G.T.N.ARTS COLLEGE (Autonomous)
(Affiliated to Madurai Kamaraj University)
(Accredited by NAAC with 'B' Grade)
EVEN SEMESTER [2021-22]
INTERNAL ASSESSMENT TEST – I

Class : **II BCA (A & B)** Date: **20-04-2022**
Paper Code : **17UCAC42** Time: **10.00-11.30 am**
Title of the Paper : **RDBMS** Max Marks: **30**

Section A [6 x 1 = 6]

[Answer **ALL** the questions]

1. Who is responsible for ensuring security in a DBMS?
   a) Developer b) Programmer c) Database Administrator d) End-User
2. The other name for conceptual schema is _____.
   a) Logical level b) external level c) Physical level d) view level
3. Which of the following commands is used to modify a column inside a table?
   a) Drop b) Update C) Alter d) Set
4. Primary Key does not allow _____ value.
   a) Integer b) String c) Null d) Decimal
5. To Select a row in relational algebra uses _____ symbol.
   a) Π b) σ c) ρ d) /
6. The join condition is identical to the _____ Condition.
   a) Selection b) Projection c) Division d) Intersection

Section B [2 x 7 = 14]

[Answer **ALL** the questions]

7. a) Discuss the advantages of a DBMS in detail. **[OR]**
   b) Describe the different levels of abstraction?

8. a) What is Trigger? Explain with example. **[OR]**
   b) Explain Union, Intersection and set difference with example.

Section C [1 x 10 = 10]

[Answer **ANY ONE** question]

9. Explain the architecture of DBMS.
10. Describe Tuple Relational Calculus in detail.

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

Class : **III BCA (A&B)** Date: 18.06.2022
Paper Code :**17UCAC61** Time:
Title of the Paper :**Python Programming** Max Marks: **30**

Section A

Answer ALL the Questions **6X1=6**

1. The block of statement for the function starts after _____.

a) : b) ; c) def d) ()

2. What is the output of len("Python Programming")?

[a] 17 [b] 18 [c] 19 [d] 20

3. Which operator is used to access the values in dictionary?

[a] { } [b] ( ) [c] <> [d] [ ]

4. Which method is used to display the current working directory?

[a] mkcwd() [b] chcwd() [c] getcwd() [d] setcwd()

5. Which keyword is used to catch the exception thrown by try block?

[a] except [b] try [c] import [d] catch

6. The _____ function takes an object as argument.

[a] dir() [b] help() [c] int() [d] range()

Section B

Answer ALL the following questions **2X7=14**

7. a) How will you handle date and time in python? [OR]

b) Write a program that demonstrates the built in functions in python.

8. a) Describe the operations that could be performed on Dictionaries in Python. [OR]

b) What is string formatting operator? Write any 4 built-in string functions.

Section C

Answer ANY one of the questions **1X10=10**

9. Briefly explain the types of arguments used to invoke a function.

10. Define Exception. How could we handle the exceptions in python?

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

Class : III BCA (A&B) Date:18.06.2022
Paper Code :17UCAC61 Time:
Title of the Paper : Python Programming Max Marks: 30

Section A
Answer ALL the Questions 6X1=6

1. The block of statement for the function starts after _____.
a) : b) ; c) def d) ()
2. What is the output of len("Python Programming")?
[a] 17 [b] 18 [c] 19 [d] 20
3. Which operator is used to access the values in dictionary?
[a] { } [b] ( ) [c] <> [d] [ ]
4. Which method is used to display the current working directory?
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5. Which keyword is used to catch the exception thrown by try block?
[a] except [b] try [c] import [d] catch
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[a] dir() [b] help() [c] int() [d] range()

Section B
Answer ALL the following questions 2X7=14

7. a) How will you handle date and time in python? [OR]
b) Write a program that demonstrates the built in functions in python.
8. a) Describe the operations that could be performed on Dictionaries in Python. [OR]
b) What is string formatting operator? Write any 4 built-in string functions.

