Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur

Department of Computer Science

M.Sc. Semester-I (Computer Science) Session 2020-2021

Unit Test I

Name of Teacher: S.P.Jagre **Date:17/08/2020**

Subject: Discrete Mathematical Structures (Paper - I) **Maximum Marks: 20**

Sr. No.	Name of Students	Obtained Marks
1.	Aishwarya Prashant Pusadkar	14
2.	Aniket Goutam Kamble	13
3.	Anjali Milind Pakhidde	16
4.	Ankita Anil Banasure	12
5.	Ashlesha Dadarao Kadaskar	16
6.	Ashwini Mularidhar Rahngadale	13
7.	Divyani Pravin Salve	17
8.	Jayshree Madhukar Rudrakar	14
9.	Jyoti Chandrabhan Patil	13
10.	Kajal Dnyaneshwar Bhoyar	16
11.	Kajal Shivshanka rBante	13
12.	Krishna Rajesh Latta	Absent
13.	Mansi Sanjay Hingle	Absent
14.	Monika Pralhad Hadge	12
15.	Nikita DeoraoWatekar	16
16.	Nitesh Ramesh Wasnik	13
17.	Pawan Ravindra Gulghane	13
18.	Payal Parmeshwar Hatwar	16
19.	Payal Vikram Thawkar	18
20.	Prachi Manoj Barsagade	17
21.	Prachi Vinod Wasnik	Absent
22.	Prajakta Tanaj iLakhmapure	16
23.	Pranali Raju Ikhar	Absent
24.	Pranay Vijay Shahare	Absent

25.	Priya Janardan Bhure	13
26.	Priyanka Dhananjay Pandit	17
27.	Priyanka Latesh Malkan	Absent
28.	Purva Ujwal Tijare	16
29.	Reena Narendra Shende	Absent
30.	Ruchika Vijay Motghare	Absent
31.	SamikshaVinodZade	13
32.	Sayali Ravindra Wankhede	13
33.	Shivani Ambirrao Bagal	13
34.	Shivani Anilrao Shende	16
35.	Shrutika Ganesh Sathwane	18
36.	Shubhangi Subhash Langewar	17
37.	Shweta Suresh Kapse	Absent
38.	Swati Arun Pandit	18
39.	Switi Ranjeet Koche	17
40.	Tejashree Manoj Wekhande	12
41.	Tejaswini Shantaram Rewatkar	16
42.	Tejaswini Vijayrao Hirudkar	17
43.	Urvashi Megandas Sonboir	Absent
44.	Vaishali Kishor Paliwal	16
45.	Yuganshi Amarsingh Bais	16
46.	Yukta Dhruwakumar Hajare	13

Signature of the Teacher

Head
Department of Computer Science

SEAL

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur

Session 2020-2021

Master of Science (M.Sc.) Semester-I (Computer Science)

Discrete Mathematical Structures (Paper - I)

Unit Test - I

Time: 1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

1.Which of the following represents the cardinality of the set A = {1, 2, 3, 4, 5}? 2

a) 5
b) 4
c) 6
d) None of the above

2.The power set of a set with n elements has how many subsets? 2

a) n
b) 2n
c) n!
d) n^n

3.Which operation on sets is commutative? 2

a) Union
b) Intersection
c) Difference
d) Symmetric difference

4.Which of the following is NOT an integer? 2

a) -3
b) 0
c) 3.5
d) 100

5.In matrix multiplication, if matrix A is of size m x n and matrix B is of size p x q, what must be true for multiplication to be valid? 2

a) n = p
b) m = q
c) m = p
d) n = q

6.What is the result of 2^3 * 2^4? 2

a) 2^7
b) 2^12
c) 2^24
d) 2^43

7.Which of the following is a valid logical equivalence? 2

a) p AND q = p OR q
b) NOT(p OR q) = NOT p AND NOT q
c) p OR q = NOT p AND NOT q
d) p AND q = NOT p OR NOT q

8.Which method of proof involves assuming the opposite of what needs to be proved and then showing that this leads to a contradiction? 2

a) Direct proof
b) Contrapositive proof
c) Proof by contradiction

d) Proof by induction

9.What is the negation of the statement "All cats are mammals"? 2

a) All cats are not mammals
b) No cats are mammals
c) Some cats are not mammals
d) Some cats are mammals

10.Which of the following is a tautology? 2

a) p AND NOT p
b) p OR NOT p
c) NOT p OR NOT q
d) p AND q

Signature of the Teacher

Head
Department of Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's
Science College, Congress Nagar, Nagpur
Department of Computer Science
M.Sc. Semester-I(Computer Science)Session 2020-2021
Discrete Mathematical Structures (Paper I)
Unit Test - II

Name of Teacher: S.P. Jagre **Date: 10/10/2020**
Subject: Discrete Mathematical Structures (Paper - I) Maximum Marks: 20

Sr. No.	Name of Students	Obtained Marks
1.	Aishwarya Prashant Pusadkar	16
2.	Aniket Goutam Kamble	13
3.	Anjali Milind Pakhidde	17
4.	Ankita Anil Banasure	12
5.	Ashlesha Dadarao Kadaskar	13
6.	Ashwini Mularidhar Rahngadale	12
7.	Divyani Pravin Salve	18
8.	Jayshree Madhukar Rudrakar	17
9.	Jyoti Chandrabhan Patil	12
10.	Kajal Dnyaneshwar Bhoyar	16

11.	Kajal Shivshanka rBante	17
12.	Krishna Rajesh Latta	Absent
13.	Mansi Sanjay Hingle	16
14.	Monika Pralhad Hadge	Absent
15.	Nikita DeoraoWatekar	Absent
16.	Nitesh Ramesh Wasnik	13
17.	Pawan Ravindra Gulghane	17
18.	Payal Parmeshwar Hatwar	14
19.	Payal Vikram Thawkar	13
20.	Prachi Manoj Barsagade	16
21.	Prachi Vinod Wasnik	12
22.	Prajakta Tanaj iLakhmapure	16
23.	Pranali Raju Ikhar	13
24.	Pranay Vijay Shahare	17
25.	Priya Janardan Bhure	14
26.	Priyanka Dhananjay Pandit	13
27.	Priyanka Latesh Malkan	16
28.	Purva Ujwal Tijare	13
29.	Reena Narendra Shende	Absent
30.	Ruchika Vijay Motghare	Absent
31.	SamikshaVinodZade	12
32.	Sayali Ravindra Wankhede	16
33.	Shivani Ambirrao Bagal	13
34.	Shivani Anilrao Shende	17
35.	Shrutika Ganesh Sathwane	14
36.	Shubhangi Subhash Langewar	13
37.	Shweta Suresh Kapse	16
38.	Swati Arun Pandit	13
39.	Switi Ranjeet Koche	16
40.	Tejashree Manoj Wekhande	18

41.	Tejaswini Shantaram Rewatkar	17
42.	Tejaswini Vijayrao Hirudkar	Absent
43.	Urvashi Megandas Sonboir	18
44.	Vaishali Kishor Paliwal	17
45.	Yuganshi Amarsingh Bais	16
46.	Yukta Dhruwakumar Hajare	18

Signature of the Teacher

Head
Department of Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Science College, Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Session 2020-2021

Master of Science (M.Sc.) Semester-I (Computer Science)

Discrete Mathematical Structures (Paper - I)

Unit Test - II

Time: 1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

1.A graph with no cycles is called: 2

a) Complete graph
b) Bipartite graph
c) Tree
d) Eulerian graph

2.Which of the following statements about Euler paths and circuits is true? 2

a) Every Euler circuit is an Euler path
b) Every Euler path is an Euler circuit
c) Euler paths and circuits are the same thing
d) Euler paths exist only in directed graphs

3.A Hamiltonian path in a graph visits each vertex exactly once. A Hamiltonian circuit: 2

a) Visits each edge exactly once
b) Visits each vertex exactly twice
c) Starts and ends at the same vertex
d) Can visit vertices multiple times

4.Which of the following is NOT true about partially ordered sets (posets)? 2

a) Every poset has a least element
b) Every poset has a greatest element
c) Posets are reflexive, antisymmetric, and transitive
d) Posets can be represented as directed acyclic graphs (DAGs)

5.A lattice is a poset in which every pair of elements has: 2

a) A greatest common divisor
b) A least upper bound and a greatest lower bound
c) A Hamiltonian path
d) Exactly two minimal elements

6.A Boolean algebra is defined as a set together with: 2

a) Two binary operations, addition, and multiplication
b) A binary operation and a unary operation
c) A binary operation and a ternary operation
d) A unary operation and a nullary operation

7.Which of the following is a Boolean function represented as a Boolean polynomial? 2

a) AND
b) OR
c) NOT
d) XOR

8.Trees are: 2

a) Connected graphs with no cycles
b) Graphs with no edges
c) Graphs with no vertices
d) Directed acyclic graphs

9.Which of the following is NOT a characteristic of a minimal spanning tree? 2

a) It spans all vertices of the graph
b) It contains the minimum possible number of edges
c) It may contain cycles
d) It minimizes the total weight or cost of edges

10.A semigroup is a set equipped with: 2

a) A binary operation that is associative
b) A binary operation that is commutative
c) A unary operation that is associative
d) A ternary operation that is associative

Signature of the Teacher

Head
Department of Computer Science

SEAL

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur

Department of Computer Science

M. Sc. Semester – I (Computer Science) Session 2020-21

Unit Test - I

Name of Teacher: Mr. M. T. Wanjari **Date: 17/09/2020**

Subject: Programming in Java (Paper-II) **Maximum Marks: 20**

Sr. No.	Name of Students	Obtained Marks
1.	Aishwarya Prashant Pusadkar	12
2.	Aniket Goutam Kamble	10
3.	Anjali Milind Pakhidde	12
4.	Ankita Anil Banasure	14
5.	Ashwini Mularidhar Rahngadale	10
6.	Divyani Pravin Salve	08
7.	Jayshree Madhukar Rudrakar	12
8.	Jyoti Chandrabhan Patil	08
9.	Kajal Dnyaneshwar Bhoyar	14
10.	Kajal Shivshanka Bante	08
11.	Krishna Rajesh Latta	12
12.	Mansi Sanjay Hingle	18
13.	Monika Pralhad Hadge	08
14.	Nikita DeoraoWatekar	14
15.	Nitesh Ramesh Wasnik	10
16.	Pawan Ravindra Gulghane	12
17.	Payal Parmeshwar Hatwar	14
18.	Payal Vikram Thawkar	10
19.	Prachi Manoj Barsagade	10
20.	Prachi Vinod Wasnik	12
21.	Prajakta Tanaji Lakhmapure	14
22.	Pranali Raju Ikhar	12
23.	Pranay Vijay Shahare	16
24.	Priya Janardan Bhure	12
25.	Priyanka Dhananjay Pandit	14
26.	Priyanka Latesh Malkan	18
27.	Purva Ujwal Tijare	12

28.	Reena Narendra Shende	10
29.	Ruchika Vijay Motghare	16
30.	SamikshaVinodZade	12
31.	Sayali Ravindra Wankhede	10
32.	Shivani Ambirrao Bagal	14
33.	Shivani Anilrao Shende	12
34.	Shrutika Ganesh Sathwane	18
35.	Shubhangi Subhash Langewar	12
36.	Shweta Suresh Kapse	10
37.	Swati Arun Pandit	10
38.	Switi Ranjeet Koche	14
39.	Tejashree Manoj Wekhande	14
40.	Tejaswini Shantaram Rewatkar	16
41.	Tejaswini Vijayrao Hirudkar	18
42.	Urvashi Megandas Sonboir	10
43.	Vaishali Kishor Paliwal	14
44.	Yuganshi Amarsingh Bais	10
45.	Yukta Dhruwakumar Hajare	14

Signature of the Teacher

Head
Department of Computer Science

SEAL

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's
Science College, Congress Nagar, Nagpur
Session 2020-21
Master of Science (M. Sc.) Semester – I (Computer Science)
Programming in Java (Paper-II)
Unit Test – I

Time: 1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

1. Which of the following is not OOPS concept in Java? 2
   a) Inheritance b) Encapsulation
   c) Polymorphism d) Compilation
2. Which of these keywords is used to define packages in Java? 2
   a) pkg b) Pkg
   c) package d) Package
3. Which of these access specifiers can be used for an interface? 2
   a) public b) protected
   c) private d) All of the mentioned
4. Which of these functions is called to display the output of an applet? 2
   a) display() b) paint()
   c) displayApplet() d) PrintApplet()
5. Give the abbreviation of AWT? 2
   a) Applet Windowing Toolkit b) Abstract Windowing Toolkit
   c) Absolute Windowing Toolkit d) None of the above
6. Which object can be constructed to show any number of choices in the visible window?2
   a. Labels b. Choice
   c. List d. Checkbox
7. The Java Foundation Classes (JFC) is a set of GUI components which simplify the development of desktop applications. 2
   a. True b. False
8. In Java, what do you call an area on the screen that has nice borders and various buttons along the top border? 2
   a) A windowb) A screen
   c) A box d) A frame
9. Which is the container that contain title bar and can have MenuBars. It can have other components like button, textfield etc.? 2
   a) Panel b) Frame
   c) Window d) Container
10. The ActionListener interface is not used for handling action events? 2
    a) True b) False

