Reg. No:

G.T.N.ARTS COLLEGE (Autonomous)
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ODD SEMESTER [2021- 2022]
INTERNAL ASSESSMENT TEST – II

Class : **III IT(A&B)** Date : 24.11.21
Paper Code : 17CINF51 Time: 11.30-12.30
Title of the Paper : Open Source Programming with Linux, Apache, MySQL, and PHP Max Marks : **25**

Section A [3 x 2 = 6]

[Answer **ALL** the questions]

1. Define Apache web server?
2. Define HTML Forms?
3. What Is Open source?

SECTION B **[2 x 5 = 10]**

Answer ALL the Questions

4.a) Explain the overview of Free/Open Source Software.

[Or]

b) Explain LAMP.

5. a) Explain importance of Table tag in HTML.

[Or]

b) Explain External CSS with example?

SECTION C **[1 x 9 = 9]**

Answer Any One Question

6. What is Web server? Explain the features of WEB Server.
7.Design school application form website using HTML.

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ODD SEMESTER [2021-22]
INTERNAL ASSESSMENT TEST –II

Class : **III IT (A&B)** Date : **22-11-21**
Paper Code : **17UITC51** Time : **10- 11am**
Title of the Paper : **Data Communication and Computer Networks** Max Marks : **30**

Section A [6 x 1 = 6]

[Answer **ALL** the questions]

4. A Computer Network permits Sharing of _____.
   a) Resources b) Information
   c)Both A&B d) Network
2. Which of the following represents the fastest data transmission speed?
   a) Gbps b) kbps
   c) mbps d) Bandwidth
3. _____ is the technology that connects the machines and people within a site in a small area.
   a) MAN b) LAN
   c) PAN d) WAN
4. ATM networks are
   a)connectionless b) Interconnected
   c) Connection Oriented d) Internet
5. Check sum is used for
   a) Internet b) Error Correction
   c) Error Free d) Error Detection
6. ISDN stands for
   a) Integrated Service Digital Network b) Interaction System Digital Network
   c) Inexpensive System Digital Network d) Interaction Service Digital Network

Section B [2 x 7 = 14]

[Answer **ALL** the questions]

7. a) Explain SNMP. [Or]
   b) Describe WWW.
8. a) Discuss the WLAN requirements. [Or]
   b) What is routing principle?

Section C [1 x 10 = 10]

[Answer **ANY ONE** question]

9. Explain LAN transmission Equipments.
10. What is Domain Name System? Discuss the three main divisions of the domain name Space.

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ODD SEMESTER [2021-22]
INTERNAL ASSESSMENT TEST –II

Class : **III IT (A&B)** Date : **22-11-21**
Paper Code : **17UITC52** Time : 11.30 -12.30
Title of the Paper : **Software Engineering** Max Marks : **30**

Section A [6 x 1 = 6]

[Answer **ALL** the questions]

1.SRS consists of _____
a) Problem statement b) Product design
c) Problem statement & Product design d) Review of the product

2.Technical level abstraction includes _____
a) User level requirements b) Physical level requirements
c) Operational level requirements d) All the above

3.What is the first step in the software development lifecycle?
a) System Design b) coding
c) System Testing d) Preliminary Investigation and Analysis

4. Which of the following prototypes does not associated with Prototyping Model?
a) Domain prototype b) Vertical prototype
c) Horizontal prototype d) Diagonal prototype

5. A set of activities that ensure that software correctly implements a specific function.
a) Verification b) Validation c) Testing d) Implementation

6.Locating or identifying the bugs is known as _____
a) Debugging b) Testing c) Design d) Implementing

Section B [2 x 7 = 14]

[Answer **ALL** the questions]

7. Write about Forms specification Techniques. [OR]
Write a note on modules and Modularization.

8. Write a note on Milestone, walk through and inspection [OR]
Explain Unit Testing.

Section C [1 x 10 = 10]

[Answer **ANY ONE** question]

9. Explain in detail about Design notation.
10. Write a note on Static analysis and symbolic execution.

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ODD SEMESTER [2021-22]
INTERNAL ASSESSMENT TEST –II

Class : **III IT (A&B)** Date : **23-11-21**
Paper Code : **17UITC53** Time : **10- 11am**
Title of the Paper : **JAVA PROGRAMMING** Max Marks : **30**

Section A [6 x 1 = 6]

[Answer **ALL** the questions]