Section C
Answer ANY one of the questions 1X10=10

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

Class : **III BCA (A&B)** Date: 20.04.2022
Paper Code :**17UCAC62** Time:
Title of the Paper :**Software Testing** Max Marks: **30**

Section A

Answer ALL the Questions **6X1=6**

1. This type of performance testing wherein competitive products are compared is called_____
   a) Balance Key Resources b) Collecting Requirements c) Acceptance Criteria
   d) Bench Making
2. _____ helps in understanding how to system can behave under extreme and realistic Situations.
   a) Stress Testing b) Acceptance Testing c) Scalability Testing d) Performance Testing
3. The Process of removing some unwanted values in a set is called_____.
   a) Performance testing b) Noise Removal c) Capacity Planning d) Test Removal.
4. There are _____types of Regression Testing.
   a) 2 b) 4 c) 7 d) 8
5 What is meant by TCDB?
   a) Test case Digital Base b) Tape Configuration Database c) Test Case Data Base
   d) Transport Classification database.
6. _____ Should increases usability , efficiency , maintainability and probability of the product.
   a) Performance Testing b) Non – Functional Testing c) Test Planning d) Test Reporting.

Section B

Answer ALL the following questions **2X7=14**

7. a) Define Stress Testing and Explain With an Example. [OR]
   b)Illustrate Performance Testing in detail .
8 a) Describe and Explain about Test Management.. [OR]
   b) Explain the Tools for Performance testing.

Section C

Answer ANY one of the questions **1X10=10**

9. Explain briefly about Non – Functional Testing.

10. State and Describe about Test Process in detail.

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

: **III BCA (A&B)** Date:20.04.2022
Paper Code :**17UCAC62** Time:
Title of the Paper :**Software Testing** Max Marks: **30**

Section A

Answer ALL the Questions **6X1=6**

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   a) Balance Key Resources b) Collecting Requirements c) Acceptance Criteria
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G.T.N.ARTS COLLEGE (Autonomous)
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EVEN SEMESTER [2021-2022]
INTERNAL ASSESSMENT TEST – II

Class **III BCA (A&B)** Date: 20.06.2022
Paper Code :**17UCAC62** Time: 10-11
Title of the Paper :**Software Testing** Max Marks: **30**

Section A

Answer ALL the Questions **6X1=6**

1. This type of performance testing wherein competitive products are compared is called_____
   a) Balance Key Resources b) Collecting Requirements c) Acceptance Criteria
   d) Bench Making
2. _____ helps in understanding how to system can behave under extreme and realistic Situations.
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Section B

Answer ALL the following questions **2X7=14**

7. a) Define Stress Testing and Explain With an Example. [OR]
   b)Illustrate Performance Testing in detail .
8 a) Describe and Explain about Test Management.. [OR]
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Section C

Answer ANY one of the questions **1X10=10**

9. Explain briefly about Non – Functional Testing.

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

Class : **III BCA (A&B)** Date:20.06.2022
Paper Code :**17UCAC62** Time: 10-11
Title of the Paper :**Software Testing** Max Marks: **30**

Section A

Answer ALL the Questions **6X1=6**

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Answer ALL the following questions **2X7=14**

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8 a) Describe and Explain about Test Management.. [OR]
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Section C

Answer ANY one of the questions **1X10=10**

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G.T.N.ARTS COLLEGE (Autonomous)
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EVEN SEMESTER [2021-22]
INTERNAL ASSESSMENT TEST – I

Programme : **III BCA (A&B)** Date: **21.04.2022**
Course Code : **17UCAE61** Time: 10 **to 11 am**
Course Title : **BIG DATA ANALYTICS** Max Marks: **30**

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

1. Which of the following describes the map function.
A)Key pairs B)Indexing C)Relational Data base D)Clusters.

2._____ is hugely popularized by web services developed utilizing SOAP Principles.
A)HTML B)XML C)Java script D)JSON

3. Which of the following term is used to denote the small subsets of a large file created by HDFS
A)Name node B)Data node C)Blocks D)Namespace [ ]

4. _____has no support for ACID properties of transactions.
A) NoSQL B) SQL C)NewSQL D)All

5. ------ is a tool used to transfer data between hadoop and relational database
A)sqoop B)hive C)pig latin D)oozie

6. Hive also support custom extensions written in -------
A) C# B) Java C) C D) C++

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

7. a) What is NoSQL? What are the advantages of NoSQL?
(Or)
b) Discuss about Hive data types.

8. a) What are the distributed computing challenges of Hadoop.
(Or)
b) List the main feature of MapReduce.