Signature of the Teacher

Head
Department of Computer Science

SEAL

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur

Department of Computer Science

M. Sc. Semester – I (Computer Science) Session 2020-21

Unit Test - II

Name of Teacher: Mr. M. T. Wanjari **Date: 18/10/2020**

Subject: Programming in Java (Paper-II) **Maximum Marks: 20**

Sr. No.	Name of Students	Obtained Marks
1.	Aishwarya Prashant Pusadkar	10
2.	Aniket Goutam Kamble	12
3.	Anjali Milind Pakhidde	14
4.	Ankita Anil Banasure	12
5.	Ashwini Mularidhar Rahngadale	12
6.	Divyani Pravin Salve	10
7.	Jayshree Madhukar Rudrakar	10
8.	Jyoti Chandrabhan Patil	10
9.	Kajal Dnyaneshwar Bhoyar	14
10.	Kajal Shivshanka Bante	10
11.	Krishna Rajesh Latta	14
12.	Mansi Sanjay Hingle	16
13.	Monika Pralhad Hadge	10
14.	Nikita Deorao Watekar	16
15.	Nitesh Ramesh Wasnik	08
16.	Pawan Ravindra Gulghane	10
17.	Payal Parmeshwar Hatwar	10
18.	Payal Vikram Thawkar	10
19.	Prachi Manoj Barsagade	14
20.	Prachi Vinod Wasnik	12
21.	Prajakta Tanaji Lakhmapure	14
22.	Pranali Raju Ikhar	10
23.	Pranay Vijay Shahare	14
24.	Priya Janardan Bhure	10
25.	Priyanka Dhananjay Pandit	16
26.	Priyanka Latesh Malkan	18
27.	Purva Ujwal Tijare	14

28.	Reena Narendra Shende	12
29.	Ruchika Vijay Motghare	18
30.	SamikshaVinodZade	12
31.	Sayali Ravindra Wankhede	08
32.	Shivani Ambirrao Bagal	16
33.	Shivani Anilrao Shende	14
34.	Shrutika Ganesh Sathwane	16
35.	Shubhangi Subhash Langewar	12
36.	Shweta Suresh Kapse	10
37.	Swati Arun Pandit	12
38.	Switi Ranjeet Koche	14
39.	Tejashree Manoj Wekhande	12
40.	Tejaswini Shantaram Rewatkar	16
41.	Tejaswini Vijayrao Hirudkar	16
42.	Urvashi Megandas Sonboir	12
43.	Vaishali Kishor Paliwal	14
44.	Yuganshi Amarsingh Bais	12
45.	Yukta Dhruwakumar Hajare	16

Signature of the Teacher

Head
Department of Computer Science

SEAL

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College.
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's
Science College, Congress Nagar, Nagpur
Session 2020-21
Master of Science (M. Sc.) Semester – I (Computer Science)
Programming in Java (Paper-II)
Unit Test – II

Time: 1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

1. _____ these package contains classes and interfaces for networking. 2
   a) java.io b) java.util
   c) java.net d) java.network
2. Which of these is a protocol for breaking and sending packets to an address across a network?
   a) TCP/IP b) DNS
   c) Socket d) Proxy Server 2
3. How many port of TCP/IP are reserved for specific protocols? 2
   a) 10 b) 1024
   c) 2048 d) 512
4. InetAddress class is not used to encapsulate IP address and DNS. 2
   a) True b) False
5. Which of these methods are member of Remote class? 2
   a) checkup() b) addLocation()
   c) AddServer() d) None of the mentioned
6. _____ Exceptions is thrown by remote method. 2
   a) RemoteException b) InputOutputException
   c) RemoteAccessException d) RemoteInputOutputException
7. java.rmi package is used for remote method invocation. 2
   a) True b) False
8. How constructor can be used for a servlet? 2
   a) Initialization b) Constructor function
   c) Initialization and Constructor function d) Setup() method
9. Can servlet class declare constructor with ServletConfig object as an argument? 2
   a) True b) False
10. _____ page directive should be used in JSP to generate a PDF page? 2
    a) contentType b) generatePdf
    c) typePDF d) contentPDF

Signature of the Teacher

Head
Department of Computer Science

SEAL

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur.

Department of Computer Science

M. Sc. Semester-I (Computer Science) Session 2020-21

Unit Test - I

Name of the Teacher: Mrs. Swati S Khandalkar **Date: 17/02/2021**

Subject: Digital Electronics and Microprocessor (Paper-III) Maximum Marks :20

Sr. No.	Name of Students	Obtained Marks
1.	Aishwarya Prashant Pusadkar	18
2.	Aniket Goutam Kamble	17
3.	Anjali Milind Pakhidde	8
4.	Ankita Anil Banasure	9
5.	Ashlesha Dadarao Kadaskar	Absent
6.	Ashwini Mularidhar Rahngadale	8
7.	Divyani Pravin Salve	19
8.	Jayshree Madhukar Rudrakar	17
9.	Jyoti Chandrabhan Patil	11
10.	Kajal Dnyaneshwar Bhoyar	Absent
11.	Kajal Shivshanka rBante	9
12.	Krishna Rajesh Latta	10
13.	Mansi Sanjay Hingle	11
14.	Monika Pralhad Hadge	14
15.	Nikita DeoraoWatekar	12
16.	Nitesh Ramesh Wasnik	11
17.	Pawan Ravindra Gulghane	10
18.	Payal Parmeshwar Hatwar	20
19.	Payal Vikram Thawkar	18
20.	Prachi Manoj Barsagade	Absent
21.	Prachi Vinod Wasnik	10
22.	Prajakta Tanaj Lakhmapure	12
23.	Pranali Raju Ikhar	20
24.	Pranay Vijay Shahare	7
25.	Priya Janardan Bhure	16
26.	Priyanka Dhananjay Pandit	15
27.	Priyanka Latesh Malkan	19
28.	Purva Ujwal Tijare	20
29.	Reena Narendra Shende	18
30.	Ruchika Vijay Motghare	18

31.	SamikshaVinodZade	10
32.	Sayali Ravindra Wankhede	12
33.	Shivani Ambirrao Bagal	19
34.	Shivani Anilrao Shende	16
35.	Shrutika Ganesh Sathwane	17
36.	Shubhangi Subhash Langewar	Absent
37.	Shweta Suresh Kapse	10
38.	Swati Arun Pandit	16
39.	Switi Ranjeet Koche	9
40.	Tejashree Manoj Wekhande	11
41.	Tejaswini Shantaram Rewatkar	19
42.	Tejaswini Vijayrao Hirudkar	12
43.	Urvashi Megandas Sonboir	19
44.	Vaishali Kishor Paliwal	18
45.	Yuganshi Amarsingh Bais	11
46.	Yukta Dhruwakumar Hajare	Absent

Signature of the Teacher

Head
Department of Computer Science

SEAL

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur.

Session 2020-2021

Master of Science (M.Sc.) Semester-I (Computer Science)

Digital Electronics and Microprocessor (Paper-III)

Unit Test - I

Time :1 Hour] **[Maximum Marks:20**

Choose the correct option and answer the following:

A. The octal equivalent of 1100101.001010 is _____ 2

a. 624.12

b. 145.12

c. 154.12
d. 145.21

B. In both signed magnitude and 2's complement , positive and negative numbers are separated using _____ 2
a. LSB
b. MSB
c. 0
d. 1

C. Which of the following gate will give a 0 when both of its inputs are 1?2
a. AND
b. OR
c. NAND
d. EXOR

D. The expression of an EXOR gate is _____ 2
a. A'B+AB'
b. AB+A'B'
c. A+A.B
d. A'+B'

E. Reflected binary code is also known as _____ 2
a. BCD code
b. Binary code
c. ASCII code
d. Gray Code

F. Which of the following is false? 2
a. x+y=y+x
b. x.y=y.x
c. x.x'=1
d. x+x'=1

G. The general form for calculating the number of rows in a truth table is ____ 2
a. 2n
b. $2^{(n+1)}$
c. 2^n
d. 2(n+1)

H. The output of AND gates in the SOP expression is connected using the _____ gate. 2
a. XOR
b. NOR
c. AND
d. OR

I. What is a multiplexer? 2
a. It is a type of decoder which decodes several inputs and gives one output
b. A multiplexer is a device which converts many signals into one
c. It takes one input and results into many output

d. It is a type of encoder which decodes several inputs and gives one output

J. How many AND, OR and EXOR gates are required for the configuration of full adder? 2

a. 1, 2, 2
b. 2, 1, 2
c. 3, 1, 2
d. 4, 0, 1

Signature of the Teacher **Head**
Department of Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's
Science College, Congress Nagar, Nagpur.
Department of Computer Science
M. Sc. Semester-I (Computer Science) Session 2020-21
Unit Test - II

Name of the Teacher: Mrs. Swati S Khandalkar **Date: 08/05/2021**

Subject: Digital Electronics and Microprocessor (Paper-III) Maximum Marks :20

Sr. No.	Name of Students	Obtained Marks
1.	Aishwarya Prashant Pusadkar	17
2.	Aniket Goutam Kamble	Absent
1.	Anjali Milind Pakhidde	19
2.	Ankita Anil Banasure	10
3.	Ashlesha Dadarao Kadaskar	7
4.	Ashwini Mularidhar Rahngadale	11
5.	Divyani Pravin Salve	10
6.	Jayshree Madhukar Rudrakar	16
7.	Jyoti Chandrabhan Patil	Absent
8.	Kajal Dnyaneshwar Bhoyar	15
9.	Kajal Shivshanka rBante	19
10.	Krishna Rajesh Latta	17
11.	Mansi Sanjay Hingle	17
12.	Monika Pralhad Hadge	12

13.	Nikita DeoraoWatekar	Absent
14.	Nitesh Ramesh Wasnik	17
15.	Pawan Ravindra Gulghane	18
16.	Payal Parmeshwar Hatwar	10
17.	Payal Vikram Thawkar	14
18.	Prachi Manoj Barsagade	17
19.	Prachi Vinod Wasnik	12
20.	Prajakta Tanaj Lakhmapure	Absent
21.	Pranali Raju Ikhar	10
22.	Pranay Vijay Shahare	12
23.	Priya Janardan Bhure	18
24.	Priyanka Dhananjay Pandit	16
25.	Priyanka Latesh Malkan	17
26.	Purva Ujwal Tijare	16
27.	Reena Narendra Shende	19
28.	Ruchika Vijay Motghare	18
29.	SamikshaVinodZade	14
30.	Sayali Ravindra Wankhede	11
31.	Shivani Ambirrao Bagal	17
32.	Shivani Anilrao Shende	20
33.	Shrutika Ganesh Sathwane	11
34.	Shubhangi Subhash Langewar	15
35.	Shweta Suresh Kapse	12
36.	Swati Arun Pandit	20
37.	Switi Ranjeet Koche	14
38.	Tejashree Manoj Wekhande	12
39.	Tejaswini Shantaram Rewatkar	9
40.	Tejaswini Vijayrao Hirudkar	14
41.	Urvashi Megandas Sonboir	Absent
42.	Vaishali Kishor Paliwal	15
43.	Yuganshi Amarsingh Bais	17

44.	Yukta Dhruwakumar Hajare	13

Signature of the Teacher **Head**
Department of Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur.

Session 2020-2021

Master of Science (M.Sc.) Semester-I (Computer Science)

Digital Electronics and Microprocessor (Paper-III)

Unit Test - II

Time :1 Hour] **[Maximum Marks:20**

Choose the correct option and answer the following:

A. The logic circuits whose outputs at any instant of time depends only on the present input but also on the past outputs are called _____2
   a. Combinational circuits
   b. Sequential circuits
   c. Latches
   d. Flip-flops

B. In S-R flip-flop, if Q = 0 the output is said to be _____ 2
   a. Set
   b. Reset
   c. Previous state
   d. Current state

C. Match the following sequential Circuits with associated functions 2

1. Counter	A. Storage of Program & data in a digital computer
2. Register	B. Generation of timing variables to sequence the digital system operations
3. Memory	C. Design of Sequential Circuits

Codes:

a. 1-A , 2-B , 3-C
b. 1-C , 2-B , 3-A
c. 1-C , 2-A , 3-B
d. 1-B , 2-C , 3-A

D. In a J-K flip-flop, if J=K the resulting flip-flop is referred to as _____2
   a. D flip-flop
   b. S-R flip-flop
   c. T flip-flop
   d. S-K flip-flop

E. The only difference between a combinational circuit and a flip-flop is that _2
   a. The flip-flop requires previous state
   b. The flip-flop requires next state
   c. The flip-flop requires a clock pulse
   d. The flip-flop depends on the past as well as present states

F. How many type of addressing in memory: 2
   a. Logical address
   b. Physical address
   c. Both A and B
   d. None of these

G. Which segment register is being used in the given instruction? 2
   MOV CX , [IP]

   a. Extra Segment Register (ES)
   b. Code Segment Register (CS)
   c. Stack Segment Register (SS)
   d. None of the Above

H. The BIU prefetches the instruction from memory and store them in 2
   a. queue
   b. register
   c. memory
   d. stack

I. Which of the following instruction is not valid? 2
   a. MOV AX, BX
   b. MOV DS, 5000H
   c. MOV AX, 5000H
   d. PUSH AX

J. A 16-bit displacement that references a memory location using any of the addressing modes is_____ 2
   a. pointer
   b. character
   c. BCD
   d. offset

