Error Rate
   c) False Transfer Error Rate d) False To Enroll Rate
4. The ____ is analogous to the Deway decimal system that classifies books and journals.
   a) Henry System b) FBI
   c) Single finger flat scanner d) AFIS
5. In a single-finger flat scanners, ____ technology uses LED or a luminescent panel
   a) Optical b) Thermal
   c) Capacitive d) Ultrasonic
6. ____ is an example of a commercial voice verification system
   a) veri voice b) voice XML
   c) DTW d) HHM

Section B [2 x 7 = 14]
[Answer **ALL** the questions]

7. a) Write a note on trial and error attacks **[OR]**
   b) Explain biometric characteristics and traits
8. a) Write about Hand geometry biometrics **[OR]**
   b) Write short notes on voice verification

Section C [1 x 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

Reg. No: | B | 5 | S | 1 | 1 | 1 | | |

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EVEN SEMESTER [2017-18]
INTERNAL ASSESSMENT TEST – I

Class : **III BCA A&B** Date : **20-02-18**
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Section A [6 x 1 = 6]
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EVEN SEMESTER [2017-18]
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 x 1 = 6]

[Answer **ALL** the questions]

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 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 b) Echo Suppressor
   c) Echo cancellers d) both a and b

Section B [2 x 7 = 14]

[Answer **ALL** the questions]

7. a) Discuss LAN and its possible topologies **[OR]**
   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 x 10 = 10]

[Answer **ANY ONE** question]

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

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EVEN SEMESTER [2017-18]
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**

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Section C [1 x 10 = 10]

[Answer **ANY ONE** question]

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G.T.N.ARTS COLLEGE (Autonomous)
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EVEN SEMESTER [FEB, 2018]
INTERNAL ASSESSMENT TEST – I

Class : **III BCA A & B** Date : **22-02-2018**
Paper Code : **SCA8C61** Time : **12 - 1 p.m.**
Title of the Paper : **SOFTWARE ENGINEERING** Max Marks : **30**

Section A [6 x 1 = 6]

[Answer **ALL** the questions]

1. Enhancing the capabilities of the product is one of the activity in Software ____
   a) quality b) reliability
   c) maintenance d)design
2. _____ system often involve real-time processing ,telecommunications and multitasking.
   a) Small b) Large
   c) Very Large d) Extremely Large
3. _____ method is bottom-up estimation tool.
   a) Expert Judgment b) Group consensus
   c) Work breakdown structures d) LOC
4. The _____team structure provide opportunity for each team member to contribute to decisions
   a) Democratic b) Chief programmer
   c) Hierarchical d) All the above
5. Boehm suggests that maintenance effort can be estimated by use of _____
   a) Adaptability b) Effort estimation
   c) Activity ratio d) FSP
6. COCOMO model expands to_____.
   a) Constructive Cost Model b) Cost computer Model
   c) Cost Constructive Model d) Computer Cost Model

Section B [2 x 7 = 14]

[Answer **ALL** the questions]

7. a) Explain the Project size categories in Software Engineering **[OR]**
   b) Explain the Managerial issues in Software Engineering
8. a)Explain the Staffing Level Estimation **[OR]**
   b)Explain the Software Cost Factors in detail

Section C [1 x 10 = 10]

[Answer **ANY ONE** question]

9. Explain Quality and Productivity Factors of a Software Product
10. Describe the State Oriented Notations of Specification Techniques

Reg. No: | | | | | | | | |

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EVEN SEMESTER [FEB, 2018]
INTERNAL ASSESSMENT TEST – I

Class : **III BCA A & B** Date : **22-02-2018**
Paper Code : **SCA8C61** Time : **12 - 1 p.m**
Title of the Paper : **SOFTWARE ENGINEERING** Max Marks : **30**

Section A [6 x 1 = 6]

[Answer **ALL** the questions]

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Section C [1 x 10 = 10]

[Answer **ANY ONE** question]

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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**

Section A [6 x 1 = 6]

[Answer **ALL** the questions]

1 A phosphor 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 graphics chores
a) video controller b) display processor
c) frame buffer d) raster scan generator