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

9. Write a short note on the Hadoop ecosystem and HDFS archiecture.

10. Discuss about HQL.

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

Programme : **III BCA (A&B)** Date: **21.06.2022**
Course Code : **17UCAE61** Time: 10 **to 11 am**
Course Title : **BIG DATA ANALYTICS** Max Marks: **30**

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

1. Which of the following describes the map function.
A)Key pairs B)Indexing C)Relational Data base D)Clusters.

2._____ is hugely popularized by web services developed utilizing SOAP Principles.
A)HTML B)XML C)Java script D)JSON

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[Answer ALL the following] 2X7=14

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8. a) What are the distributed computing challenges of Hadoop.
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10. Discuss about HQL.

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

EVEN Semester (2021 – 2022)

OBE Regulation – 2020

Continuous Internal Assessment Test – I

Programme: BCA | Semester: IV

Class: II BCA | Date: 19.04.2022

Course Title: **C#.NET Programming** | Time:10 – 11.30

Course Code: **20UCAC41** | Max. Marks: 30

Course Outcomes (COs):

CO1	Manipulate properties of Class in C#.Net
CO2	Infer Manipulation of Strings and Files in C#

Qn. No.	Section – A Answer ALL the Questions (6 x 1 = 6)	CO(s)	K – Level
1	The events that represent occurrences related to the browser window are_____ 1.Window 2.Element 3.Display 4.Handlers	CO1	K1
2	To delete a record from the Dataset, we use the ----------- method. CO5 K1 1.Remove 2.Delete() 3.Delete 4.removeI()	CO1	K1
3	SQL Server variant is called T-SQL. The T stands for ---------- CO5 K1 1.Transaction 2.Transfer 3.Transact 4.Transparent	CO1	K1
4	At the time of table creation,----------is the kind of data going into a table column 1.Allow Nulls 2.Primary key 3.Length 4.Data Type	CO1	K1

5	If you want to fill your polygon, the ---------- method is used. 1.PolygonFill() 2.Fillshape() 3.FillPolygon() 4.ShapeFill()	CO1	K1
6	A class member declared protected becomes member of subclass of _____ member. 1.public 2.private 3.protected 4.static	CO1	K1

Qn. No.		**Section – B** **Answer ALL the Questions (3 x 4 = 12)**	**CO(s)**	**K – Level**
7	A	Relate the concept of Hash tables.	CO1	K1
		OR		
	B	Demonstrate about sorting a list.	CO1	K1
8	A	Illustrate how to open a Text file in C#.	CO1	K1
		OR		
	B	Apply the concept how to Copy a content to the file.	CO2	K2
9	A	Discuss about to Create Database project.	CO2	K2
		OR		
	B	Classify the usage of Data base Navigation Buttons.	CO2	K2

Qn. No.		**Section – C** **Answer ALL the Questions (2 x 6 = 12)**	**CO(s)**	**K – Level**
10	A	Explain in detail about C#.Net program for inheritance.	CO1	K1
		OR		
	B	Explain about Method Overloading.	CO1	K1
11	A	Explain how to Create a Compact SQL Server Database	CO2	K2
		OR		
	B	Write a C#.Net coding to update a record	CO2	K2

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

EVEN Semester (2021 – 2022)

OBE Regulation – 2020

Continuous Internal Assessment Test – II

Programme: BCA | Semester: IV

Class: II BCA | Date: 18.06.2022

Course Title: **C#.NET Programming** | Time:1.00 to 2.30pm

Course Code: **20UCAC41** | Max. Marks: 30

Course Outcomes (COs):

CO3	Manipulate properties of Class in C#.Net
CO4	Infer Manipulation of Strings and Files in C#
CO5	Use and connect to Sql Server Express Database

Qn. No.	Section – A Answer ALL the Questions (6 x 1 = 6)	CO(s)	K – Level
1	The events that represent occurrences related to the browser window are_____ 1.Window 2.Element 3.Display 4.Handlers	CO3	K1
2	To delete a record from the Dataset, we use the ---------- method. CO5 K1 1.Remove 2.Delete() 3.Delete 4.removeI()	CO3	K1
3	SQL Server variant is called T-SQL. The T stands for ---------- CO5 K1 1.Transaction 2.Transfer 3.Transact 4.Transparent	CO4	K1
4	At the time of table creation,----------is the kind of data going into a table column 1.Allow Nulls 2.Primary key 3.Length 4.Data Type	CO4	K1
5	If you want to fill your polygon, the ---------- method is used. 1.PolygonFill() 2.Fillshape() 3.FillPolygon() 4.ShapeFill()	CO5	K1