Signature of the Teacher

Head
Department of Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur

Department of Computer Science

M. Sc. Semester – I (Computer Science) Session 2020-21

Unit Test - I

Name of Teacher: A.M.Taori **Date: 24/08/2020**

Subject:Advanced DBMS and Administration (Paper-IV) **Maximum Marks: 20**

Sr.No.	Name of Students	Obtained Marks
1.	Aishwarya Prashant Pusadkar	16
2.	Aniket Goutam Kamble	17
3.	Anjali Milind Pakhidde	18
4.	Ankita Anil Banasure	15
5.	Ashlesha Dadarao Kadaskar	Absent
6.	Ashwini Mularidhar Rahngadale	16
7.	Divyani Pravin Salve	11
8.	Jayshree Madhukar Rudrakar	18
9.	Jyoti Chandrabhan Patil	15
10.	Kajal Dnyaneshwar Bhoyar	11
11.	Kajal Shivshankar Bante	Absent
12.	Krishna Rajesh Latta	14
13.	Mansi Sanjay Hingle	20
14.	Monika Pralhad Hadge	16
15.	Nikita DeoraoWatekar	11
16.	Nitesh Ramesh Wasnik	18
17.	Pawan Ravindra Gulghane	13
18.	Payal Parmeshwar Hatwar	14
19.	Payal Vikram Thawkar	16
20.	Prachi Manoj Barsagade	15
21.	Prachi Vinod Wasnik	15
22.	Prajakta Tanaj iLakhmapure	16
23.	Pranali Raju Ikhar	Absent
24.	Pranay Vijay Shahare	17

25.	Priya Janardan Bhure	12
26.	Priyanka Dhananjay Pandit	16
27.	Priyanka Latesh Malkan	17
28.	Purva Ujwal Tijare	16
29.	Reena Narendra Shende	11
30.	Ruchika Vijay Motghare	18
31.	Samiksha VinodZade	15
32.	Sayali Ravindra Wankhede	16
33.	Shivani Ambirrao Bagal	09
34.	Shivani Anilrao Shende	Absent
35.	Shrutika Ganesh Sathwane	11
36.	Shubhangi Subhash Langewar	13
37.	Shweta Suresh Kapse	14
38.	Swati Arun Pandit	16
39.	Switi Ranjeet Koche	Absent
40.	Tejashree Manoj Wekhande	11
41.	Tejaswini Shantaram Rewatkar	16
42.	Tejaswini Vijayrao Hirudkar	16
43.	Urvashi Megandas Sonboir	11
44.	Vaishali Kishor Paliwal	18
45.	Yuganshi Amarsingh Bais	15
46.	Yukta Dhruwakumar Hajare	16

Signature of the Teacher

Head
Department of the Computer Science

SEAL

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's
Science College, Congress Nagar, Nagpur
Session 2020-2021
Master of science (M. Sc.) Semester-I (Computer Science)
Advanced DBMS and Administration (Paper-IV)
Unit Test - I

Time: 1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

1. Which of the following normal forms eliminates repeating groups of data? 2
   A) First Normal Form (1NF)
   B) Second Normal Form (2NF)
   C) Third Normal Form (3NF)
   D) Fourth Normal Form (4NF)

2.Which normal form ensures that there are no partial dependencies on non-prime attributes? 2
   A) First Normal Form (1NF)
   B) Second Normal Form (2NF)
   C) Third Normal Form (3NF)
   D) Boyce-Codd Normal Form (BCNF)

3.Lossless join property ensures: 2
   A) No data loss during query execution
   B) Every attribute is functionally dependent on the primary key.
   C) Decomposition of relations preserves original data
   D) There are no duplicate tuples in a relation

4.Query Interpretation involves: 2
   A) Estimating query processing cost
   B) Parsing and validating the query syntax
   C) Executing the query against the database
   D) Selecting the most efficient query execution plan

5.Which method for joining tables iterates through one table while looking up matching records in the other table? 2
   A) Nested Loop Join
   B) Merge Join
   C) Hybrid Join
   D) Multiple Join

6. Which of the following is the correct definition of a transaction? 2
   A) A unit of work that must be completed in a single execution without interruption
   B) A logical unit of work that consists of a sequence of database operations
   C) A database record containing information about a specific event.
   D) A group of related tables in a database schema

7. What does the acronym ACID stand for in the context of database transactions? 2
   A) Atomicity, Complexity, Integrity, Durability
   B) Atomicity, Consistency, Isolation, Durability
   C) Atomicity, Concurrency, Isolation, Dependency
   D) Accuracy, Consistency, Integrity, Durability

8. Serializability in database transactions refers to: 2
   A) Ensuring that transactions are executed in parallel
   B) Ensuring that transactions are executed in a predetermined order
   C) Ensuring that the outcome of concurrent transactions is equivalent to some serial execution
   D) Ensuring that transactions are executed in isolation

9. Which of the following is NOT a state of a transaction? 2
   A) Active
   B) Partially Committed
   C) Inconsistent
   D) Aborted

10. The desirable properties of transaction schedules include all of the following EXCEPT: 2
   A) Atomicity
   B) Consistency
   C) Isolation
   D) Fragmentation

Signature of the Teacher

Head
Department of the Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College.
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur

Department of Computer Science

M. Sc. Semester – I (Computer Science) Session 2020-21

Unit Test – II

Name of Teacher: A.M.Taori **Date: 15/10/2020**

Subject:Advanced DBMS and Administration (Paper-IV) **Maximum Marks: 20**

Sr.No.	Name of Students	Obtained Marks
1.	Aishwarya Prashant Pusadkar	18
2.	Aniket Goutam Kamble	16
3.	Anjali Milind Pakhidde	11
4.	Ankita Anil Banasure	18
5.	Ashlesha Dadarao Kadaskar	15
6.	Ashwini Mularidhar Rahngadale	18
7.	Divyani Pravin Salve	10
8.	Jayshree Madhukar Rudrakar	16
9.	Jyoti Chandrabhan Patil	11
10.	Kajal Dnyaneshwar Bhoyar	18
11.	Kajal Shivshankar Bante	15
12.	Krishna Rajesh Latta	16
13.	Mansi Sanjay Hingle	18
14.	Monika Pralhad Hadge	16
15.	Nikita DeoraoWatekar	11
16.	Nitesh Ramesh Wasnik	18
17.	Pawan Ravindra Gulghane	15
18.	Payal Parmeshwar Hatwar	16
19.	Payal Vikram Thawkar	17
20.	Prachi Manoj Barsagade	13

21.	Prachi Vinod Wasnik	13
22.	Prajakta Tanaj iLakhmapure	17
23.	Pranali Raju Ikhar	13
24.	Pranay Vijay Shahare	13
25.	Priya Janardan Bhure	14
26.	Priyanka Dhananjay Pandit	18
27.	Priyanka Latesh Malkan	16
28.	Purva Ujwal Tijare	11
29.	Reena Narendra Shende	16
30.	Ruchika Vijay Motghare	11
31.	SamikshaVinodZade	16
32.	Sayali Ravindra Wankhede	17
33.	Shivani Ambirrao Bagal	16
34.	Shivani Anilrao Shende	11
35.	Shrutika Ganesh Sathwane	18
36.	Shubhangi Subhash Langewar	15
37.	Shweta Suresh Kapse	16
38.	Swati Arun Pandit	11
39.	Switi Ranjeet Koche	18
40.	Tejashree Manoj Wekhande	15
41.	Tejaswini Shantaram Rewatkar	16
42.	Tejaswini Vijayrao Hirudkar	11
43.	Urvashi Megandas Sonboir	18
44.	Vaishali Kishor Paliwal	17
45.	Yuganshi Amarsingh Bais	17
46.	Yukta Dhruwakumar Hajare	13

Signature of the Teacher

Head
Department of the Computer Science

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur

Session 2020-2021

Master of science (M. Sc.) Semester-I (Computer Science)

Advanced DBMS and Administration (Paper-IV)

Unit Test - II

Time: 1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

1. Which component of the Oracle database architecture is responsible for managing memory structures and background processes? 2
   A) Shared Pool
   B) System Global Area (SGA)
   C) Program Global Area (PGA)
   D) Redo Log Buffer
2. What is the primary function of the Data Dictionary in Oracle databases? 2
   A) It stores metadata about database objects and user accounts.
   B) It maintains a record of all transactions in the database.
   C) It contains the actual data stored in tables.
   D) It manages the memory allocation for SQL queries.
3. Redo log files in Oracle are used for: 2
   A) Storing a record of committed transactions for recovery purposes
   B) Storing temporary data during query processing
   C) Maintaining a log of user login attempts
   D) Holding intermediate results of database operations
4. Which statement best describes a tablespace in Oracle? 2
   A) It is a logical storage container for database objects such as tables and indexes.
   B) It is a physical storage unit on the disk where data files are stored.
   C) It is a temporary area used for sorting and joining operations.
   D) It is a special area reserved for storing system-related data
5. The primary purpose of a rollback segment in Oracle is to: 2
   A) Store temporary data during database operations
   B) Record changes made to the database for backup purposes.
   C) Provide a read-consistent view of data for transactions
   D) Manage the allocation and deallocation of memory.
6. In Oracle, which statement best describes an index? 2
   A) It is a physical file that contains table data.
   B) It is a data structure that improves the speed of data retrieval operations.
   C) It is a constraint used to enforce data integrity rules.
   D) It is a privilege granted to users to access specific database objects.
7. Oracle Data Pump is used for: 2
   A) Importing and exporting data between Oracle databases
   B) Managing storage allocation within data files
   C) Monitoring database performance in real-time
   D) Recovering corrupted data files
8. Which Oracle utility is used to perform a physical backup of the database? 2
   A) RMAN (Recovery Manager)
   B) SQL*Loader
   C) Data Pump
   D) Export
9. What is the purpose of Oracle Flashback Technology? 2

A) To recover from media failures using incremental backups
B) To restore the database to a previous point in time.
C) To provide a high-speed data transfer mechanism.
D) To view and rewind database changes at a transactional level.

10. In Oracle, which statement best describes a standby database? 2
A) It is a read-only copy of the primary database used for reporting purposes.
B) It is a backup copy of the database stored on a separate server for disaster recovery.
C) It is a temporary storage area used during query processing.
D) It is a special database used for managing user authentication.

Signature of the Teacher

Head
Department of the Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's
Science College, Congress Nagar, Nagpur
Department of Computer Science
M.Sc. Semester-III (Computer Science) Session 2020-2021
Unit Test - I

Name of Teacher: A.J.Thakur **Date:20/08/2020**
Subject: Data Communication & Network (Paper I) **Maximum Marks: 20**

Sr. No.	Name of Students	Marks Obtained
1.	Aishwarya Manohar Kadu	17
2.	Aishwarya N.Jadhav	Absent
3.	Akash Vijay Rajurkar	18
4.	Alpa Babu Shinde	17
5.	Ambika Dhanraj Nagpure	12
6.	Archana C.Waghmare	16
7.	Ayshu Ashutosh Pandey	17
8.	Bhavana Suresh Kamble	Absent
9.	Damini Banduji Shende	18
10.	Darshana Sanjay Maske	17
11.	Kalyani P. Dhumankhede	Absent
12.	Karuna Ashok Kapgate	17
13.	Kasturi Shyam Nisal	13
14.	Manisha Mahendra Mari	17
15.	Naina Babban Yadav	12

16.	Nikita Nitendra Wakodkar	13
17.	Payal Kishor Shete	12
18.	Piyu Vinayak Nagpure	18
19.	Pooja Chopdeo Nandanwar	17
20.	Pratiksha Rajendra Fulkar	17
21.	Priya Laxmanrao Latare	13
22.	Priya Narayan Fule	17
23.	Renu Asharfi Sah	16
24.	Rutuja Diwakar Takit	13
25.	Roshani Khiran Mandlekar	17
26.	Roshani P. Gajbhiye	12
27.	Ruchira Rajesh Bhanarkar	13
28.	Sandhya Suroshe	12
29.	Shivani Yashwant Naitam	18
30.	Shweta A. Jaiswal	17
31.	Suraj Sevak Gawande	17
32.	Swathi Rathnam Premar	Absent
33.	Urvashi D. Banothe	14

Signature of the Teacher

Head
Department of Computer Science

SEAL

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College.
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's
Science College, Congress Nagar, Nagpur
Session 2020-2021
Master of Science (M.Sc.) Semester-III (Computer Science)
Data Communication & Network (Paper - I)
Unit Test - I

Time: 1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

1.What is the purpose of remote procedure call (RPC) in the session layer? 2

a) Error detection and correction
b) Encryption of data
c) Managing sessions between applications
d) Remote execution of procedures/functions

2.Which layer is responsible for data compression techniques and cryptography? 2
a) Transport Layer
b) Presentation Layer
c) Application Layer
d) Session Layer

3. Which encryption algorithm is commonly used in the Presentation Layer? 2
a) RSA
b) AES
c) DES
d) MD5

4.Which layer provides network services directly to end-users or applications? 2
a) Network Layer
b) Data Link Layer
c) Transport Layer
d) Application Layer

5.What is the primary function of the Application Layer? 2
a) Ensuring reliable data transfer
b) Routing packets between networks
c) Providing network services to end-users
d) Managing physical connections between devices

6.Which protocol is commonly used for file transfer at the Application Layer? 2
a) HTTP
b) FTP
c) SMTP
d) DNS

7. Which layer is responsible for managing access to network resources and virtual terminals? 2
a) Network Layer
b) Transport Layer
c) Presentation Layer
d) Application Layer