1. Which of these class is superclass of String and StringBuffer Class?
   a)java.util b)java.lang c)java.string d)java.awt
2. Which of these method of class String is used to obtain length of String object?
   a)get() b)sizeof() c)Lengthof() d)length()
3. AWT Stands for_____
   a)Abstract Window ToolKit b) Abstract Window Toolbar
   c)Access Window Toolkit d)Access Window Toolbar
4. Event Listeners are created by implementing one or more interfaces defined by the ____ package.
   a)java.awt.event b) java.awt.listen
   c)java.awt.Event d)java.awt.Listen
5. When a thread is created using new operator, the thread is in_____ state.
   a)Old b)New c)Run d)Terminate
6. When we implement the runnable interface we must define _____method
   a)start() b) run() c)init() d)new()

Section B [2 x 7 = 14]

[Answer **ALL** the questions]

7.a) Explain any five string handling function with example.[Or]
   b) Discuss the use of Interface in Java.
8. a) What is AWT? Explain the features of AWT. [Or]
   b) Write a Java Program to illustrate the concepts of multithreading?

Section C [1 x 10 = 10]

[Answer **ANY ONE** question]

9. Explain AWT components and Event Handlers.

10. Explain about Multithreading in java with an example.

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ODD SEMESTER [2021-22]
INTERNAL ASSESSMENT TEST –II

Class : **III IT (A&B)** Date : 24.11.2021
Paper Code : **17UITE51** Time : **10- 11am**
Title of the Paper : **Mobile Computing** Max Marks : **30**

Section A [6 x 1 = 6]

[Answer **ALL** the questions]

1. _____ used by the service providers of telecommunications to manage networks.
   a) Base Station Subsystem b) Network Switching Subsystem
   c) GPRS Core Network d) Operations Support System (OSS)
2. GPRS stands for?
   a) General Packet Repair Service b) General Packet Radio Service
   c) Graphics Packet Radio Service d) None of these
3. UMTS is also known as _____.
   a) IS-95 b) GPRS
   c) CDMA One d) W-CDMA
4. The processes that keep track of all mobile hosts visiting the area is
   a) Home agent b) Mobile agent
   c) Foreign agent d) User agent
5. What is the type of network in which the topology change from time to time?
   a) Wi-Fi b) Cell Network
   c) LAN d) MANET
6. Which of the following correctly describes an advantage of a Mobile Ad-hoc Network?
   a) Autonomous nodes that can act as both a host and a router. b) Maximum Security
   c) Faster than Wired networks d) Highly Reliable

Section B [2 x 7 = 14]

[Answer **ALL** the questions]

7. a) Describe in detail functions of GPRS. [OR]
   b) Explain the characteristics of ad-hoc networks.
8. a) Discuss about designing issues in routing. [OR]
   b) Compare MANET and VANET.

Section C [1 x 10 = 10]

[Answer **ANY ONE** question]

9. Describe in detail the component of GSM.
10. Explain popular routing protocols in MANET.

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ODD SEMESTER [2021- 2022]
INTERNAL ASSESSMENT TEST – II

Class : **III IT(A&B)** Date : 24.11.21
Paper Code : **17UITE52** Time: 10-11am
Title of the Paper **: Cryptography and Network Security** Max Marks : **30**

Section A [6 x 1 = 6]

[Answer **ALL** the questions]

1. When there are N systems,_____ keys are needed for Symmetric key cryptography
   a)2N b)3N
   c)N(N-1)/2 d)N(2N-1)/2

2._____ states that if p is prime number is a positive integer not divisible by p then $a^{p-1}=1 \bmod p$.
   a) fermat's theorem b) euler's theorem
   c) euclid's d) modular theorem

3.The private key _____.
   a) must be distributed b) must be shared with everyone
   c) must remain secret with an individual d) public to everyone

4. When a hash function is used to provide message authentication, the hash function value is referred to as _____.
   a) Message Field b) Message Digest
   c) Message Score d) Message Leap

5. A digital signature is a mathematical technique which validates?
   a) authenticity b) integrity
   c) non - repudiation d) confidentiality

6.IPSec is designed to provide security at the _____ layer.
   a) Transport b) Network
   c) Application d) Session

Section B [2 x 7 = 14]

[Answer **ALL** the questions]

7.a) Explain in details about Diffie -Hellman key exchange algorithm [Or]
   b)Write the difference between public key and symmetric key cryptography

8. a) Explain the basic theorems available in number theory [OR]
   b)Explain the RSA algorithm with example.

Section C [1 x 10 = 10]

[Answer **ANY ONE** question]

9.Discuss in detail about Block cipher mode of operation.

10. Discuss IP security in detail.

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ODD SEMESTER [2021- 2022]
INTERNAL ASSESSMENT TEST – II

Class	: **II BBA**	Date : 24.11.21
Paper Code	:**20CINF31**	Time : 3.00-4.30
Title of the Paper	: **Business Analytics**	Max Marks : 20

Section A [5 x 2 = 10]

[Answer **ALL** questions]

1. What is the uses of Business Analytics?
2. List out any 5 basic excel skills.
3. Explain any 2 charts in MS Excel.
4. Explain the scope of business Analytics .
5 How will you create charts in MS Excel ?