3 Picture definition is stored in memory area called the _____
a) frame buffer b) vertical retrace
c) bitmap d) pixmap

4 If (x,y) is inside the circle boundary, then fcircle(x,y) is.
a) < 0 b) = 0
c) > 0 d) ≠ 0

5 The maximum number of points that cn be displayed without overlap on a CRT is ___
a) resolution b) persistance
c) aspect ratio d) pixel

6 The interactive painting package use ____ algorithm
a) scan line polygon fill b) flood fill
c) odd even rule d) boundary fill

Section B [2 x 7 = 14]

[Answer **ALL** 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 lines. **[OR]**
b) Explain the boundary fill algorithm in detail

Section C [1 x 10 = 10]

[Answer **ANY ONE** question]

9. What are the various applications of computer graphics

10. Write an algorithm to draw ellipse

Reg. No: | | | | | | | | |

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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**

Section A [6 x 1 = 6]

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4 If (x,y) is inside the circle boundary, then fcircle(x,y) is.
a) < 0 b) = 0
c) > 0 d) ≠ 0

5 The maximum number of points that cn be displayed without overlap on a CRT is ___
a) resolution b) persistance
c) aspect ratio d) pixel

6 The interactive painting package use ____ algorithm
a) scan line polygon fill b) flood fill
c) odd even rule d) boundary fill

Section B [2 x 7 = 14]

[Answer **ALL** 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 lines. **[OR]**
b) Explain the boundary fill algorithm in detail

Section C [1 x 10 = 10]

[Answer **ANY ONE** question]

9. What are the various applications of computer graphics

10. Write an algorithm to draw ellipse

Reg. No: | | | | | | | | |

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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 Computer Algorithm** Max Marks : **30**

Section A [6 x 1 = 6]

[Answer **ALL** the questions]

1. The _____ provides only the operations, hiding the implementation details.
   a) DT b) DATA
   c) ADT d) SYMBOL
2. In _____ linked list, we can traverse in reverse direction.
   a) single b) doubly
   c) circular d) node
3. The Addressing function of a 2D array stored in column major 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 _____ parenthesis has higher precedence.
   a) outer b) inner
   c) top d) bottom
6. In queue, insertion are done at the _____ end of the queue.
   a) reverse b) rear
   c) left d) right

Section B [2 x 7 = 14]

[Answer **ALL** the questions]

7. a) Write about storage representation of **2D Array**. **[OR]**
   b) Explain the various special types of Matrices.
8. a) Explain the **ADT stack**. **[OR]**
   b) Discuss about the linked list implementation of a queue with any 2 operations.

Section C [1 x 10 = 10]

[Answer **ANY ONE** question]

9. Write algorithum and c program for the following operation on a DLL
   a) Insert an element after node M b) delete a node.
10. Explain the **Infix, Prefix and Postfix** Expressions.

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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**
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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**

Section A [6 x 1 = 6]

[Answer **ALL** the questions]

1. A _____ level process is characterized by the fact that both its inputs and 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 _____ Tomography.
   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.
   a) Gamma b) X-rays
   c) Ultraviolet d) Visible

Section B [2 x 7 = 14]

[Answer **ALL** the questions]

7. a) What is Digital Image Processing **[OR]**
   b) List and explain the components of an Image Processing System.
8. a) Draw and Explain Structure of an eye.**[OR]**
   b) What do you mean by Image Acquisition? Explain it using sensors.

Section C [1 x 10 = 10]

[Answer **ANY ONE** question]

9. What are the fundamental steps involved in Digital Image Processing.
10. Give an overview of Light and Electromagnetic Spectrum.

Reg. No: | | | | | | | | |

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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**

Section A [6 x 1 = 6]

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

Section A [6 x 1 = 6]

[Answer **ALL** the questions]

1. ---------- is a pipe between two specified sectrons at the specified sets.
   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 ---------- device
   a) Inter connecting b) data c) Memory d) control bus

4 Loops are used when exciting a set of statements_____
   a) Repeatedly b) Rarely c) Constantly d) Fixed

5. List is a ----------structure.
   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 x 7 = 14]

[Answer **ALL** the questions]

7. a) Explain the Embedded C,C++ and Java Features. **[OR]**
   b) Write a note on various Data structures.
8. a) Differentiate Task and Threads. **[OR]**
   b) Explain the RTOS services.