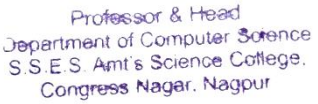
8.What is the purpose of the OSI reference model? 2
a) To define the physical components of a network
b) To standardize network protocols and services
c) To manage network congestion
d) To encrypt data for secure communication

9.Which layer of the OSI model deals with routing packets from the source to the destination across multiple networks? 2
a) Network Layer
b) Data Link Layer
c) Transport Layer
d) Presentation Layer

10.Which layer of the OSI model ensures reliable data transfer between end systems? 2
a) Network Layer
b) Transport Layer
c) Data Link Layer
d) Application Layer

Signature of the Teacher

Head
Department of Computer Science



Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur

Department of Computer Science

M.Sc. Semester-III (Computer Science) Session 2020-2021

Unit Test - II

Name of Teacher: A.J.Thakur **Date: 09/10/2020**

Subject: Data Communication & Network (Paper I) **Maximum Marks: 20**

Sr. No.	Name of Students	Obtained Marks
1.	Aishwarya Manohar Kadu	13
2.	Aishwarya N.Jadhav	16
3.	Akash Vijay Rajurkar	18
4.	Alpa Babu Shinde	17
5.	Ambika Dhanraj Nagpure	Absent
6.	Archana C.Waghmare	18
7.	Ayshu Ashutosh Pandey	17
8.	Bhavana Suresh Kamble	12
9.	Damini Banduji Shende	16
10.	Darshana Sanjay Maske	17
11.	Kalyani P. Dhumankhede	Absent
12.	Karuna Ashok Kapgate	18
13.	Kasturi Shyam Nisal	17
14.	Manisha Mahendra Mari	Absent
15.	Naina Babban Yadav	16
16.	Nikita Nitendra Wakodkar	Absent
17.	Payal Kishor Shete	Absent
18.	Piyu Vinayak Nagpure	13

19.	Pooja Chopdeo Nandanwar	17
20.	Pratiksha Rajendra Fulkar	14
21.	Priya Laxmanrao Latare	13
22.	Priya Narayan Fule	16
23.	Renu Asharfi Sah	18
24.	Rutuja Diwakar Takit	17
25.	Roshani Khiran Mandlekar	13
26.	Roshani P. Gajbhiye	16
27.	Ruchira Rajesh Bhanarkar	18
28.	Sandhya Suroshe	17
29.	Shivani Yashwant Naitam	Absent
30.	Shweta A. Jaiswal	18
31.	Suraj Sevak Gawande	17
32.	Swathi Rathnam Premar	12
33.	Urvashi D. Banothe	16

Signature of the Teacher

Head
Department of Computer Science

SEAL

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur

Session 2020-2021

Master of Science (M.Sc.) Semester-III (Computer Science)

Data Communication & Network (Paper - I)

Unit Test - II

Time: 1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

1.What is the primary purpose of intrusion detection systems? 2

a) Encrypting network traffic
b) Preventing unauthorized access

c) Monitoring and identifying suspicious activities
d) Filtering network packets

2. Which authentication method relies on a user's unique physiological characteristics? 2
a) Password-based authentication
b) Address-based authentication
c) Biometric authentication
d) Certificate-based authentication

3. What is the function of firewalls in network security? 2
a) Encrypting data packets
b) Filtering network traffic based on predefined rules
c) Authenticating users
d) Providing secure key distribution

4.Which design principle of firewalls involves examining each packet and accepting or rejecting it based on a set of rules? 2
a) Packet filtering
b) Access control
c) Intrusion detection
d) Encryption

5.What is the purpose of access control in network security? 2
a) Monitoring network traffic
b) Preventing unauthorized access to network resources
c) Encrypting sensitive data
d) Generating message digests

6.Which type of system is designed to prevent unauthorized access and ensure the integrity of data? 2
a) Intrusion detection system
b) Trusted system
c) Authentication system
d) Firewall system

7.What is the primary function of monitoring and management in network security? 2
a) Encrypting network traffic
b) Identifying security vulnerabilities and threats
c) Authenticating users
d) Filtering network packets

8.Which cryptographic system is based on the difficulty of factoring large prime numbers? 2
a) RSA
b) DES
c) IDEA
d) CRC

9.Which key management technique involves securely exchanging encryption keys over an insecure channel? 2
a) Diffie-Hellman key exchange
b) Password-based key derivation
c) Public key infrastructure
d) Symmetric key encryption

10.Which security measure ensures that a user's password is never transmitted over the network in plaintext? 2
a) Public key encryption
b) Digital signatures
c) Hashing
d) Salting

Signature of the Teacher

Head
Department of Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur

Department of Computer Science

M. Sc. Semester – III (Computer Science) Session 2020-21

Unit Test - I

Name of Teacher: Mr. M. T. Wanjari **Date: 06/08/2020**

Subject: Software Engineering (Paper-II) **Maximum Marks: 20**

Sr. No.	Name of Students	Obtained Marks
1.	Aishwarya Manohar Kadu	14
2.	Aishwarya N.Jadhav	12
3.	Akash Vijay Rajurkar	10
4.	Alpa Babu Shinde	12
5.	Ambika Dhanraj Nagpure	14
6.	Archana C.Waghmare	16
7.	Ayshu Ashutosh Pandey	18
8.	Bhavana Suresh Kamble	12
9.	Damini Banduji Shende	10
10.	Darshana Sanjay Maske	18
11.	Kalyani P. Dhumankhede	12
12.	Karuna Ashok Kapgate	14
13.	Kasturi Shyam Nisal	16
14.	Manisha Mahendra Mari	16
15.	Naina Babban Yadav	08
16.	Nikita NitendraWakodkar	10

17.	Payal Kishor Shete	12
18.	Piyu Vinayak Nagpure	10
19.	Pooja Chopdeo Nandanwar	14
20.	Pratiksha Rajendra Fulkar	10
21.	Priya Laxmanrao Latare	14
22.	Priya Narayan Fule	16
23.	Renu Asharfi Sah	16
24.	Rutuja Diwakar Takit	12
25.	Roshani Khiran Mandlekar	14
26.	Roshani P. Gajbhiye	10
27.	Ruchira Rajesh Bhanarkar	12
28.	Sandhya Suroshe	16
29.	Shivani Yashwant Naitam	10
30.	Shweta A. Jaiswal	12
31.	Suraj Sevak Gawande	08
32.	Swathi Rathnam Premar	10
33.	Urvashi D. Banothe	12

Signature of the Teacher

Head
Department of Computer Science

SEAL

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur

Session 2020-21

Master of Science (M. Sc.) Semester – III (Computer Science)

Software Engineering (Paper-II)

Unit Test – I

Time: 1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

1. Software is data structures that enable the programs to adequately manipulate information.2

A. True B. False

2. Which are the software applications? 2

A. Real-time software B. Business Software

C. Web based software D. All of the above

3. _____ software makes use of non-numerical algorithms to solve complex problems that are not amenable to computation or straightforward analysis. 2

A. Artificial intelligence B. Personal computer

C. Embedded D. Engineering and scientific

4. Software engineering is a _____ technology. 2

A. data B. layered

C. process D. none of these

5. Engineering is the _____ and management of technical (or social) entities. 2

A. analysis B. design

C. construction D. verification E. All of the above

6. What are the software application layers? 2

A. Tools B. Methods

C. A quality focus D. All of these

7. As software is used, the customer/user will recognize additional functions that will provide benefit. Perfective maintenance extends the software beyond its original functional requirements. 2

A. Correction B. Adaptation

C. Enhancement D. Prevention

8. . _____ combines elements of the linear sequential model (applied repetitively) with the iterative philosophy of prototyping. 2

A. The Incremental Model B. The Spiral Model

C. The WINWIN Spiral Model D. The Concurrent Development Model

9. The information flow defined as part of the business modeling phase is refined into a set of data objects that are needed to support the business. 2

A. Business modeling B. Data modeling

C. Application generation D. Testing and turnover

10. The design must be translated into a machine-readable form. 2

A. Software requirements analysis: B. Code generation

C. Testing D. Design

Signature of the Teacher

Head
Department of Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur

Department of Computer Science

M. Sc. Semester – III (Computer Science) Session 2020-21

Unit Test - II

Name of Teacher: Mr. M. T. Wanjari **Date: 10/09/2020**

Subject: Software Engineering (Paper-II) **Maximum Marks: 20**

Sr. No.	Name of Students	Obtained Marks
1.	Aishwarya Manohar Kadu	12
2.	Aishwarya N.Jadhav	14
3.	Akash Vijay Rajurkar	12
4.	Alpa Babu Shinde	14
5.	Ambika Dhanraj Nagpure	12
6.	Archana C.Waghmare	16
7.	Ayshu Ashutosh Pandey	18
8.	Bhavana Suresh Kamble	14
9.	Damini Banduji Shende	12
10.	Darshana Sanjay Maske	18
11.	Kalyani P. Dhumankhede	14
12.	Karuna Ashok Kapgate	16
13.	Kasturi Shyam Nisal	18
14.	Manisha Mahendra Mari	14
15.	Naina Babban Yadav	10
16.	Nikita NitendraWakodkar	12
17.	Payal Kishor Shete	14

18.	Piyu Vinayak Nagpure	12
19.	Pooja Chopdeo Nandanwar	14
20.	Pratiksha Rajendra Fulkar	12
21.	Priya Laxmanrao Latare	16
22.	Priya Narayan Fule	14
23.	Renu Asharfi Sah	14
24.	Rutuja Diwakar Takit	12
25.	Roshani Khiran Mandlekar	10
26.	Roshani P. Gajbhiye	12
27.	Ruchira Rajesh Bhanarkar	14
28.	Sandhya Suroshe	16
29.	Shivani Yashwant Naitam	10
30.	Shweta A. Jaiswal	12
31.	Suraj Sevak Gawande	10
32.	Swathi Rathnam Premar	12
33.	Urvashi D. Banothe	14

Signature of the Teacher

Head
Department of Computer Science

SEAL

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur

Session 2020-21

Master of Science (M. Sc.) Semester – III (Computer Science)

Software Engineering (Paper-II)

Unit Test – II

Time: 1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

1. _____ consists of a set of auditing and reporting functions that assess the

effectiveness and completeness of quality control activities. 2

A. Quality B. Quality Control

C. Quality Assurance D. Cost of Quality

2. The risk components are defined in the following manner: 2

A. Performance risk B. Cost risk

C. Support risk D. All of the above

3. _____ is a systematic attempt to specify threats to the project plan. 2

A. Software Risks B. Reactive vs. Proactive Risk

C. Risk Identification D. Assessing Overall Project Risk

4. A quality metric that provides benefits at both the project and process level is deject removal efficiency (DRE). 2

A. True B. False

5. Software maintenance accounts for more effort than any other software engineering activity.2

A. Correctness B. Integrity

C. Maintainability D. Usability

6. _____ are derived by normalizing quality and/or productivity measures by considering the size of the software that has been produced. 2

A. Function-Oriented software Metrics B. Size-Oriented software Metrics

C. Object-Oriented software Metrics D. Use-Case Oriented software Metrics

7. What are the software measurement metrics? 2

A. Size-Oriented Metrics B. Function-Oriented Metrics

C. Object-Oriented Metrics D. All of the above

8. Function-oriented software metrics use a measure of the functionality delivered by the application as a _____ value. 2

A. normalization B. null

C. one D. none of these

9. Software measurement can be categorized into 2

A. direct measures B. indirect measures

C. Both A & B D. none of these

10. Project metrics enable a software project manager to

1. assess the status of an ongoing project,

2. track potential risks,

3. uncover problem areas before they go "critical,"

4. adjust work flow or tasks 2

A. 1 & 2 B. 2 & 3

C. 1, 2, 3 & 4 D. 3 & 4

Signature of the Teacher

Head
Department of Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur.

Department of Computer Science

M. Sc. Semester-III (Computer Science) Session 2020-21

Unit Test - I

Name of the teacher: Mrs. Swati S Khandalkar **Date: 04/11/2020**

Subject: Neural Network (Paper-III) **Maximum Marks :20**

Sr. No.	Name of Students	Obtained Marks
1.	Aishwarya Manoharv Kadu	15
2.	Aishwarya N.Jadhav	10
3.	Akash Vijay Rajurkar	16
4.	Alpa Babu Shinde	8
5.	Ambika Dhanraj Nagpure	17
6.	Archana C.Waghmare	17
7.	Ayshu Ashutosh Pandey	20
8.	Bhavana Suresh Kamble	10
9.	Damini Banduji Shende	20
10.	Darshana Sanjay Maske	14
11.	Kalyani P. Dhumankhede	19
12.	Karuna Ashok Kapgate	17
13.	Kasturi Shyam Nisal	Absent
14.	Manisha Mahendra Mari	16
15.	NainaBabbanYadav	15
16.	Nikita Nitendra Wakodkar	13
17.	Payal Kishor Shete	8

18.	Piyu Vinayak Nagpure	10
19.	Pooja Chopdeo Nandanwar	8
20.	Pratiksha Rajendra Fulkar	Absent
21.	Priya Laxmanrao Latare	12
22.	Priya Narayan Fule	15
23.	Renu Asharfi Sah	9
24.	Rutuja Diwakar Takit	15
25.	Roshani Khiran Mandlekar	11
26.	Roshani P. Gajbhiye	11
27.	Ruchira Rajesh Bhanarkar	10
28.	Sandhya Suroshe	11
29.	Shivani Yashwant Naitam	Absent
30.	Shweta A. Jaiswal	16
31.	Suraj Sevak Gawande	15
32.	Swathi Rathnam Premar	20
33.	Urvashi D. Banothe	14

Signature of the Teacher

Head
Department of Computer Science

SEAL

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur.