6	A class member declared protected becomes member of subclass of _____ member. 1.public 2.private 3.protected 4.static	CO5	K1

Qn. No.		Section – B Answer ALL the Questions (3 x 4 = 12)	CO(s)	K – Level
7	A	Relate the concept of Hash tables.	CO3	K2
		OR		
	B	Demonstrate about sorting a list.	CO3	K2
8	A	Illustrate how to open a Text file in C#.	CO4	K3
		OR		
	B	Apply the concept how to Copy a content to the file.	CO4	K3
9	A	Discuss about to Create Database project.	CO5	K2
		OR		
	B	Classify the usage of Data base Navigation Buttons.	CO5	K2

Qn. No.		Section – C Answer ALL the Questions (2 x 6 = 12)	CO(s)	K – Level
10	A	Explain in detail about C#.Net program for inheritance.	CO3	K3
		OR		
	B	Explain about Method Overloading.	CO4	K4
11	A	Explain how to Create a Compact SQL Server Database	CO5	K3
		OR		
	B	Write a C#.Net coding to update a record	CO5	K3

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

EVEN Semester (2021 – 2022)

OBE Regulation – 2020

Continuous Internal Assessment Test – II

Programme: BCA | Semester: IV

Class: II BCA | Date: 20.06.2022

Course Title: **RDBMS** | Time:10-11

Course Code: **20UCAC42** | Max. Marks: 30

Course Outcomes (COs):

CO3	Working with Tables
CO4	PL/SQL
CO5	PL/SQL Composite Data Types

Qn. No.	Section – A Answer ALL the Questions (6 x 1 = 6)	CO(s)	K – Level
1	The _____ function performs case conversion or character manipulation. A. Number B. Max C. Average D. Upper	CO3	K1
2	The _____ function performs an operation on a group of rows and returns one result. A. Date B. Sum C. Aggregate D. Math	CO3	K1
3	_____ is a block structured language. A. SQL B. PL/SQL C. Procedure D. Oracle	CO4	K1
4	ROLLBACK is a _____ language statement. A. DML B. DDL C. DCL D. TCL	CO4	K1
5	_____ is an example of composite data types. A. Package B.Varray C. Trigger D. Integer	CO5	K1
6	A trigger is based on a _____ statement. A. TCL B. DDL C. DML D. DCL	CO5	K1

Qn. No.		Section – B Answer ALL the Questions (3 x 4 = 12)	CO(s)	K – Level
7	A	Explain in detail about the usage of HAVING Clause.	CO3	K2
		OR		
	B	Summarize the usage of numeric functions.	CO3	K2
8	A	Illustrate the usage of various explicit attributes.	CO4	K3
		OR		
	B	Show the working of While loop	CO4	K3
9	A	Illustrate the usage of Procedures.	CO5	K3
		OR		
	B	Interpret on BEFORE TRIGGER.	CO5	K3

Qn. No.		Section – C Answer ALL the Questions (2 x 6 = 12)	CO(s)	K – Level
10	A	Show the use of character function in PL/SQL.	CO3	K3
		OR		
	B	Classify the various data types of PL/SQL.	CO4	K4
11	A	Explain in detail about Packages.	CO5	K4
		OR		
	B	Infer the usage of Varrays in PL/SQL.	CO5	K4

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

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

Class : **III BCA (A&B)** Date: **22.06.2022**
Paper Code : **17UCAE62** Time: **10-11 AM**
Title of the Paper : **Artificial Intelligence & Expert System** Max Marks: **30**

Section A

Answer ALL the Questions **6X1=6**

1. A problem in a search space is defined by which one of these state?
   A. Initial state B. Last state C. Intermediate state D. All of these
2. An AI agent perceives and acts upon the environment using_____
   A. Sensors B.Perceiver C. Actuators D.Both A and C
3. The available ways to solve a problem of stae-space search?
   A. 1 B.2 C. 3 D.4
4. Which AI technique enables the computer to understand associations & relationship between objects and events?
   A. Heuristic Processing B.Cognitive Science
   C. Relative Symbolism D.Pattern Matching
5. To overcome the need to backtrack in constraint satisfaction problem can be eliminated by_____
   A. Forward Searching B.Constraint Propagation
   C. Backtrack after a forward search D.Omitting the constraints
6. A production rule consists of_____
   A. A set of rule B. A sequence of steps
   C. Set of rules and sequence of steps D. Arbitrary representation to problem

Section B

Answer ALL the following questions **2X7=14**

7. a) Explain AI techniques in detail.
   (Or)
   b) Write a short note on production systems?
8. a) Explain in detail about Generate and test algorithm.
   (Or)
   b) Write a note on means-end analysis.