Section B [1 x 10 = 10]

[Answer **Any One** questions]

6. Prepare a student mark list for 5 students and find the total and average.
7. Explain Filtering and sorting in detail with example.

G.T.N. ARTS COLLEGE (Autonomous), Dindigul

ODD Semester (2021 – 2022)

OBE Regulation – 2020

Continuous Internal Assessment Test – II

Programme : BBA | Semester: III

Class : II year | Date: 23.11.21

Course Title : Computer Literacy for Managers-Theory | Time: 3.00-04.30pm

Course Code: 20UBAC34 | Max. Marks: 30

Course Outcomes (COs):

CO1	Outline the fundamental knowledge about Computer
CO2	Make use of MS Word and its tools for Professional documents
CO3	Organize and perform data analysis by using MS Excel
CO4	Develop a perfect PowerPoint presentations for business purposes
CO5	Make use of internet facilities for day to day business activities

Qn. No.	**Section – A** **Answer ALL the Questions (6 x 1 = 6)**	**CO**	**K – Level**
1	To wrap the text in a cell_____ A. Format cells font B. Format cells protection C. Format cells number D. Format cells alignment	CO3	K1
2	_____to convert a column of data into row. A. Cut and Paste B. Paste Special > Transpose C. Copy and Paste D. Transpose	CO3	K2
3	What is the file extension of PowerPoint application? A. .docx B. .ppt C. .xls D. .jpeg	CO4	K1
4	Shortcut key for the Slide Show view is A. F1 B. F2 C. F5 D. F6	CO4	K2
5	A program that is used to view websites is called a A. Browser B. Web viewer C. Spreadsheet D. Word processor	CO5	K1
6	The first part of your email address before the '@' is called your A. Domain name B. Username C. Profile name	CO5	K2

	D. Password		

Qn. No.		Section – B Answer ALL the Questions (3 x 4 = 12)	CO	K – Level
7	A	Explain how to edit cells in Ms-Excel.	CO3	K2
		or		
	B	Discuss in detail about the types of Excel Charts.	CO3	K2
8	A	Identify the process behind the clipboard.	CO4	K2
		or		
	B	Interpret the uses of themes in slides.	CO4	K2
9	A	Differentiate hotspot and tethering in your view.	CO5	K2
		or		
	B	Classify the characteristics of E- business.	CO5	K2

Qn. No.	Section – C Answer any two Questions (2 x 6=12)	CO	K – Level
10	Explain about Excel Charts. Discuss in detail about the types of Excel Charts.	CO3	K3
11	Illustrate the role of Animation effect in Power Point presentation.	CO4	K3
12	Discuss the ap plications of the internet.	CO5	K3

~All the Best~

G.T.N. ARTS COLLEGE (Autonomous),
DindigulODD Semester (2021 – 2022)
OBE Regulation – 2020
Continuous Internal Assessment Test – II

Programme : BSc | Semester:I
Class : I | Date: 5.2.22
Course Title : Introduction to Programming | Time: 9.30-11.00
Course Code: 20UITC11 | Max. Marks: 30

Course Outcomes (COs):

CO1	Explain the Linux files systems, Linux Commands and process status.
CO2	Classify various Control structures and Operators.
CO3	Explain Functions and Arrays.
CO4	Experiment Structures and Union.
CO5	Make use of Pointers and Files in various programs.

Qn. No.	Section – A Answer ALL the Questions (6 x 1 = 6)	CO(s)	K – Level
1	Core of linux operating system is _____. a. Shell b. Kernel c. Terminal d. Command	CO1	K1
2	_____ Command is used to set terminal IO characteristics. a. tty b. ctty c. sty d. stty	CO1	K1
3	_____ operator connects the structure name to its member name. a. " _ " b. " -> " c. " . " d. both "." And "->"	CO4	K1
4	The size of C structure is _____. a. always 128 bytes b. the size of largest element c. the total bytes of all elements of structure d. the size of smallest element	CO4	K1

5	_____ is an indirection operator in pointers. a. % b. * c. # d. &	CO5	K1
6	EOF stands for _____. a. End of File b. End of Files c. End of Folder d. End of Folders	CO5	K2

Qn. No.		Section – B Answer ALL the Questions (3 x 4 = 12)	CO(s)	K – Level
7	A	Retell about linux file permissions.	CO1	K1
	OR			
	B	Describe the cut command with example.	CO1	K1
8	A	Define structure. Describe the syntax of structure declaration with example.	CO4	K2
	OR			
	B	Describe the similarity between Structure, Union and enumeration.	CO4	K2
9	A	Define pointer. Examine how the pointer is initialized?	CO5	K3
	OR			
	B	Collect the methods to open and close a file in C.	CO4	K3