Session 2020-2021

Master of Science (M.Sc.) Semester-III (Computer Science)

Neural Network -III

Unit Test- I

Time :1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

A. The network that involves backward links from output to the input and hidden layers is called _____ 2
   a. Self organizing map
   b. Perceptrons
   c. Recurrent neural network
   d. Multi layered perceptron

B. What are the requirements of learning laws ? 2
   a. convergence of weights
   b. learning time should be as small as possible
   c. learning should use only local weights
   d. all of the mentioned

C. How is pattern information distributed ? 2
   a. It is distributed all across the weights
   b. It is distributed in localised weights
   c. It is distributed in certain proactive weights only
   d. None of the mentioned

D. Negative sign of weight indicates? 2
   a. Excitatory input
   b. Inhibitory input
   c. Excitatory output
   d. Inhibitory output

E. When two classes can be separated by a separate line, they are known as? 2
   a. Linearly separable
   b. Linearly inseparable classes
   c. May be separable or inseparable, it depends on system
   d. None of the mentioned

F. If the change in weight vector is represented by Δwij, what does it mean? 2
   a. describes the change in weight vector for ith processing unit, taking input vector jth into account
   b. describes the change in weight vector for jth processing unit, taking input vector ith into account
   c. describes the change in weight vector for jth & ith processing unit.
   d. none of the mentioned

G. What are the requirements of learning laws? 2
   a. convergence of weights
   b. learning time should be as small as possible
   c. learning should use only local weights
   d. all of the mentioned

H. Why is the XOR problem exceptionally interesting to neural network researchers?2
   a. Because it can be expressed in a way that allows you to use a neural network
   b. Because it is complex binary operation that cannot be solved using neural networks
   c. Because it can be solved by a single layer perceptron
   d. Because it is the simplest linearly inseparable problem that exists.

I. Activation models are _____. 2
   a. Dynamic
   b. Static
   c. Deterministic
   d. none of the mentioned

J. The process of adjusting the weight is known as? 2
   a. Activation
   b. Synchronization
   c. Learning

d. none of the mentioned

Signature of the Teacher **Head**
Department of Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College.
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur.

Department of Computer Science

M. Sc. Semester-III (Computer Science) Session 2020-21

Unit Test - I

Name of the teacher: Mrs. Swati S Khandalkar **Date: 24/12/2020**

Subject: Neural Network (Paper-III) **Maximum Marks :20**

Sr. No.	Name of Students	Obtained Marks
1.	Aishwarya Manoharv Kadu	12
2.	Aishwarya N.Jadhav	12
3.	Akash Vijay Rajurkar	11
4.	Alpa Babu Shinde	Absent
5.	Ambika Dhanraj Nagpure	14
6.	Archana C.Waghmare	14
7.	Ayshu Ashutosh Pandey	15
8.	Bhavana Suresh Kamble	19
9.	Damini Banduji Shende	15
10.	Darshana Sanjay Maske	10
11.	Kalyani P. Dhumankhede	19
12.	Karuna Ashok Kapgate	20
13.	Kasturi Shyam Nisal	15
14.	Manisha Mahendra Mari	13
15.	NainaBabbanYadav	Absent
16.	Nikita Nitendra Wakodkar	14
17.	Payal Kishor Shete	9

18.	Piyu Vinayak Nagpure	18
19.	Pooja Chopdeo Nandanwar	12
20.	Pratiksha Rajendra Fulkar	9
21.	Priya Laxmanrao Latare	18
22.	Priya Narayan Fule	7
23.	Renu Asharfi Sah	18
24.	Rutuja Diwakar Takit	12
25.	Roshani Khiran Mandlekar	10
26.	Roshani P. Gajbhiye	15
27.	Ruchira Rajesh Bhanarkar	14
28.	Sandhya Suroshe	12
29.	Shivani Yashwant Naitam	8
30.	Shweta A. Jaiswal	Absent
31.	Suraj Sevak Gawande	15
32.	Swathi Rathnam Premar	19
33.	Urvashi D. Banothe	18

Signature of the Teacher

Head
Department of Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur.

Session 2020-2021

Master of Science (M.Sc.) Semester-III (Computer Science)

Neural Network -III

Unit Test - II

Time :1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

A. Consider a single perceptron with sign activation function.The perceptron is represented by weight vector $[0.4 \ -0.3 \ 0.1]^t$ and a bias $\Theta=0$.If the input vector to the perceptron is X=[0.2 0.6 0.5] then the output of the perceptron is: 2

a. 1
b. 0
c. -0.05
d. -1

B. In Neural network the network capacity is defined as 2
   a. The traffic carry capacity of the network
   b. The total number of nodes in the network
   c. The number of patterns that can be stored and recalled in a network
   d. None of the above

C. Which of the following is true for neural networks? 2
   (i).The training time depends on the size of the network
   (ii). Neural networks can be simulated on a conventional computer
   (iii). Artificial neurons are identical in operation to biological ones
   a. All of the mentioned
   b. (ii) is true(i) and (ii) are true
   c. None of the mentioned

D. Why are linearly separable problems of interest of neural network researchers? 2
   a. Because they are the only class of problem that can solve successfully
   b. Because they are the only class of problem that Perceptron can solve successfully
   c. Because they are the only mathematical functions that are continue
   d. Because they are the only mathematical functions you can draw

E. Neural Networks are complex _____with many parameters. 2
   a. Linear Functions
   b. Nonlinear Functions
   c. Discrete Functions
   d. Exponential Functions

F. Which of the following is an application of NN(Neural Network)? 2
   a. Sales forecasting
   b. Data validation
   c. Risk management
   d. All of the mentioned

G. Different learning method does not include: 2
   a. Memorization
   b. Analogy
   c. Deduction
   d. Introduction

H. Automated vehicle is an example of_____ 2
   a. Supervised learning
   b. Unsupervised learning
   c. Active learning
   d. Reinforcement learning

I. How many types of learning are available in machine learning? 2
   a. 1
   b. 2
   c. 3
   d. 4

J. Which of the following is the consequence between a node and its predecessors while creating bayesian network? 2
   a. Conditionally independent
   b. Functionally dependent
   c. Both Conditionally dependant & Dependant
   d. Dependent

Signature of the Teacher

Head
Department of Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's
Science College, Congress Nagar, Nagpur
Department of Computer Science
M. Sc. Semester – III (Computer Science) Session 2020-21
Unit Test – I

Name of Teacher: S.B.Raipure **Date: 26/08/2020**

Subject: Mobile Computing (Paper-IV) **Maximum Marks: 20**

Sr. No.	Name of Students	Obtained Marks
1.	Aishwarya Manohar Kadu	19
2.	Aishwarya N.Jadhav	20
3.	Akash Vijay Rajurkar	17
4.	Alpa Babu Shinde	18
5.	Ambika Dhanraj Nagpure	19
6.	Archana C.Waghmare	Absent
7.	Ayshu Ashutosh Pandey	20
8.	Bhavana Suresh Kamble	18
9.	Damini Banduji Shende	16
10.	Darshana Sanjay Maske	18
11.	Kalyani P. Dhumankhede	19
12.	Karuna Ashok Kapgate	18
13.	Kasturi Shyam Nisal	19
14.	Manisha Mahendra Mari	20
15.	Naina Babban Yadav	17
16.	Nikita Nitendra Wakodkar	18
17.	Payal Kishor Shete	19
18.	Piyu Vinayak Nagpure	Absent
19.	Pooja Chopdeo Nandanwar	20

20.	Pratiksha Rajendra Fulkar	18
21.	Priya Laxmanrao Latare	16
22.	Priya Narayan Fule	18
23.	Renu Asharfi Sah	19
24.	Rutuja Diwakar Takit	18
25.	Roshani Khiran Mandlekar	Absent
26.	Roshani P. Gajbhiye	20
27.	Ruchira Rajesh Bhanarkar	17
28.	Sandhya Suroshe	18
29.	Shivani Yashwant Naitam	19
30.	Shweta A. Jaiswal	17
31.	Suraj Sevak Gawande	Absent
32.	Swathi Rathnam Premar	17
33.	Urvashi D. Banothe	18

Signature of the Teacher

Head
Department of the Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's
Science College, Congress Nagar, Nagpur
Session 2020-2021
Master of science (M.Sc.) Semester-III (Computer Science)
Mobile Computing (Paper-IV)
UNIT TEST- I

Time: 1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

1.Which term refers to the ability of a device to maintain connectivity while moving from one location to another? 2

a) Mobile Communication
b) Mobility Management
c) Data Dissemination
d) Handover Management

2.What is the primary concern addressed by security measures in mobile devices and systems? 2

a) Physical durability

b) Battery life optimization
c) Protection against data breaches
d) Network speed enhancement

3.Which technology is commonly used for localization in GSM and similar architectures? 2
a) GPS
b) Bluetooth
c) NFC
d) RFID

4.What is the primary function of the Medium Access Control (MAC) layer in wireless communication? 2
a) Routing data packets
b) Providing security protocols
c) Managing access to the wireless medium
d) Encoding data for transmission

5.Which coding method is typically used in CDMA-based communication systems? 2
a) Frequency Division Multiplexing (FDM)
b) Time Division Multiplexing (TDM)
c) Code Division Multiple Access (CDMA)
d) Orthogonal Frequency Division Multiplexing (OFDM)

6.What type of device is commonly associated with mobile computing? 2
a) Desktop computer
b) Laptop computer
c) Tablet computer
d) Mainframe computer

7.Which architecture is responsible for managing the movement of mobile devices between different base stations? 2
a) Mobility Management
b) Mobile Computing Architecture
c) Wireless Medium Access Control
d) Handover Management

8.Which service is NOT typically provided by GSM systems? 2
a) Voice calling
b) SMS messaging
c) Video streaming
d) Data transfer

9.Which technology is commonly used for wireless communication in automotive systems? 2
a) Bluetooth
b) Wi-Fi
c) Zigbee
d) Cellular networks

10.Which protocol is used for tunneling and encapsulation in Mobile IP networks? 2
a) TCP
b) UDP
c) ICMP
d) GRE

Signature of the Teacher

Head
Department of the Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College.
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's
Science College, Congress Nagar, Nagpur
Department of Computer Science
M. Sc. Semester – III (Computer Science) Session 2020-21
Unit Test – II

Name of Teacher: S.B.Raipure **Date:12/10/2020**

Subject: Mobile Computing (Paper-IV) **Maximum Marks: 20**

Sr. No.	Name of Students	Obtained Marks
1.	Aishwarya Manohar Kadu	20
2.	Aishwarya N.Jadhav	18
3.	Akash Vijay Rajurkar	16
4.	Alpa Babu Shinde	Absent
5.	Ambika Dhanraj Nagpure	19
6.	Archana C.Waghmare	18
7.	Ayshu Ashutosh Pandey	19
8.	Bhavana Suresh Kamble	20
9.	Damini Banduji Shende	17
10.	Darshana Sanjay Maske	18
11.	Kalyani P. Dhumankhede	19
12.	Karuna Ashok Kapgate	Absent
13.	Kasturi Shyam Nisal	20
14.	Manisha Mahendra Mari	18
15.	Naina Babban Yadav	16
16.	Nikita Nitendra Wakodkar	18
17.	Payal Kishor Shete	19
18.	Piyu Vinayak Nagpure	18
19.	Pooja Chopdeo Nandanwar	19
20.	Pratiksha Rajendra Fulkar	20
21.	Priya Laxmanrao Latare	17
22.	Priya Narayan Fule	18

23.	Renu Asharfi Sah	Absent
24.	Rutuja Diwakar Takit	17
25.	Roshani Khiran Mandlekar	17
26.	Roshani P. Gajbhiye	18
27.	Ruchira Rajesh Bhanarkar	19
28.	Sandhya Suroshe	Absent
29.	Shivani Yashwant Naitam	17
30.	Shweta A. Jaiswal	17
31.	Suraj Sevak Gawande	18
32.	Swathi Rathnam Premar	19
33.	Urvashi D. Banothe	Absent

Signature of the Teacher

Head
Department of the Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College.
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur

Session 2020-2021

Master of science (M.Sc.) Semester-III (Computer Science)

Mobile Computing (Paper-IV)

UNIT TEST- II

Time: 1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

1.What technique is used to improve database performance by storing frequently accessed data closer to the client? 2

a) Database Hoarding
b) Data Caching
c) Transactional Models
d) Query Processing

2.Which computing model involves the separation of responsibilities between a client and a server? 2

a) Peer-to-peer computing
b) Client-Server computing
c) Cloud computing
d) Distributed computing

3.Which model ensures that a series of database operations are completed successfully as a single unit? 2

a) ACID model
b) BASE model
c) CAP theorem
d) Two-phase commit

4.What is the primary function of query processing in database management? 2
a) Data encryption
b) Data recovery
c) Data retrieval
d) Data synchronization

5.What process involves restoring a database to a consistent state after a failure or error? 2
a) Data Caching
b) Data Recovery
c) Data Dissemination
d) Quality of Service