Section C [1 x 10 = 10]

[Answer **ANY ONE** question]

9. Explain the Program Models concepts in embedded system.
10. Explain in detail about Inter Process Communication.

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

Section A [6 x 1 = 6]

[Answer **ALL** the questions]

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Section B [2 x 7 = 14]

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EVEN SEMESTER [2017-18]
INTERNAL ASSESSMENT TEST – II

Class : **III BCA A & B** Date: 13.4.2018
Paper Code : **SCA8S62** Time: **1.30-2.30 pm**
Title of the Paper : CRYPTOGRAPHY Max Marks: **30**

Section A [6 x 1 = 6]

[Answer **ALL** the questions]

1. If the number of parties involved in a lock – key mechanism is 4, the number of keys needed is _____
   a) 2 b) 4 c) 6 d) 8
2. _____ increases the redundancy of plain text
   a) confusion b) diffusion c) both d) neither confusion nor diffusion
3. The actual algorithm is the AES encryption scheme is _____
   a)blow fish b)IDEA c) Rijndael d) RC4
4. The RC5 block cipher mode is also called as _____
   a) RC5 block cipher b) RC5 – CBC c) RC5-CBC pad d) RC5-CTS
5. Symmetric key cryptography is _____ than asymmetric cryptography.
   a) always slower b) of the same speed c) faster d)usually slower
6. To verify a digital signature, we need the _____
   a)Sender's private key b) sender's public key c)receiver's private key d) receiver's public key

Section B [2 x 7 = 14]

[Answer **ALL** the questions]

7. a) Discuss about stream and block ciphers. **[OR]**
   b) Discuss the advantages and dis advantages of various algorithm modes.
8. a) Write short notes on IDEA. **[OR]**
   b) What is mono alphabetic cipher? explain.

Section C [1 x 10 = 10]

[Answer **ANY ONE** question]

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

Reg. No: | | | | | | | | |

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EVEN SEMESTER [2017-18]
INTERNAL ASSESSMENT TEST – II

Class : **III BCA A & B** Date: 13.4.2018
Paper Code : **SCA8S62** Time: **1.30-2.30 pm**
Title of the Paper : CRYPTOGRAPHY Max Marks: **30**

Section A [6 x 1 = 6]

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Section B [2 x 7 = 14]

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Section C [1 x 10 = 10]

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Reg.No | | | | | | | | |

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ODD SEMESTER [2017-18]
INTERNAL ASSESSMENT TEST – II

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

Section A [6 x 1 = 6]

[Answer **ALL** 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 system.
   a) VoiceXML b) VeriVoice c) DTW d) HHM
4. _____ biometric is captured without the willingness of the subject.
   a) Facial b) voice c) Iris d) Retina
5. Retinal scanning is accomplished by illuminating the Retina with a low intensity_____ Light and imaging the patterns formed by the major blood vessels.
   a) UV b) Infra Red c) Beam d) Leakage
6. The Human Iris is controlled by 2 muscles namely dilator and the _____
   a) Spectator b) Sphincter c) Raterial d)Monforsia.

Section B [2 x 7 = 14]

[Answer **ALL** 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 with example

Section C [1 x 10 = 10]

[Answer **ANY ONE** question]

9. Explain the Iris Recognition Technology with its application.

10. Describe the History and application of Keystroke dynamics.

Reg.No | | | | | | | | |

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ODD SEMESTER [2017-18]
INTERNAL ASSESSMENT TEST – II

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

Section A [6 x 1 = 6]

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EVEN SEMESTER [2017-18]
INTERNAL ASSESSMENT TEST – II

Class : **III BCA A & B** Date: 13.4.2018
Paper Code : **SCA8C62** Time: **12 – 1 pm**
Title of the Paper : **COMPUTER NETWORKS** Max Marks: **30**

Section A [6 x 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 x 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]**
   b) Explain
      a) Establishing a connection
      b)Releasing connection.