Section C

Answer ANY one of the following **1X10=10**

9. Write a short note on problem characteristics.
10. Explain Hill Climbing algorithm with an example.

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

Even Semester (2021- 2022)

OBE Regulation – 2020

Continuous Internal Assessment Test – I

Programme: BCA | Semester: II

Class: I BCA (A, B, C, D) | Date: 19.04.2022

Course Title: Data Structure using C | Time: 10.00 to11.30a.m

Course Code: 20UCAC21 | Max. Marks: 30

Course Outcomes (COs):

CO1	Classify the input and output devices.
CO2	Outline the computer software and it types.

Qn. No.	Section – A Answer ALL the Questions (6 x 1 = 6)	CO(s)	K – Level
1	In a linked list, the pointer of the last node contains a special value, called the _____ pointer a) NULL b) Zero c) Link d) Next pointer	CO1	K1
2	The link list also contains a list pointer variable called start or _____. a) Name b) Field c) Node d) Link	CO1	K1
3	_____ is a linear structure in which items may be added or removed at one end. a) Queue b) Recursion c) Stack d) Linear List	CO1	K1
4	---------- is a dequeue which allows insertions at only one end of list but allows deletion at both ends of the list. a) Input-restricted queue b) Output-restricted queue c) Queue d) Dequeue	CO1	K1
5	A terminal node in a binary tree T is called_____. a) Edge b) Path c) Leaf d) Branch	CO1	K1

6	Binary tree is said to be 2 tree or _____. a) Extended Binary tree b) Expression c) Threaded d) Game	CO1	K1

Qn. No.		Section – B Answer ALL the Questions (3 x 4 = 12)	CO(s)	K – Level
7	A	State the Representation of Linked List in Memory	CO1	K1
		OR		
	B	Specify how to Insert into a sorted Linked List with Algorithm	CO1	K1
8	A	Show the Implementation of Queue as an array in C	CO1	K1
		OR		
	B	Illustrate about Dequeues	CO2	K2
9	A	Describe about Binary Trees	CO2	K2
		OR		
	B	Recall how to Traverse Binary Trees in Memory	CO2	K2
Qn. No.		**Section – C** **Answer Any two Questions (2 x 6=12)**	**CO(s)**	**K – Level**
10		Discuss how to transform Infix Expression to postfix with algorithm and example.	CO2	K2
11		Discriminate the Implementation of Queue in C	CO2	K2
12		Examine the Traversing Binary Trees with example	CO2	K2

Course Teacher Hod Dean

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

Even Semester (2021- 2022)

OBE Regulation – 2020

Continuous Internal Assessment Test – II

Programme: BCA | Semester: II

Class: I BCA (A, B, C, D) | Date: 20.06.2022

Course Title: Data Structure using C | Time: 10.00 to11.30a.m

Course Code: 20UCAC21 | Max. Marks: 30

Course Outcomes (COs):

CO3	Classify the input and output devices.
CO4	Outline the computer software and it types.
CO5	Make use of Algorithms and pseudo code to write a program.

Qn. No.	Section – A Answer ALL the Questions (6 x 1 = 6)	CO(s)	K – Level
1	In a linked list, the pointer of the last node contains a special value, called the _____ pointer a) NULL b) Zero c) Link d) Next pointer	CO3	K1
2	The link list also contains a list pointer variable called start or _____. a) Name b) Field c) Node d) Link	CO3	K1
3	_____ is a linear structure in which items may be added or removed at one end. a) Queue b) Recursion c) Stack d) Linear List	CO4	K1
4	---------- is a dequeue which allows insertions at only one end of list but allows deletion at both ends of the list. a) Input-restricted queue b) Output-restricted queue c) Queue d) Dequeue	CO4	K1
5	A terminal node in a binary tree T is called_____. a) Edge b) Path c) Leaf d) Branch	CO5	K1