6.What markup language is used for creating multimedia presentations in mobile environments?2
a) HTML
b) XML
c) SMIL
d) Java

7.Which mobile operating system is commonly used in handheld devices? 2
a) Windows CE
b) Linux
c) Symbian OS
d) All of the above

8.What is the primary function of WAP (Wireless Application Protocol) in mobile internet connectivity? 2
a) Network security
b) Web browsing
c) Email communication
d) Voice calling

9.Which programming language is commonly used for developing applications on Java-enabled mobile devices? 2
a) XML
b) Java
c) C++
d) Python

10.Which operating system is known for its use in smartphones and tablets? 2
a) PalmOS
b) Windows CE
c) Symbian OS
d) Android

Signature of the Teacher

Head
Department of the Computer Science

SEAL

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur

Department of Computer Science

M. Sc. Semester – II (Computer Science) Session 2020-21

Unit Test - I

Name of Teacher: S.B.Raipure **Date: 10/02/2021**

Subject: Windows Programming using VC++ (Paper-I) **Maximum Marks: 20**

Sr. No.	Name of Students	Obtained Marks
1.	Aishwarya Prashant Pusadkar	16
2.	Aniket Goutam Kamble	17
3.	Anjali Milind Pakhidde	18
4.	Ankita Anil Banasure	15
5.	Ashlesha Dadarao Kadaskar	17
6.	Ashwini Mularidhar Rahngadale	16
7.	Divyani Pravin Salve	18
8.	Jayshree Madhukar Rudrakar	18
9.	Jyoti Chandrabhan Patil	15
10.	Kajal Dnyaneshwar Bhoyar	18
11.	Kajal Shivshanka rBante	17
12.	Krishna Rajesh Latta	14
13.	Mansi Sanjay Hingle	20
14.	Monika Pralhad Hadge	16
15.	Nikita DeoraoWatekar	19
16.	Nitesh Ramesh Wasnik	18
17.	Pawan Ravindra Gulghane	16
18.	Payal Parmeshwar Hatwar	17
19.	Payal Vikram Thawkar	16
20.	Prachi Manoj Barsagade	15
21.	Prachi Vinod Wasnik	15
22.	Prajakta Tanaj iLakhmapure	16
23.	Pranali Raju Ikhar	17
24.	Pranay Vijay Shahare	17
25.	Priya Janardan Bhure	17

26.	Priyanka Dhananjay Pandit	16
27.	Priyanka Latesh Malkan	17
28.	Purva Ujwal Tijare	16
29.	Reena Narendra Shende	16
30.	Ruchika Vijay Motghare	18
31.	SamikshaVinodZade	15
32.	Sayali Ravindra Wankhede	16
33.	Shivani Ambirrao Bagal	17
34.	Shivani Anilrao Shende	14
35.	Shrutika Ganesh Sathwane	19
36.	Shubhangi Subhash Langewar	13
37.	Shweta Suresh Kapse	14
38.	Swati Arun Pandit	16
39.	Switi Ranjeet Koche	17
40.	Tejashree Manoj Wekhande	15
41.	Tejaswini Shantaram Rewatkar	16
42.	Tejaswini Vijayrao Hirudkar	16
43.	Urvashi Megandas Sonboir	16
44.	Vaishali Kishor Paliwal	18
45.	Yuganshi Amarsingh Bais	15
46.	Yukta Dhruwakumar Hajare	16

Signature of the Teacher

Head
Department of the Computer Science

SEAL

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur

Academic Session 2020-2021

Master of science (M. Sc.) Semester-II (Computer Science)

Windows Programming using VC++ (Paper-I)

UNIT TEST- I

Time: 1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

1.Which of the following frameworks is primarily used for developing Windows desktop applications? 2

a) MFC
b) ATL
c) WFC
d) All of the above

2.What does MFC stand for in the context of Windows programming? 2

a) Microsoft Form Controls
b) Microsoft Foundation Classes
c) Modern Framework Components
d) Main File Compiler

3.Which library provides support for event handling in MFC applications? 2

a) MFC Library
b) ATL Library
c) WFC Library
d) GDI Library

4.In MFC, what is used to specify how graphics are displayed and printed? 2

a) Mapping Modes
b) Scrolling Views
c) Graphic Device Interface
d) Bitmaps

5.Which component is responsible for managing colors and fonts in Windows programming? 2

a) Graphics Device Interface (GDI)
b) Event Handling Component
c) Memory Management Component
d) Message Processing Component

6.Which type of application architecture allows multiple documents to be opened within a single parent window? 2

a) SDI (Single Document Interface)
b) MDI (Multiple Document Interface)
c) DLL (Dynamic Link Library)
d) MFC (Microsoft Foundation Classes)

7.Which component is responsible for handling keyboard shortcuts in Windows applications? 2

a) Menus
b) Keyboard Accelerators
c) Rich Edit Controls
d) Property Sheets

8.What is the purpose of a splitter window in Windows programming? 2

a) To split the screen into multiple sections
b) To handle printing and print preview
c) To manage memory resources
d) To separate documents from views

9.Which feature is commonly used to provide context-sensitive help in Windows applications? 2

a) Toolbars

b) Status Bars
c) Menus
d) Context-Sensitive Help

10.Which type of Windows application does not require Document or View classes? 2

a) SDI Applications
b) MDI Applications
c) DLL Applications
d) MFC Applications

Signature of the Teacher **Head**

Department of the Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur

Department of Computer Science

M. Sc. Semester – II (Computer Science) Session 2020-21

Unit Test - II

Name of Teacher: S.B.Raipure **Date: 12/04/2021**

Subject: Windows Programming using VC++ (Paper-I) **Maximum Marks: 20**

Sr. No.	Name of Students	Obtained Marks
1.	Aishwarya Prashant Pusadkar	16
2.	Aniket Goutam Kamble	17
3.	Anjali Milind Pakhidde	18
4.	Ankita Anil Banasure	15
5.	Ashlesha Dadarao Kadaskar	11
6.	Ashwini Mularidhar Rahngadale	16
7.	Divyani Pravin Salve	11
8.	Jayshree Madhukar Rudrakar	18
9.	Jyoti Chandrabhan Patil	15
10.	Kajal Dnyaneshwar Bhoyar	19
11.	Kajal Shivshanka rBante	13
12.	Krishna Rajesh Latta	14
13.	Mansi Sanjay Hingle	20
14.	Monika Pralhad Hadge	16

15.	Nikita DeoraoWatekar	16
16.	Nitesh Ramesh Wasnik	18
17.	Pawan Ravindra Gulghane	18
18.	Payal Parmeshwar Hatwar	17
19.	Payal Vikram Thawkar	16
20.	Prachi Manoj Barsagade	15
21.	Prachi Vinod Wasnik	15
22.	Prajakta Tanaj iLakhmapure	16
23.	Pranali Raju Ikhar	14
24.	Pranay Vijay Shahare	17
25.	Priya Janardan Bhure	14
26.	Priyanka Dhananjay Pandit	16
27.	Priyanka Latesh Malkan	17
28.	Purva Ujwal Tijare	16
29.	Reena Narendra Shende	17
30.	Ruchika Vijay Motghare	18
31.	SamikshaVinodZade	15
32.	Sayali Ravindra Wankhede	16
33.	Shivani Ambirrao Bagal	17
34.	Shivani Anilrao Shende	16
35.	Shrutika Ganesh Sathwane	18
36.	Shubhangi Subhash Langewar	18
37.	Shweta Suresh Kapse	14
38.	Swati Arun Pandit	16
39.	Switi Ranjeet Koche	17
40.	Tejashree Manoj Wekhande	17
41.	Tejaswini Shantaram Rewatkar	16
42.	Tejaswini Vijayrao Hirudkar	16
43.	Urvashi Megandas Sonboir	18
44.	Vaishali Kishor Paliwal	17
45.	Yuganshi Amarsingh Bais	14

46.	Yukta Dhruwakumar Hajare	16

Signature of the Teacher

Head
Department of the Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's
Science College, Congress Nagar, Nagpur
Academic Session 2020-2021
Master of science (M. Sc.) Semester-II(Computer Science)
Windows Programming using VC++ (Paper-I)
UNIT TEST- II

Time: 1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

1.What does COM stand for in the context of ActiveX and OLE? 2
- a) Component Object Model
- b) Common Object Model
- c) Communication Object Model
- d) Component Oriented Model

2. Which technology is primarily used for communication between software components in the Windows operating system? 2
- a) Automation
- b) OLE
- c) COM
- d) ActiveX

3. Which of the following is used for transferring data between different applications in Windows? 2
- a) OLE
- b) Clipboard Transfer
- c) Automation
- d) Structured Storage

4.What is the purpose of Drag and Drop functionality in Windows applications? 2
- a) To automate tasks
- b) To facilitate data transfer between applications
- c) To enhance user interaction
- d) To manage database connections

5. Which technology allows embedding one document within another in OLE? 2
- a) Automation
- b) OLE Embedded Components
- c) Structured Storage
- d) Clipboard Transfer

6.What is the purpose of Dynamic HTML (DHTML) in web development? 2
- a) To create dynamic web pages
- b) To manage databases
- c) To handle drag and drop operations
- d) To automate tasks in web servers

7.Which technology is used for developing applications for Windows CE? 2

a) Winsock
b) ActiveX
c) ATL (Active Template Library)
d) OLE DB Templates

8.Which component provides a standard interface for data exchange between applications in Windows? 2

a) Automation
b) Clipboard Transfer
c) OLE
d) Structured Storage

9.What is the primary advantage of using OLE DB over ODBC for database access? 2

a) OLE DB provides better performance.
b) OLE DB is easier to implement.
c) OLE DB supports a wider range of data sources.
d) OLE DB is more secure.

10.Which technology is used for creating reusable software components in Windows programming? 2

a) Automation
b) OLE
c) COM
d) Structured Storage

Signature of the Teacher

Head
Department of the Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur

Department of Computer Science

M. Sc. Semester – II (Computer Science) Session 2020-21

Unit Test - I

Name of Teacher: Mr. M. T. Wanjari **Date: 22/04/2021**

Subject: Theory of Computation and Compiler Construction (Paper-II)Maximum Marks: 20

Sr. No.	Name of Students	Obtained Marks
1.	Aishwarya Prashant Pusadkar	10
2.	Aniket Goutam Kamble	12
3.	Anjali Milind Pakhidde	14
4.	Ankita Anil Banasure	14
5.	Ashwini Mularidhar Rahngadale	16

6.	Divyani Pravin Salve	10
7.	Jayshree Madhukar Rudrakar	12
8.	Jyoti Chandrabhan Patil	16
9.	Kajal Dnyaneshwar Bhoyar	16
10.	Kajal Shivshanka Bante	12
11.	Krishna Rajesh Latta	14
12.	Mansi Sanjay Hingle	20
13.	Monika Pralhad Hadge	16
14.	Nikita DeoraoWatekar	18
15.	Nitesh Ramesh Wasnik	12
16.	Pawan Ravindra Gulghane	10
17.	Payal Parmeshwar Hatwar	14
18.	Payal Vikram Thawkar	12
19.	Prachi Manoj Barsagade	14
20.	Prachi Vinod Wasnik	10
21.	Prajakta Tanaji Lakhmapure	14
22.	Pranali Raju Ikhar	12
23.	Pranay Vijay Shahare	16
24.	Priya Janardan Bhure	14
25.	Priyanka Dhananjay Pandit	18
26.	Priyanka Latesh Malkan	20
27.	Purva Ujwal Tijare	16
28.	Reena Narendra Shende	12
29.	Ruchika Vijay Motghare	14
30.	Samiksha Vinod Zade	12
31.	Sayali Ravindra Wankhede	10
32.	Shivani Ambirrao Bagal	16
33.	Shivani Anilrao Shende	14

34.	Shrutika Ganesh Sathwane	10
35.	Shubhangi Subhash Langewar	14
36.	Shweta Suresh Kapse	12
37.	Swati Arun Pandit	10
38.	Switi Ranjeet Koche	12
39.	Tejashree Manoj Wekhande	14
40.	Tejaswini Shantaram Rewatkar	18
41.	Tejaswini Vijayrao Hirudkar	20
42.	Urvashi Megandas Sonboir	16
43.	Vaishali Kishor Paliwal	18
44.	Yuganshi Amarsingh Bais	12
45.	Yukta Dhruwakumar Hajare	18

Signature of the Teacher

Head
Department of Computer Science

SEAL

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's
Science College, Congress Nagar, Nagpur
Session 2020-21
Master of Science (M. Sc.) Semester – II (Computer Science)
Theory of Computation and Compiler Construction (Paper-II)
Unit Test – I

Time: 1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

1. Which model is used to represent Finite State Systems in the study of finite automation?
a) Deterministic Finite Automata (DFA) b) Non-deterministic Finite Automata (NFA)
c) Push-Down Automata (PDA) d) Turing Machine (TM) 2

2. Which property describes the ability of a regular set to be recognized by a finite automaton?
a) The Pumping Lemma b) Closure Properties
c) Decision Algorithms d) Finite State Property 2

3. What is the purpose of Chomsky Normal Form (CNF) in the context of context-free grammars?
a) To simplify the derivation tree b) To eliminate left recursion

c) To handle inherently ambiguous languagesd) To convert into a regular expression 2