Qn. No.	Section – C Answer any two Questions (2 x 6=12)	CO(s)	K – Level
10	Identify redirection in detail.	CO1	K1
11	Compare and contrast structures and functions with example.	CO4	K2
12	Write a short note on file functions in C.	CO5	K3

G.T.N. ARTS COLLEGE (Autonomous), Dindigul

ODD Semester (2021 – 2022)
OBE Regulation – 2020
Continuous Internal Assessment Test – II

Programme : BSc IT | Semester: III
Class : II year | Date: 23.11.21
Course Title : Database Management System | Time: 1.00-02.30pm
Course Code: 20UITC32 | Max. Marks: 30

Course Outcomes (COs):

CO1	Understand the basic Database concepts and its Architecture.
CO2	Experiment with various SQL Queries.
CO3	Make use of Database Models.
CO4	Identify various Storage Management and Indexing.
CO5	Utilize various Transaction Management, Concurrency Control and Recovery System.

Qn. No.	**Section – A** **Answer ALL the Questions (6 x 1 = 6)**	**CO**	**K – Level**
1	_____is a single-entity instance of one type related to many entity instances of another type. A. One-to-One Relationship B. One-to-Many Relationship C. Many-to-Many Relationship C. Composite Relationship	CO3	K1
2	In 2NF _____dependency is removed. A. Transitive B. Associative B. Partial D. Functional	CO3	K1
3	_____of the following is the oldest database model. A. Relational B. Hierarchical B. Physical D. Network	CO4	K1
4	Which RAID type doesn't use parity for data protection? A. RAID 1 B. RAID 4 C. RAID 6 D. RAID 5	CO4	K2
5	A deadlock exists in the system if and only if the wait-for graph contains a _____ A. Cycle B. Direction C. Bi-direction D. Rotation	CO5	K2
6	Serializability can be ensured by the two-phase locking protocol but not_____. A. Unlocking freedom B. Locking freedom B. Deadlock freedom D. Access freedom	CO5	K2

Qn. No.		**Section – B** **Answer ALL the Questions (3 x 4 = 12)**	**CO**	**K – Level**
	A	Classify different types of Anomalies in relational databases.	CO3	K2
		or		

7	B	Represent first and second normal form in detail	CO3	K2
8	A	Describe the different types of file organization? Explain using a sketch of each of them with their advantages and disadvantages.	CO4	K1
		or		
	B	Recognize the factors to be taken into account when choosing a RAID level.	CO4	K1
9	A	Explain the ACID Properties of a transaction.	CO5	K2
		or		
	B	Write short notes on Transaction concept	CO5	K2

Qn. No.	**Section – C** **Answer any two Questions (2 x 6=12)**	**CO**	**K – Level**
10	Explain about Functional Dependencies and its impact on the data base.	CO3	K2
11	Explain about RAID levels in detail	CO4	K2
12	Explain dead lock? How does it occur? How transactions be written to Avoid deadlock	CO5	K3

~All the Best~

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ODD Semester (2021 – 2022)

OBE Regulation – 2020

Continuous Internal Assessment Test – II

Programme : BSc IT | Semester: III

Class : II year | Date: 24.11.21

Course Title : Data Structures and Computer Algorithms | Time: 1.00-02.30pm

Course Code: 20UITC32 | Max. Marks: 30

Course Outcomes (COs):

CO1	Understand basic data structures such as arrays and linked list.
CO2	Explain the concept of stacks and queues.
CO3	Build trees based on our Application.
CO4	Understand the various algorithm design techniques and strategies.
CO5	Apply the right strategy for solving a problem.

Qn. No.	Section – A Answer ALL the Questions (6 x 1 = 6)	CO	K – Level
1	An important application of binary tree is _____. A. Huffman coding B. Stack implementation D. Queue implementation D. Traverse a cyclic graph	CO3	K1
2	An algorithm is_____. A. A procedure for solving a problem B. A problem C. A real life mathematical problem D. A solution	CO3	K1
3	Optimization of an algorithm means_____. A. Making that algorithm fast by time and compact by space. B. Making that algorithm slow by time and large by space. C. Making that algorithm fast by time and large by space. D. Making that algorithm slow by time and compact by space.	CO4	K1
4	The time complexity of binary search using recursion is _____. A. O(nlogn) B. O(logn) C. O(n) D. $O(n^2)$	CO4	K1
5	The knapsack problem is an example of _____. A. Greedy algorithm B. 2D dynamic programming C. 1D dynamic programming D. Divide and conquer	CO5	K1
6	The travelling salesman problem can be solved using_____. A. A spanning tree B. Bellman-ford algorithm C. A minimum spanning tree D.DFS traversal	CO5	K1