6	Binary tree is said to be 2 tree or _____. a) Extended Binary tree b) Expression c) Threaded d) Game	CO5	K1

Qn. No.		Section – B Answer ALL the Questions (3 x 4 = 12)	CO(s)	K – Level
7	A	State the Representation of Linked List in Memory	CO3	K2
		OR		
	B	Specify how to Insert into a sorted Linked List with Algorithm	CO3	K2
8	A	Show the Implementation of Queue as an array in C	CO4	K3
		OR		
	B	Illustrate about Dequeues	CO4	K3
9	A	Describe about Binary Trees	CO5	K2
		OR		
	B	Recall how to Traverse Binary Trees in Memory	CO5	K2

Qn. No.	Section – C Answer Any two Questions (2 x 6=12)	CO(s)	K – Level
10	Discuss how to transform Infix Expression to postfix with algorithm and example.	CO3	K3
11	Discriminate the Implementation of Queue in C	CO4	K3
12	Examine the Traversing Binary Trees with example	CO5	K3

Course Teacher Hod Dean

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

G.T.N.ARTS COLLEGE (Autonomous)
(Affiliated to Madurai Kamaraj University)
(Accredited by NAAC with 'B' Grade)
EVEN SEMESTER [2021-22]
INTERNAL ASSESSMENT TEST – I

Class : **III BCA (A&B)** Date: **22.04.2022**
Paper Code : **17UCAE62** Time: **10-11 AM**
Title of the Paper : **Artificial Intelligence & Expert System** Max Marks: **30**

Section A

Answer ALL the Questions **6X1=6**

1. A problem in a search space is defined by which one of these state?
   A. Initial state B. Last state C. Intermediate state D. All of these
2. An AI agent perceives and acts upon the environment using_____
   A. Sensors B.Perceiver C. Actuators D.Both A and C
3. The available ways to solve a problem of stae-space search?
   A. 1 B.2 C. 3 D.4
4. Which AI technique enables the computer to understand associations & relationship between objects and events?
   A. Heuristic Processing B.Cognitive Science
   C. Relative Symbolism D.Pattern Matching
5. To overcome the need to backtrack in constraint satisfaction problem can be eliminated by_____
   A. Forward Searching B.Constraint Propagation
   C. Backtrack after a forward search D.Omitting the constraints
6. A production rule consists of_____
   A. A set of rule B. A sequence of steps
   C. Set of rules and sequence of steps D. Arbitrary representation to problem

Section B

Answer ALL the following questions **2X7=14**

7. a) Explain AI techniques in detail.
   (Or)
   b) Write a short note on production systems?
8. a) Explain in detail about Generate and test algorithm.
   (Or)
   b) Write a note on means-end analysis.

Section C

Answer ANY one of the following **1X10=10**

9. Write a short note on problem characteristics.
10. Explain Hill Climbing algorithm with an example.

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EVEN SEMESTER [2021-22]
INTERNAL ASSESSMENT TEST – I

Class : **III BCA (A&B)** Date: **19.04.2022**
Paper Code : **17UCAC61** Time: **10-11 AM**
Title of the Paper : **Python Programming** Max Marks: **30**

Section A

Answer ALL the Questions **6X1=6**

1. Which one of these is floor division?
   A. / B. // C. % D. **
2. Which of the following is a Python tuple?
   A. {1,2,3} B.(1,2,3) C. [1,2,3] D.{}
3. In order to store values in terms of key and value pair we use what core datatype?
   A. List B.Dictionary C. Tuples D.Array
4. What is the valuet of the x in Python programming? x=4^12
   A. 2 B.4 C. 8 D.12
5. What is the output of "math.floor(3.4)"?
   A. 3 B.4 C. 4.0 D.3.0
6. Which of the following cannot be a variable?
   A. _init_ B. in C. it D. on

Section B

Answer ALL the following questions **2X7=14**

7. a) Explain features of Python in detail.
   (Or)
   b)Write a short note on decision making statements in Python?
8. a) Explain in detail about Loops in Python.
   (Or)
   b) How to define and calling a recursive function with example programs?