4. What type of automaton is typically associated with context-free languages?

a) Deterministic Finite Automaton (DFA) b) Non-deterministic Finite Automaton (NFA)

c) Push-Down Automaton (PDA) d) Two-way Finite Automaton 2

5. What is the primary function of a Turing Machine in computational theory?

a) Recognize regular languages b) Recognize context-free languages

c) Recognize recursively enumerable languages d) Recognize context-sensitive languages 2

6. Which property describes the ability of context-free languages to be closed under certain operations?

a) Closure Properties b) Pumping Lemma

c) Decision Algorithms d) Turing Machines 2

7. What is the primary function of structured storage in computational theory?

a) To represent hierarchical data structures b) To store regular expressions

c) To optimize Turing Machine construction d) To handle context-free languages 2

8. Which property characterizes the ability of certain languages to be recognized by a Turing Machine?

a) Computable Languages b) Pumping Lemma

c) Church's Hypothesis d) Decision Algorithms 2

9. What is the primary characteristic of inherently ambiguous context-free languages?

a) They cannot be recognized by a Turing Machine

b) They have multiple valid parse trees for a single string

c) They are always regular languages

d) They have a finite number of states in their automaton 2

10. Which property is associated with the decision algorithms for context-free languages?

a) They always terminate b) They are polynomial-time algorithms

c) They are based on Turing Machines d) They are undecidable 2

Signature of the Teacher

Head
Department of Computer Science

SEAL

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's
Science College, Congress Nagar, Nagpur
Department of Computer Science
M. Sc. Semester – II (Computer Science) Session 2020-21
Unit Test - II

Name of Teacher: Mr. M. T. Wanjari **Date: 11/05/2021**

Subject: Theory of Computation and Compiler Construction (Paper-II)Maximum Marks: 20

Sr. No.	Name of Students	Obtained Marks
1.	Aishwarya Prashant Pusadkar	12
2.	Aniket Goutam Kamble	14
3.	Anjali Milind Pakhidde	16
4.	Ankita Anil Banasure	16
5.	Ashwini Mularidhar Rahngadale	18
6.	Divyani Pravin Salve	12
7.	Jayshree Madhukar Rudrakar	14
8.	Jyoti Chandrabhan Patil	16
9.	Kajal Dnyaneshwar Bhoyar	18
10.	Kajal Shivshanka Bante	14
11.	Krishna Rajesh Latta	16
12.	Mansi Sanjay Hingle	20
13.	Monika Pralhad Hadge	18
14.	Nikita DeoraoWatekar	18
15.	Nitesh Ramesh Wasnik	14
16.	Pawan Ravindra Gulghane	12
17.	Payal Parmeshwar Hatwar	16
18.	Payal Vikram Thawkar	14
19.	Prachi Manoj Barsagade	16
20.	Prachi Vinod Wasnik	12
21.	Prajakta Tanaji Lakhmapure	16
22.	Pranali Raju Ikhar	14
23.	Pranay Vijay Shahare	16
24.	Priya Janardan Bhure	16
25.	Priyanka Dhananjay Pandit	16
26.	Priyanka Latesh Malkan	18
27.	Purva Ujwal Tijare	14

28.	Reena Narendra Shende	14
29.	Ruchika Vijay Motghare	14
30.	Samiksha Vinod Zade	14
31.	Sayali Ravindra Wankhede	12
32.	Shivani Ambirrao Bagal	16
33.	Shivani Anilrao Shende	16
34.	Shrutika Ganesh Sathwane	12
35.	Shubhangi Subhash Langewar	16
36.	Shweta Suresh Kapse	14
37.	Swati Arun Pandit	12
38.	Switi Ranjeet Koche	14
39.	Tejashree Manoj Wekhande	16
40.	Tejaswini Shantaram Rewatkar	18
41.	Tejaswini Vijayrao Hirudkar	20
42.	Urvashi Megandas Sonboir	16
43.	Vaishali Kishor Paliwal	18
44.	Yuganshi Amarsingh Bais	14
45.	Yukta Dhruwakumar Hajare	18

Signature of the Teacher

Head
Department of Computer Science

SEAL

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur

Session 2020-21

Master of Science (M. Sc.) Semester – II (Computer Science)

Theory of Computation and Compiler Construction (Paper-II)

Unit Test – II

Time: 1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

1. Which of the following is a stage of compiler design? 2

   A. Semantic analysis B. Intermediate code generator

   C. Code generator D. All of the mentioned

2. Which of the following error can a compiler check? 2

   A. Syntax Error B. Logical Error

   C. Both Logical and Syntax Error D. Compiler cannot check errors

3. Which of the following phase of the compiler is Syntax Analysis? 2

   A. Second B. Third

   C. First D. All of the mentioned

4. Which of the following concept of FSA is used in the compiler? 2

   A. Code optimization B. Code generation

   C. Lexical analysis D. Parser

5. What is CFG? 2

   A. Regular Expression B. Compiler

   C. Language expression D. All of the mentioned

6. Which of the following is correct regarding an optimizer Compiler? 2

   A. Optimize the code B. Is optimized to occupy less space

   C. Both of the mentioned D. None of the mentioned

7. Which of the following error can Compiler diagnose? 2

   A. Logical errors only B. Grammatical and logical errors

   C. Grammatical errors only D. All of the mentioned

8. In which of the following phase of the compiler is Lexical Analyser? 2

   A. Second B. Third

   C. First D. All of the mentioned

9. Which of the following does an address code involve? 2

   A. No unary operators B. Exactly 3 address

   C. At most Three address D. None of the mentioned

10. Characters are grouped into tokens in which of the following phase of the compiler design?2

    A. Code generator B. Lexical analyzer

    C. Parser D. Code optimization

Signature of the Teacher

Head
Department of Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's
Science College, Congress Nagar, Nagpur
Department of Computer Science
M.Sc. Semester-II (Computer Science) Session 2020-2021
Unit Test - I

Name of Teacher: S.P.Jagre **Date: 17/03/2021**
Subject: Computer Architecture & Organization (Paper III) **Maximum Marks: 20**

Sr. No.	Name of Students	Marks Obtained
1.	Aishwarya Prashant Pusadkar	14
2.	Aniket Goutam Kamble	13
3.	Anjali Milind Pakhidde	16
4.	Ankita Anil Banasure	18
5.	Ashlesha Dadarao Kadaskar	17
6.	Ashwini Mularidhar Rahngadale	Absent
7.	Divyani Pravin Salve	16
8.	Jayshree Madhukar Rudrakar	Absent
9.	Jyoti Chandrabhan Patil	Absent
10.	Kajal Dnyaneshwar Bhoyar	13
11.	Kajal Shivshanka rBante	17
12.	Krishna Rajesh Latta	Absent
13.	Mansi Sanjay Hingle	14
14.	Monika Pralhad Hadge	13
15.	Nikita DeoraoWatekar	16
16.	Nitesh Ramesh Wasnik	13
17.	Pawan Ravindra Gulghane	18
18.	Payal Parmeshwar Hatwar	13

19.	Payal Vikram Thawkar	16
20.	Prachi Manoj Barsagade	13
21.	Prachi Vinod Wasnik	18
22.	Prajakta Tanaj iLakhmapure	13
23.	Pranali Raju Ikhar	16
24.	Pranay Vijay Shahare	13
25.	Priya Janardan Bhure	17
26.	Priyanka Dhananjay Pandit	14
27.	Priyanka Latesh Malkan	16
28.	Purva Ujwal Tijare	Absent
29.	Reena Narendra Shende	12
30.	Ruchika Vijay Motghare	Absent
31.	SamikshaVinodZade	14
32.	Sayali Ravindra Wankhede	13
33.	Shivani Ambirrao Bagal	16
34.	Shivani Anilrao Shende	12
35.	Shrutika Ganesh Sathwane	16
36.	Shubhangi Subhash Langewar	13
37.	Shweta Suresh Kapse	17
38.	Swati Arun Pandit	12
39.	Switi Ranjeet Koche	13
40.	Tejashree Manoj Wekhande	12
41.	Tejaswini Shantaram Rewatkar	18
42.	Tejaswini Vijayrao Hirudkar	17
43.	Urvashi Megandas Sonboir	14
44.	Vaishali Kishor Paliwal	16
45.	Yuganshi Amarsingh Bais	Absent
46.	Yukta Dhruwakumar Hajare	12

Head

Signature of the Teacher **Department of Computer Science**

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College.
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur

Session 2020-2021

Master of science (M. Sc.) Semester-II (Computer Science)

Computer Architecture & Organization (Paper III)

Unit Test - I

Time: 1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

1.What is the primary function of the control path in CPU design? 2

A) Performing arithmetic and logical operations
B) Managing data flow between registers
C) Controlling the operation of various CPU components
D) Executing machine language instructions

2.Which addressing mode involves specifying the operand directly in the instruction itself? 2

A) Immediate addressing
B) Direct addressing
C) Indirect addressing
D) Indexed addressing

3.What distinguishes Complex Instruction Set Computing (CISC) architectures from Reduced Instruction Set Computing (RISC) architectures? 2

A) CISC architectures have fewer instructions than RISC architectures.
B) RISC architectures prioritize simpler instructions and fewer addressing modes.
C) CISC architectures have a simpler control unit design than RISC architectures.
D) RISC architectures are typically used in mobile devices, while CISC architectures are used in desktop computers.

4.Which of the following is a characteristic of hardwired control in CPU design? 2

A) It allows for easy modification of control signals.
B) It utilizes microcode for instruction execution.
C) It provides greater flexibility compared to microprogramming.
D) It is implemented using logic gates and finite-state machines.

5.What is the primary goal of superscalar processors? 2

A) To execute instructions out of order
B) To support multiple cores on a single chip
C) To exploit parallelism by executing multiple instructions simultaneously
D) To reduce power consumption in CPU design

6.Which performance benchmark measures the performance of a CPU by simulating real-world application usage? 2

A) SPECmarks
B) MIPS (Million Instructions Per Second)
C) Dhrystone
D) Linpack

7.What architectural feature is commonly used to increase the effective bandwidth between the CPU and memory? 2

A) Cache memory
B) Pipelining

C) Memory interleaving
D) Virtual memory

8.In the context of computer architecture, what is the purpose of pipelining? 2
A) To reduce the number of CPU registers required
B) To increase the clock speed of the CPU
C) To overlap the execution of multiple instructions
D) To minimize the latency of memory accesses

9.Which type of processor architecture typically employs a Reduced Instruction Set Computing (RISC) approach? 2
A) Mainframe computers
B) Personal computers (PCs)
C) Mobile devices
D) Supercomputers

10.What is a characteristic feature of superscalar processors? 2
A) They execute only one instruction at a time.
B) They rely solely on hardwired control.
C) They exploit instruction-level parallelism.
D) They have a small cache memory size.

Signature of the Teacher

Head
Department of Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College.
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's
Science College, Congress Nagar, Nagpur
Department of Computer Science
M.Sc. Semester-II (Computer Science) Session 2020-2021
Unit Test - II

Name of Teacher: S.P.Jagre **Date: 22/04/2021**
Subject: Computer Architecture & Organization (Paper III) **Maximum Marks: 20**

Sr. No.	Name of Students	Obtained Marks
1.	Aishwarya Prashant Pusadkar	18
2.	Aniket Goutam Kamble	13
3.	Anjali Milind Pakhidde	16
4.	Ankita Anil Banasure	13
5.	Ashlesha Dadarao Kadaskar	17
6.	Ashwini Mularidhar Rahngadale	14
7.	Divyani Pravin Salve	16

8.	Jayshree Madhukar Rudrakar	Absent
9.	Jyoti Chandrabhan Patil	12
10.	Kajal Dnyaneshwar Bhoyar	Absent
11.	Kajal Shivshanka rBante	14
12.	Krishna Rajesh Latta	13
13.	Mansi Sanjay Hingle	16
14.	Monika Pralhad Hadge	14
15.	Nikita DeoraoWatekar	13
16.	Nitesh Ramesh Wasnik	16
17.	Pawan Ravindra Gulghane	18
18.	Payal Parmeshwar Hatwar	17
19.	Payal Vikram Thawkar	Absent
20.	Prachi Manoj Barsagade	16
21.	Prachi Vinod Wasnik	Absent
22.	Prajakta Tanaj iLakhmapure	Absent
23.	Pranali Raju Ikhar	13
24.	Pranay Vijay Shahare	17
25.	Priya Janardan Bhure	14
26.	Priyanka Dhananjay Pandit	13
27.	Priyanka Latesh Malkan	16
28.	Purva Ujwal Tijare	18
29.	Reena Narendra Shende	17
30.	Ruchika Vijay Motghare	Absent
31.	SamikshaVinodZade	16
32.	Sayali Ravindra Wankhede	Absent
33.	Shivani Ambirrao Bagal	Absent
34.	Shivani Anilrao Shende	13
35.	Shrutika Ganesh Sathwane	17
36.	Shubhangi Subhash Langewar	Absent

37.	Shweta Suresh Kapse	16
38.	Swati Arun Pandit	Absent
39.	Switi Ranjeet Koche	Absent
40.	Tejashree Manoj Wekhande	13
41.	Tejaswini Shantaram Rewatkar	17
42.	Tejaswini Vijayrao Hirudkar	Absent
43.	Urvashi Megandas Sonboir	14
44.	Vaishali Kishor Paliwal	13
45.	Yuganshi Amarsingh Bais	16
46.	Yukta Dhruwakumar Hajare	13

Signature of the Teacher

Head
Department of Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College.
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's
Science College, Congress Nagar, Nagpur
Session 2020-2021
Master of science (M. Sc.) Semester-II (Computer Science)
Computer Architecture & Organization (Paper III)
Unit Test - II

Time: 1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

1.Which of the following is a volatile storage technology? 2

A) NAND Flash
B) Magnetic tape
C) SSD (Solid State Drive)
D) Optical disc

2.What is the primary purpose of memory hierarchy in computer systems? 2

A) To reduce the cost of memory storage
B) To provide faster access to data
C) To decrease power consumption
D) To increase the size of main memory

3.In memory array organization, what does memory interleaving help to improve? 2

A) Memory reliability
B) Memory capacity
C) Memory bandwidth
D) Memory security

4.Which of the following is an example of a synchronous data transfer technique? 2
A) DMA (Direct Memory Access)
B) Interrupt-driven I/O
C) Memory-mapped I/O
D) Polling

5.What is the purpose of an I/O interrupt handler? 2
A) To improve CPU performance
B) To manage I/O device operations
C) To optimize memory access
D) To enhance cache coherence

6.What is the significance of Amdahl's Law in performance evaluation? 2
A) It predicts the maximum speedup achievable with parallel processing.
B) It measures the impact of memory hierarchy on system performance.
C) It quantifies the effect of serial execution on overall system performance.
D) It evaluates the performance of network protocols.