Qn. No.		Section – B Answer ALL the Questions (3 x 4 = 12)	CO	K – Level
7	A	Identify the applications of Trees.	CO3	K2
		or		
	B	Transform the below expression to Binary Tree Structure. A+B-C*(E-F)/G.	CO3	K2
	A	Write a routine for Merge Sort.	CO4	K3

8		or		
	B	Discover the difference between Merge Sort and Quick Sort.	CO4	K3
9	A	Explain in detail about Greedy method.	CO5	K3
		or		
	B	Illustrate the routine for Job Scheduling algorithm.	CO5	K3

Qn. No.	**Section – C** **Answer any two Questions (2 x 6=12)**	**CO**	**K – Level**
10	Show the output when you apply Preorder, Inorder and Postorder traversal in the following expressions (A+B*C)+((D*E+L)*G).	CO3	K2
11	Determine the working principles of Binary Search Algorithm.	CO4	K3
12	Compute an optimal solution to the Knapsack instance. N=7, m15, (p1,p2,p3,p4,p5,p6,p7)=(10,5,15,7,6,18,3) and (w1,w2,w3,w4,w5,w6,w7)=(2,3,5,7,1,2,4).	CO5	K3

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ODD SEMESTER [2020-2021]

INTERNAL ASSESSMENT TEST – II

Programme : III IT | **Date: 20.11.2021**

Course Code :17UEVS51 | **Time: 10 am to 12 am**

Course Title : EVS | **Marks: 25**

SECTION A [3×5=15]

ANSWER **ANY THREE** QUESTIONS

1. Write short notes on environment educations in India.
2. Describe non-conventional resources with examples.
3. List the natural resources.
4. Describe about environmental pollutions.
5. Give Hot spots and cool spots of Biodiversity.

SECTION B [1×10=10]

ANSWER **ANY ONE** QUESTION

6. Explain the energy flow and food chains of Eco system.
7. Explain the types of Biodiversity.

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Odd Semester
(2021- 2022)OBE
Regulation – 2020
Continuous Internal Assessment
Test – II

Programme: B.Sc(IT) Semester: I
Class: I IT A&B Date: 07/02/2022
Course Title: Value Education Time: 2.00p.m to 3.00p.m
Course Code: **20UVEV11** Max. Marks: 15
Course Outcomes (COs):

CO3	Identify the social realities and inculcate essential value system towards building a healthy society.
CO4	Employ the knowledge of professional values in life.
CO5	Associate the role in social institutions, family and constitutional values.

Qn. No.	**Section – A** **Answer All the Questions (5 x 2 = 10)**	**CO(s)**	**K – Level**
1	Write the note on Human Rights Council	CO3	K1
2	What you mean by socialism?	CO3	K1
3	Write notes on a) Team sprit b) Honesty	CO4	K1
4	What is mass media?	CO4	K2
5	What you mean by role model?	CO5	K2

Qn. No.		**Section – B** **Answer any one Questions (1 x 5 = 5)**	**CO(s)**	**K – Level**
6	A	Describe accountability and its types	CO4	K2
		OR		
	B	Discuss the role of peer group.	CO5	K3

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ODD SEMESTER [2021-2022]
INTERNAL ASSESSMENT TEST – I

Programme : **III IT(A&B)** Date : 21.09.2021
Course Code : **17UITC51** Time : 10.00 am -11.00 am
Course Title : **Data Communication and Computer Networks** Max Marks : **30**

Section A [6 x 1 = 6]

[Answer **ALL** the questions]

7. A Computer Network permits Sharing of _____.
   a) Resources b) Information
   c)Both A&B d) Network
2. TCP is _____
   a) Connection-less b) Scalability
   c) Connection-oriented d) Control-oriented
3. _____ is a network that covers geographic areas that are larger,such as districts or cities.
   a) MAN b) LAN
   c) PAN d) WAN
4. The internetworking protocol is known as
   a)SMTP b) PPP
   c) TCP/IP d) NNTP
5. Check sum is used for
   a) Internet b) Error Correction
   c) Error Free d) Error Detection
6. ISDN stands for
   a) Integrated Service Digital Network b) Interaction System Digital Network
   c) Inexpensive System Digital Network d) Interaction Service Digital Network

Section B [2 x 7 = 14]

[Answer **ALL** the questions]

7. a) Describe the Data Transmission modes. [OR]
   b) Explain the concept of MODEM.

8. a) What is an error ? Explain the types of errors?. [OR]
   b) Explain the various types of connecting devices.