Section C [1 x 10 = 10]

[Answer **ANY ONE** question]

9. Explain in detail about Error Detection and Error Correction
10. Discuss Shortest path routing.

Reg. No: | | | | | | | | |

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EVEN SEMESTER [2017-18]
INTERNAL ASSESSMENT TEST – II

Class : **III BCA A & B** Date: 13.4.2018
Paper Code : **SCA8C62** Time: **12 – 1 pm**
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Section A [6 x 1 = 6]

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EVEN SEMESTER [APRIL, 2018]
INTERNAL ASSESSMENT TEST – II

Class : **II B.C.A.** Date : **18-04-2018**
Paper Code : **SCAGC42** Time : **12- 1 pm**
Title of the Paper : **COMPUTER GRAPHICS** Max Marks : **30**

Section A [6 x 1 = 6]

[Answer **ALL** the questions]

1 The _____ is defined as the distance between the baseline and the capline characters.
a) Character size b) Text size
c) Character Height d) Text Height.

2 A_____ is accomplished by extending the outer boundaries of each of the two lines until they meet
a) Miter join b) Round join
c) Bevel join d) circle join

3 Raster objects can also be antialiased by shifting the display location of pixel areas is called _____.
a) Prefiltering b) Super sampling
c) Pixel phasing d) Line segment.

4 In _____ an object is displaced a given distance and direction from its original position
a) Scaling b) Shear
c) Rotation d) Translation

5 A world coordinate area selected for display is called _____.
a) window b) view
c) viewport d) mapping

6 The clipping region is commonly referred to as _____
a) clipping window b) clip port
c) clip view d) viewport

Section B [2 x 7 = 14]

[Answer **ALL** the questions]

7. a) Give a short note about the character attributes . **[OR]**
b) Give brief note about Anti aliasing.

8. a) What is Transformation? Explain about Basic Transformation **[OR]**
b) Explain about Cohen-Sutherland Line Clipping.

Section C [1 x 10 = 10]

[Answer **ANY ONE** question]

9. Explain briefly about Composite Transformation.

10. Write about Polygon Clipping.

Reg. No: | | | | | | | | |

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EVEN SEMESTER [APRIL, 2018]
INTERNAL ASSESSMENT TEST – II

Class : **II B.C.A.** Date : **18-04-2018**
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Reg. No: | | | | | | | | |

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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** Max Marks : **30**

Section A [6 x 1 = 6]

[Answer **ALL** the questions]

1. A binary expression tree each internal node corresponds to
   a) Operand b) both a & c
   c) Operator d) string
2. A threaded binary tree making all right child pointers 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) bubble
4. The Strassen's method is to reduce the recursive calls to _____.
   a) 6 b) 7
   c) 4 d) 5
5. The _____ notation is used to define the upper bound of an algorithm.
   a) Big-Oh b) Big-Theta
   c) Big-Omega d) Alpha
6. The _____ algorithm sorts an array by repeatedly finding the minimum element.
   a) quick b) insertion
   c) merge d) selection

Section B [2 x 7 = 14]

[Answer **ALL** the questions]

7. a) Explain the Binary tree Traversals with an algorithum. **[OR]**
   b) Explain the Threaded trees.
8. a) Explain the Performance Analysis. **[OR]**
   b) Discuss about Binary Search.

Section C [1 x 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: | | | | | | | | |

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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** Max Marks : **30**

Section A [6 x 1 = 6]

[Answer **ALL** the questions]

1. A binary expression tree each internal node corresponds to
   a) Operand b) both a & c
   c) Operator d) string
2. A threaded binary tree making all right child pointers 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) bubble
4. The Strassen's method is to reduce the recursive calls to _____.
   a) 6 b) 7
   c) 4 d) 5
5. The _____ notation is used to define the upper bound of an algorithm.
   a) Big-Oh b) Big-Theta
   c) Big-Omega d) Alpha
6. The _____ algorithum sorts an array by repeatedly finding the minimum element.
   a) quick b) insertion
   c) merge d) selection

Section B [2 x 7 = 14]

[Answer **ALL** the questions]

7. a) Explain the Binary tree Traversals with an algorithum. **[OR]**
   b) Explain the Threaded trees.
8. a) Explain the Performance Analysis. **[OR]**
   b) Discuss about Binary Search.