Section C

Answer ANY one of the following **1X10=10**

9. What are the data types available in python?
10. Write any 10 string formatting functions with example programs?

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

Even Semester (2021- 2022)

OBE Regulation – 2020

Continuous Internal Assessment Test – I

Programme: BCA | Semester: IV

Class: II | Date: 21-04-2022

Course Title: Principles of operating system | Time: 10-11.30

Course Code: 20UCAC43 | Max. Marks: 30

Course Outcomes (COs):

Qn. No.	Section – A Answer ALL the Questions (6 x 1 = 6)	CO(s)	K – Level
1	SPOOL is _____. a)simultaneous Printer operation offline. b)Simple peripheral operation offline. c)Simple printer operation online. d)Simultaneous peripheral operation online.	CO1	K1
2	Multitasking was developed in _____ generation. a)first b)second c)third d)fourth	CO1	K1
3	_____ mut reside in the memory forever. a)resident b)transient c)CM d)VMS	CO1	K1
4	Aegis and XOK are example of _____ OS. a)monolithic b)layered c)exokernal d)hybrid kernel based	CO1	K1
5	Program is a _____entity while process is a _____entity. a)passive,active b)active,passive c)active,active d)passive,passive	CO2	K1
6	When a job is selected to be brought in the main memory it is called _____ scheduling. A)process b)job c)CPU d)disk	CO5	K1

Qn. No.		Section – B Answer ALL the Questions (5 x 3 = 15)	CO(s)	K – Level
7	A	List the function performed by OS with needed diagrams?	CO1	K1
		OR		
	B	Describe the characteristic of distributed OS.	CO1	K1
8	A	Outline all the steps of the general working of an OS?	CO1	K1
		OR		
	B	What is the idea behind development of layered architecture OS?	CO1	K1
9	A	State how context switching implemented?	CO2	K1
		OR		
	B	Recite different types schedulers in detail?	CO2	K1
Qn. No.		**Section – C Answer Any two Questions (2 x 6=12)**	**CO(s)**	**K – Level**
10	A	Discuss briefly about third generation of computers?	CO1	K2
		OR		
	B	Explain the goals of an OS?	CO1	K2
11	A	What is the need of system call?with the help of example illustrate how it is executed?	CO2	K2
		OR		
	B	Express your views about process states?Draw and show how state transistion are implemented?	CO2	K2

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

Even Semester (2021- 2022)

OBE Regulation – 2020

Continuous Internal Assessment Test – II

Programme: BCA | Semester: IV

Class: II | Date: 21-06-2022

Course Title:Principles of operating system | Time: 1.00 to2.30p.m

Course Code: 20UCAC43 | Max. Marks: 30

Course Outcomes (COs):

Qn. No.	Section – A Answer ALL the Questions (6 x 1 = 6)	CO(s)	K – Level
1	An edge form a process to a resourse in RAG is known as _____. a)Assignment edge. b)Rectangular node. c)Request edge. d)Circular edge.	CO4	K1
2	_____ I the minimum number of memory access needed in paging. a)threeb)fourc)two d)five	CO4	K1
3	_____ of the following decreases the overhead of processing. a)paging b)compaction c)segmentationd)fragmentation	CO4	K1
4	_____ algorithm is better when the load on the disk is low and the request are uniformly distributed a)SCAN b)FCFS c)LOOK d)SSTT	CO5	K1
5	_____is also known elevator algorithm. a)SCAN b)FCFS c)LOOK d)SSTT	CO5	K1
6	Block level distributed party is used in _____ A)RAID level 1 b)RAID level 4 c)RAID level 5 d)RAID level 6	CO5	K1

Qn. No.		Section – B Answer ALL the Questions (5 x 3 = 15)	CO(s)	K – Level
7	A	Show the use of any one methos for preventing deadlock?	CO4	K3
		OR		
	B	Articulate how to select a return process in about a process while recovering from a deadlock?	CO4	K3
8	A	What are the advantages and disadvantages of contiguous allocation with variable partitioning?	CO4	K3
		OR		
	B	Can you produce hardware requirements in the implementation of segmentation?	CO4	K4
9	A	Why disks scheduling is important for I/O operation?defend with reasons?	CO5	K2
		OR		
	B	Express the factors that decide swap space size?	CO5	K2
Qn. No.		**Section – C** **Answer Any two Questions (2 x 6=12)**	**CO(s)**	**K – Level**
10	A	Illustrate how deadlock can be detected efficiently?	CO4	K4
		OR		
	B	Analyze any three condition of your choice for preventing deadlock?	CO4	K4
11	A	Sketch how FSFS can be used for disk scheduling with example?	CO5	K3
		OR		
	B	Explain rotational optimization in detail?	CO5	K3

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