Section C [1 x 10 = 10]

[Answer **ANY ONE** question]

9. Explain the OSI reference model with neat diagram
10. Explain types of Topologies.

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ODD SEMESTER [2021-2022]
INTERNAL ASSESSMENT TEST – I

Programme : **III IT(A&B)** Date : 22.09.2021
Course Code : **17UITC52** Time : 10.00 am -11.00 am
Course Title : **Software Engineering** Max Marks : **30**

Section A
[Answer ALL the Questions]
(6X1=6)

1. Efficiency in a software product does not include_____
   a) Responsiveness b) Licensing
   c) Memory utilization d) processing time
2. RAD stands for _____
   a) Relative application development b) Rapid application development
   c) Rapid application document d) Relative application document
3. Find which is not one of the types of prototype of prototyping model?
   a) Horizontal prototype b) vertical prototype
   c) Diagonal prototype d) domain prototype
4. What is the first step in the software development lifecycle?
   a) System Design b) Coding
   c) System Testing d) Preliminary Investigation and Analysis
5. Which of the following is involved in the system planning and designing phase of the Software Development Life Cycle (SDLC)?
   a) Sizing b) Parallel run
   c) Specification freeze d) All of the above
6. Which of the following is not included in the total effort cost?
   a) Costs of lunch time food b) Costs of support staff
   c) Costs of networking and communications
   d) Costs of air conditioning and lighting in the office space

Section B
[Answer ALL the following]
(2X7=14)

7. Write about Quality and productivity factor. [OR]
Explain in detail about planning the development process.

8. Discuss the cost factors. [OR]
Define level estimation.

Section C

[Answer ANY one of the following]
(1X10=10)

9. Explain in detail about software cost estimation.
10. Write a note on software requirement specification.

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

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ODD SEMESTER [2021-2022]
INTERNAL ASSESSMENT TEST – I

Programme : **III IT(A&B)** Date : 23.09.2021
Course Code : **17UITC53** Time : 10.00 am -11.00 am
Course Title : **JAVA Programming** Max Marks : **30**

Section A
[Answer ALL the Questions]
(6X1=6)

2. Java programs are platform_____
   a) Dependent b) Independent
   c) Correlated d)Joining

2. Methods having same name, same type signature are called_____ methods.
   a) Overriding b) Overloading
   c) Overwriting d) Overreading
3. User defined exception can be created using _____ class.
   a) catch b)try
   c) throwable d)get
4. Wrapper class is a wrapper around in _____data type.
   a) normal b) central
   c) primitive d) concrete
5. To create a subclass, the keyword_____is used.
   a) import b) new
   c) implements d) extends
6. When an interface method is implemented in a class, it must be declared as_____
   a)classes b) public
   c)private d) protected.

Section B
[Answer ALL the following]
(2X7=14)

9. Discuss the usage of abstract and final classes with example. [OR]
   Write about wrapper classes with example.
10. How do design a package?. [OR]
    Write a java program to illustrate multiple inheritance

Section C
[Answer ANY one of the following]
(1X10=10)

11. What are Built in exception in java? Explain with example.
12. Write about special string operations with examples.

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

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ODD SEMESTER [2021-2022]
INTERNAL ASSESSMENT TEST – I

Programme : **III IT(A&B)** Date : 25.09.2021
Course Code : **17UITE51** Time : 10.00 am -11.00 am
Course Title : **Mobile Computing** Max Marks : **30**

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

1. A client sends the request, and the server provides_____.
   a) Data b) Service
   c) Information d) All of the above
2. Drawbacks of the Mobile and Wireless Devices?
   a) Smaller keypads b) Consumes power rapidly
   c) Requires a big power source d) All of the above
3. In general, a mobile computing environment can also be considered as the type of _____ environment.
   a) Grid computing b) Mobile computing
   c) Distributed computing d) None of the above
4. TCP is a reliable protocol that incorporates
   a) congestion control b) Flow control mechanisms
   c) guarantees in-order delivery of data d) All of the above
5. Advantages of Indirect TCP includes
   a) Fast transmission b) Congestion control
   c) Error control d) All of the above
6. Which of the following offers packet mode data transfer service over the cellular network?
   a) TCP b) GPRS
   c) GSM d) None of the above

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

7. a) Describe in detail about Mobile Computing structures. [OR]
   b) Explain about random assignment schemes.

8. a) Discuss about key mechanism in mobile IP. [OR]
   b) How would you improve the TCP performance?