Section C [1 x 10 = 10]

[Answer **ANY ONE** question]

9. Explain the prims and kruskal algorithum with examples.

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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**

Section A [6 x 1 = 6]

[Answer **ALL** the questions]

1. _____ of a data flow diagram specifies processing activities.
   a) Nodes b) Arcs
   c) Graph d) Tree
2. _____ is a process of isolating and correcting the cause of known errors.
   a) Testing b) Debugging
   c) Coding d) SQA
3. In _____ coupling, one module relies on the internal working of another module.
   a) Content b) Control
   c) Stamp d) External
4. The software requirements specification is based on _____.
   a) System definition b) Users manual
   c) Project plan d) Design
5. The _____ board reviews and approves all change requests.
   a) Change control b) Review control
   c) Control review d) Review change
6. _____ is concerted with tracking and controlling of the work products that constitute a software product.
   a) SQA b) Verification
   c) Configuration Management d) Metrics

Section B [2 x 7 = 14]

[Answer **ALL** the questions]

7. a) Explain the concept of Coupling and Cohesion **[OR]**
   b) Explain any one of the Design techniques.
8. a) Write short notes on walkthroughs and Inspections **[OR]**
   b) Explain about Managerial aspects of Software Maintenance

Section C [1 x 10 = 10]

[Answer **ANY ONE** question]

9. Explain briefly about Design Notations.
10. Describe about the System Testing.

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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**

Section A [6 x 1 = 6]

[Answer **ALL** the questions]

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Section B [2 x 7 = 14]

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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 x 1 = 6]

[Answer **ALL** the questions]

1. Power-law transformations have the basic form
   a) $s=cr^r$ b) $C=Sr^r$
   c) s=c log(1+r) d) s = L – 1- r
2. ---------- domain processing techniques are based on manipulation in fourier transform of image
   a) spatial b) Frequency
   c) Grey-level d) Thresholding
3. If the function is under sampled then the phenomena called ----------
   a)Aliasing b) Band limit
   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
   c) Luminance d) Elegant
6. Most devices that deposit colored pigments on paper, such as color printers and copiers require ---------- data input.
   a) HSI b) RGB
   c) CMY d) CMYK

Section B [2 x 7 = 14]

[Answer **ALL** the questions]

7. a) Explain the histogram 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.

Section C [1 x 10 = 10]

[Answer **ANY ONE** question]

9. Explain about Histogram Equalization.
10. Explain about Various Color Models.

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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 x 1 = 6]

[Answer **ALL** the questions]

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Section B [2 x 7 = 14]

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Section C [1 x 10 = 10]

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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 x 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 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 x 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 [1 x 10 = 10]

[Answer **ANY ONE** question]

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

Reg. No: | | | | | | | | |

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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 x 1 = 6]

[Answer **ALL** the questions]

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Section B [2 x 7 = 14]

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Section C [1 x 10 = 10]

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Reg.No | 1 | 7 | B | C | | | | |

G.T.N.ARTS COLLEGE (Autonomous)
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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 x 1 = 6]

[Answer **ALL** the questions]

1. _____Operator also called the class member access operator.
   a) Dot b) function call d) comma d) pointer
2. In the following which one is unary operator while overloading _____.
   a) ( ) b) [ ] c) → d) ,(comma)
3. The _____ operator is normally used to access and modify a specific elements in an array.
   a) < > b) { } c) [ ] d) ( )
4. When a protected member is inherited in _____ mode, it become protected 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 x 7 = 14]

[Answer **ALL** the questions]

7. a) Explain about function overloading **[OR]**
   b. Explain about single inheritance

8. a) Explain about function overloading using friend function **[OR]**
   b) Discuss about basic stream class

Section C [1 x 10 = 10]

[Answer **ANY ONE** question]

9. Write a c++ program for unary operator overloading
10. Explain about build in manipulators with example

Reg.No | 1 | 7 | B | C | | | | |

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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 x 1 = 6]

[Answer **ALL** the questions]

1 _____Operator also called the class member access operator.
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4 When a protected member is inherited in _____ mode, it become protected in the derived class.
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5 A_____ member inherited in the private mode derivation, becomes private in the derived class.
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Section B [2 x 7 = 14]

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7.a) Explain about function overloading **[OR]**
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Section C [1 x 10 = 10]

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