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

9. Describe in detail the characteristics of Mobile Computing.

10. Explain architecture of TCP/IP.

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

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ODD SEMESTER [2021-2022]
INTERNAL ASSESSMENT TEST – I

Programme : **III IT(A&B)** Date : 25.09.2021
Course Code : **17UITE52** Time : 10.00 am -11.00 am
Course Title : **Cryptography and Network Security** Max Marks : **30**

Section A [6 x 1 = 6]

[Answer **ALL** the questions]

8. A Substitution cipher replaces one character with _____.
   a) same character b) another Information
   c) another number d) another character
2. In cryptography, the original message, before being transformed , is called _____.
   a) simple text b) plain text
   c) empty text d) cipher text
3. An encryption algorithm transforms the plaintext into _____.
   a) simple text b) plain text
   c) empty text d) cipher text
4. In cryptography, when text is treated at the bit level, each character is replaced by_____.
   a) 4 bits b) 6 bits
   c) 8 bits d) 10 bits
5. The DES algorithm has a key length of _____.
   a) 128 bit b) 32 bit
   c) 64 bit d) 112 bit
6. The Advanced Encryption Standard was designed by _____.
   a) NIST b) IBM
   c) HP d) Intel

Section B [2 x 7 = 14]

[Answer **ALL** the questions]

7. a) Describe in detail about security trends. [OR]
   b) Explain about security services and security mechanism.

8. a) Discuss about transposition technique with example. [OR]
   b) Illustrate substitution technique with example.

Section C [1 x 10 = 10]

[Answer **ANY ONE** question]

9. Describe in detail about DES algorithm.
10. Explain AES algorithm in detail.

G.T.N. ARTS COLLEGE(Autonomous), Dindigul
ODD Semester (2021 – 2022)
OBE Regulation – 2020
Continuous Internal Assessment Test – I

Programme : BSc | Semester:I
Class : I | Date: 15.12.2021
Course Title : Introduction to Programming | Time: 9.30-11.00
Course Code: 20UITC11 | Max. Marks: 30

Course Outcomes (COs):

CO1	Explain the Linux files systems, Linux Commands and process status.
CO2	Classify various Control structures and Operators.
CO3	Explain Functions and Arrays.
CO4	Experiment Structures and Union.
CO5	Make use of Pointers and Files in various programs.

Qn. No.	Section – A Answer ALL the Questions (6 x 1 = 6)	CO(s)	K – Level
1	The father of C language is _____. a. Charles Babbage b. James Gosling c. Dennis Ritchie d. Tim Berners Lee	CO2	K1
2	Which function is used to display the output on the screen? a. Println b. Scanf c. Printf d. Scan	CO2	K1
3	Which of the following declaration is not correct? a. float d1 b. unsigned char d; c. int d=5; d. unsigned float d;	CO2	K1
4	What will strcmp() function do? a. compares the first n characters b. compares the string c. undefined function d. copies the string	CO2	K2
5	Every c program _____. a. Must contain at least one function b. Need not contain any function c. Needs input data d. Needs Two Function	CO3	K1

6	A function which calls itself is call as _____ function. a. static b.auto c.recursive d.dynamic	CO3	K1

Qn. No.		Section – B Answer ALL the Questions (3 x 4 = 12)	CO(s)	K – Level
7	A	Rewrite the structure of C program with an example.	CO2	K2
		OR		
	B	Write a program to find biggest among two nos.	CO2	K2
8	A	Define function. Interpret the difference between user defined function and library Function.	CO3	K3
		OR		
	B	Write about call by values and call by references.	CO3	K3
9	A	Define structure. Describe the syntax of structure declaration with example.	CO4	K2
		OR		
	B	Express the rules for initializing structures.	CO4	K2

Qn. No.	Section – C Answer any two Questions (2 x 6=12)	CO(s)	K – Level
10	Summarize the various types of C operators with example.	CO2	K2
11	Articulate in detail about different categories of function with example.	CO3	K3
12	Compare structures and functions with example.	CO4	K2

~All the Best~

G.T.N. ARTS COLLEGE (Autonomous), Dindigul
ODD Semester (2021 – 2022)
OBE Regulation – 2020
Continuous Internal Assessment Test – I

Programme : BSc IT
Class : II year
Course Title : Database Management System Concepts
Course Code: 20UITC31

Semester:III
Date: 23.9.21
Time: 10.00-11.30am
Max. Marks: 30

Course Outcomes (COs):

CO1	Understand the basic Database concepts and its Architecture
CO2	Experiment with various SQL Queries.
CO3	Make use of Database Models.
CO4	Identify various Storage Management and Indexing.
CO5	Utilize various Transaction Management, Concurrency Control and Recovery System

Qn. No.	Section – A Answer ALL the Questions (6 x 1 = 6)	CO(s)	K – Level
1	A database management system_____ A. is a collection of programs for managing data in a single file B. can do more than a record management system C. allows simultaneous access to multiple file D. Both (b) and (c)	CO1	K1
2	_____is the problem of data integrity. A. Data redundancy B. Security constraints C. Data inconsistency D. Data availability constraints	CO1	K1
3	_____command can be used to modify a record in a table A. alter B. update C. set D. create	CO2	K1
4	A primary key should be _____ A. not unique B. candidate key C. Atomic D. NULL	CO2	K2
5	candidate key is a_____with no redundant attributes A. composite key B. primary key C. foreign key D. super key	CO2	K2
6	FULL OUTER JOIN_____ A. Returns LEFT records when there is a match in table B. Returns all records when there is a match in either left or right table C. Returns all records when there is NO match in either left or right table D. Returns all records when there is a match in right table	CO3	K2

Qn. No.		Section – B Answer ALL the Questions (3 x 4 = 12)	CO(s)	K – Level
7	A	State the diagram for Overall system structure of DBMS Architecture.	CO1	K1
		OR		
	B	List four significant differences between a file-processing system and DBMS.	CO1	K1
8	A	Develop the queries for five built in aggregate functions.	CO2	K3
		OR		
	B	Modify a base table Customer by creating a view as Cust_V for customer_id and customer_name alone.	CO2	K3
9	A	Give example for a foreign key? Relate it with primary key.	CO3	K2
		OR		
	B	Restate the Extended E-R features available in Entity Relationship diagram.	CO3	K2

Qn. No.	Section – C Answer any two Questions (2 x 6=12)	CO(s)	K – Level
10	Describe about Views of data and State what are the functions of database administrator?	CO1	K1
11	Construct the relational table for the given schema below and answer the following SQL queries. Student (Regno, Name, Department, Age, vaccinated _dose1, vaccinated_dose2) . (i) List out all students who have the minimum Age of 18 years (ii) Find the number of students vaccinated (iii) Find the name and reg_no of the students who are not vaccinated.	CO2	K3
12	Draw the E-R diagram for bank systems and Illustrate specialization and generalization with your own example.	CO3	K2

~All the Best~

G.T.N. ARTS COLLEGE(Autonomous),
DindigulODD Semester (2021 – 2022)
OBE Regulation – 2020
Continuous Internal
Assessment Test – I

Programme : BSc IT
Class : II year
Course Title : Data Structures and Computer Algorithms
Course Code: 20UITC32

Semester: III
Date: 24.9.21
Time: 10.00-11.30am
Max. Marks: 30

Course Outcomes (COs):

CO1	Understand basic data structures such as arrays and linked list.
CO2	Explain the concept of stacks and queues.
CO3	Build trees based on our Application.
CO4	Understand the various algorithm design techniques and strategies.
CO5	Apply the right strategy for solving a problem.

Qn. No.	Section – A Answer ALL the Questions (6 x 1 = 6)	CO(s)	K – Level
1	_____ is the logical or mathematical model of a particular organization of data. A. Structure B. Variable C. Function D. Data Structure	CO1	K1
2	An Array is_____. A. A Data structure that shows a hierarchical behavior B. Container of objects of similar type C. Arrays are immutable once initialized D. Array is not a Data structure	CO1	K1
3	Process of removing an element from the stack is known as_____. A. Crush B. Evaluate C. Pop D. Enqueue	CO2	K1
4	Another name of circular Queue is _____ A. Circular Buffer B. Circle Buffer C. Ring Buffer D. Curve Buffer	CO2	K1
5	_____ is a statement about stack data structure is not correct? A. Linked list are used to implement stacks B. Top of a stack always contains a new node C. Stack is the FIFO data structure D. Null link is resent in the last node at he bottom of the stack	CO2	K1

6	The average case time complexity for finding the height of the binary tree is _____ A. h=O(loglogn) B. h=O(nlogn) C. h=O(n) D. h=O(logn)	CO3	K1

Qn. No.		Section – B Answer ALL the Questions (3 x 4 = 12)	CO(s)	K – Level
7	A	List the operations performed in linked list. Recall the routine for insertion and deletion operation.	CO1	K1
	OR			
	B	State the operations of Singly linked list in detail with suitable example.	CO1	K1
8	A	Show how stack is implemented by Linked list?	CO2	K2
	OR			
	B	Distinguish between Stack and Queue.	CO2	K2
9	A	Explain Binary Tree ADT in detail.	CO3	K2
	OR			
	B	Determine the working principles of Binary Search Algorithm.	CO3	K2

Qn. No.	Section – C Answer any two Questions (2 x 6=12)	CO(s)	K – Level
10	Describe the operations of circularly linked list in detail with suitable example.	CO1	K1
11	Illustrate the routine for Enqueue and Dequeue operations on Queue	CO2	K2
12	Show the output when you apply Preorder, Inorder and Postorder traversal in the following expressions (A+B*C)+((D*E+L)*G)	CO3	K2

~All the Best~