7.Which of the following is a characteristic of a real-time operating system (RTOS)? 2
A) High throughput
B) Low latency
C) Large memory footprint
D) Extensive graphical user interface (GUI)

8.I/O interrupts are primarily used to: 2
A) Improve cache performance
B) Enable communication between devices
C) Control memory access
D) Execute instructions faster

9.Transaction Processing Benchmarks are used to evaluate the performance of: 2
A) Graphics processing units (GPUs)
B) Database management systems (DBMS)
C) Operating systems (OS)
D) Network protocols

10.Which of the following architectural aids is commonly used to improve memory performance? 2
A) Cache Memory
B) ALU
C) Control Unit
D) Registers

Signature of the Teacher

Head
Department of Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College.
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur.

Department of Computer Science

M. Sc. Semester-II (Computer Science) Session 2020-21

Unit Test - I

Name of the teacher: Mrs. Swati S Khandalkar **Date: 15/06/2021**

Subject: Computer Graphics (Paper-IV) **Maximum Marks :20**

Sr. No.	Name of Students	Obtained Marks
1.	Aishwarya Prashant Pusadkar	10
2.	Aniket Goutam Kamble	14
3.	Anjali Milind Pakhidde	11
4.	Ankita Anil Banasure	12
5.	Ashlesha Dadarao Kadaskar	16
6.	Ashwini Mularidhar Rahngadale	Absent
7.	Divyani Pravin Salve	17
8.	Jayshree Madhukar Rudrakar	14
9.	Jyoti Chandrabhan Patil	12
10.	Kajal Dnyaneshwar Bhoyar	15
11.	Kajal Shivshanka rBante	15
12.	Krishna Rajesh Latta	20
13.	Mansi Sanjay Hingle	11
14.	Monika Pralhad Hadge	18
15.	Nikita DeoraoWatekar	11
16.	Nitesh Ramesh Wasnik	18
17.	Pawan Ravindra Gulghane	13
18.	Payal Parmeshwar Hatwar	Absent
19.	Payal Vikram Thawkar	19

20.	Prachi Manoj Barsagade	13
21.	Prachi Vinod Wasnik	8
22.	Prajakta Tanaj iLakhmapure	19
23.	Pranali Raju Ikhar	20
24.	Pranay Vijay Shahare	16
25.	Priya Janardan Bhure	18
26.	Priyanka Dhananjay Pandit	10
27.	Priyanka Latesh Malkan	Absent
28.	Purva Ujwal Tijare	13
29.	Reena Narendra Shende	16
30.	Ruchika Vijay Motghare	14
31.	SamikshaVinodZade	17
32.	Sayali Ravindra Wankhede	11
33.	Shivani Ambirrao Bagal	20
34.	Shivani Anilrao Shende	11
35.	Shrutika Ganesh Sathwane	14
36.	Shubhangi Subhash Langewar	11
37.	Shweta Suresh Kapse	14
38.	Swati Arun Pandit	17
39.	Switi Ranjeet Koche	13
40.	Tejashree Manoj Wekhande	14
41.	Tejaswini Shantaram Rewatkar	15
42.	Tejaswini Vijayrao Hirudkar	Absent
43.	Urvashi Megandas Sonboir	18
44.	Vaishali Kishor Paliwal	16
45.	Yuganshi Amarsingh Bais	11
46.	Yukta Dhruwakumar Hajare	15

Signature of the Teacher

Head
Department of Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur.

Session 2020-2021

Master of Science (M.Sc.) Semester-II (Computer Science)

Computer Graphics -IV

Unit Test -I

Time :1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

A. In Bressenham's line algorithm, there are certain conditions for deciding the successive parameters. Of the distances d1 < d2 then decision parameter Pk is which of the following? 2
   a. Positive
   b. Equal
   c. Negative
   d. Can be any of the above

B. Which of the following line-generating algorithms is the most effective and efficient?2
   a. Midpoint algorithm
   b. Bresenham's Line algorithm
   c. DDA algorithm
   d. None of the mentioned above

C. The method which used either delta x or delta y, whichever is larger, is chosen as one raster unit to draw the line this algorithm is called? 2
   a. DDA Line Algorithm
   b. Midpoint Line Algorithm
   c. Bresenham`s Line Algorithm
   d.Generalized Bresenham`s Algorithm

D. "The Digital Differential Analyzer (DDA) algorithm is an incremental method of scan conversion of line."Based upon the above statement, determine whether the following condition is true or false.
   "The DDA algorithm uses the results of previous step for determining the value of the next step." 2
   a. True
   b. False

E. What are the fundamental characteristics of a straight line? 2
   a. Width
   b. Color
   c. Type
   d. All of the mentioned above

F. A beam of electrons emitted by an electron gun is also called as _____.2
   a. electric rays

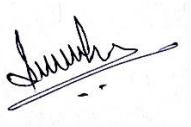
b. magnetic rays.
c. cathode rays.
d. infra-red rays.

G. In beam penetration method, _____and_____ layers of phosphor are usually used. 2
a. red and green.
b. blue and green.
c. yellow and green
d. orange and green.

H. Picture definition is stored in _____ buffer area in memory. 2
a. frame.
b. outer.
c. refresh.
d. restore.

I. The_____ shadow-mask method, is commonly used in color CRT systems. 2
a. delta-delta.
b. beta-beta.
c. delta-beta.
d. alpha-alpha.

J. In flat panel display the emissive displays are devices that converts electric energy into_____. 2
a. obscurity
b. stimulating energy.
c. light energy.
d. non emitting energy.



Signature of the Teacher **Head**
Department of Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's
Science College, Congress Nagar, Nagpur.
Department of Computer Science
M. Sc. Semester-II (Computer Science) Session 2020-21
Unit Test - II

Name of the teacher: Mrs. Swati S Khandalkar **Date: 15/07/2021**
Subject: Computer Graphics (Paper-IV) **Maximum Marks :20**

Sr. No.	Name of Students	Obtained Marks
1.	Aishwarya Prashant Pusadkar	13
2.	Aniket Goutam Kamble	17
3.	Anjali Milind Pakhidde	10
4.	Ankita Anil Banasure	11
5.	Ashlesha Dadarao Kadaskar	11
6.	Ashwini Mularidhar Rahngadale	15
7.	Divyani Pravin Salve	17
8.	Jayshree Madhukar Rudrakar	20
9.	Jyoti Chandrabhan Patil	20
10.	Kajal Dnyaneshwar Bhoyar	Absent
11.	Kajal Shivshanka rBante	8
12.	Krishna Rajesh Latta	14
13.	Mansi Sanjay Hingle	17
14.	Monika Pralhad Hadge	18
15.	Nikita DeoraoWatekar	20
16.	Nitesh Ramesh Wasnik	16
17.	Pawan Ravindra Gulghane	20
18.	Payal Parmeshwar Hatwar	9
19.	Payal Vikram Thawkar	Absent
20.	Prachi Manoj Barsagade	19
21.	Prachi Vinod Wasnik	18
22.	Prajakta Tanaj iLakhmapure	13
23.	Pranali Raju Ikhar	Absent
24.	Pranay Vijay Shahare	15
25.	Priya Janardan Bhure	9
26.	Priyanka Dhananjay Pandit	7
27.	Priyanka Latesh Malkan	9
28.	Purva Ujwal Tijare	10
29.	Reena Narendra Shende	17

30.	Ruchika Vijay Motghare	14
31.	SamikshaVinodZade	19
32.	Sayali Ravindra Wankhede	9
33.	Shivani Ambirrao Bagal	12
34.	Shivani Anilrao Shende	7
35.	Shrutika Ganesh Sathwane	7
36.	Shubhangi Subhash Langewar	11
37.	Shweta Suresh Kapse	18
38.	Swati Arun Pandit	13
39.	Switi Ranjeet Koche	16
40.	Tejashree Manoj Wekhande	20
41.	Tejaswini Shantaram Rewatkar	20
42.	Tejaswini Vijayrao Hirudkar	13
43.	Urvashi Megandas Sonboir	13
44.	Vaishali Kishor Paliwal	11
45.	Yuganshi Amarsingh Bais	12
46.	Yukta Dhruwakumar Hajare	18

Signature of the Teacher

Head
Department of Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur.

Session 2020-2021

Master of Science (M.Sc.) Semester-II (Computer Science)

Computer Graphics -IV

Unit Test -II

Time :1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

A. One of the oldest and most popular line clipping procedure is_____. 2
   a. Liang-Barsky Line Clipping.
   b. Nicholl-Lee-Nicholl Line Clipping.
   c. Cohen-Sutherland Line Clipping.
   d. Line Clipping musing Nonrectangular Clip window.

B. The two-dimensional viewing transformation is simply referred to as the window-to-viewport transformation or the_____. 2
   a. viewing pipeline.
   b. transformation.
   c. windowing transformation.
   d. world coordinate.

C. The depth-buffer method is also called as_____. 2
   a. A-buffer.
   b. C-buffer
   c. Z-buffer
   d. W-buffer.

D. _____ for a three dimensional graphics object is a set of surface. 2
   a. polygons that enclose the object interior.
   b. Surface rendering.
   c. Space partitioning representations.
   d. Surface identification. Boundary representations.

E. The scaling transformation alters the size of an_____. 2
   a. vector
   b. edge
   c. side
   d. object

F. An illumination model is also called as_____. 2
   a. lighting model.
   b. surface model.
   c. shading model.
   d. rendering model.

G. The representation of the amount of variation in object detail is represented with_____. 2
   a. fractal geometry.
   b. fractal dimension.
   c. fractal definition.
   d. fractal generation.

H. The three color parameters in HLS color model are _____. 2
   a. hue, lightness and saturation.
   b. height, lightness and saturation.
   c. hue, light and saturation.
   d. hue, lightness and scaling.

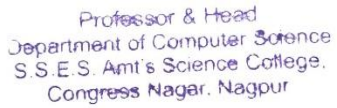
I. When objects are to be displayed with color or shaded surfaces we apply_____. 2
   a. object rendering.

b. surface rendering
c. view rendering.
d. parameter rendering.

J. The team _____ is used to refer collectively two properties describing color characteristics purity and dominant frequency. 2
a. white light source.
b. chromaticity
c. purity
d. saturation

Signature of the Teacher

Head
Department of Computer Science



Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur.

Department of Computer Science

M. Sc. Semester-IV (Computer Science) Session 2020-21

Unit Test - I

Name of the Teacher: Mrs. Swati S Khandalkar **Date: 17/03/2021**

Subject: Data Mining (Paper-I) **Maximum Marks :20**

Sr. No.	Name of Students	Obtained Marks
47.	Aishwarya Manoharv Kadu	15
48.	Aishwarya N.Jadhav	Absent
49.	Akash Vijay Rajurkar	17
50.	Alpa Babu Shinde	8
51.	Ambika Dhanraj Nagpure	15
52.	Archana C.Waghmare	10
53.	Ayshu Ashutosh Pandey	20
54.	Bhavana Suresh Kamble	11
55.	Damini Banduji Shende	16
56.	Darshana Sanjay Maske	Absent
57.	Kalyani P. Dhumankhede	18

58.	Karuna Ashok Kapgate	17
59.	Kasturi Shyam Nisal	7
60.	Manisha Mahendra Mari	7
61.	Naina BabbanYadav	8
62.	Nikita Nitendra Wakodkar	15
63.	Payal Kishor Shete	17
64.	Piyu Vinayak Nagpure	Absent
65.	Pooja Chopdeo Nandanwar	20
66.	Pratiksha Rajendra Fulkar	9
67.	Priya Laxmanrao Latare	16
68.	Priya Narayan Fule	8
69.	Renu Asharfi Sah	9
70.	Rutuja Diwakar Takit	18
71.	Roshani Khiran Mandlekar	10
72.	Roshani P. Gajbhiye	14
73.	Ruchira Rajesh Bhanarkar	15
74.	Sandhya Suroshe	17
75.	Shivani Yashwant Naitam	Absent
76.	Shweta A. Jaiswal	9
77.	Suraj Sevak Gawande	13
78.	Swathi Rathnam Premar	19
79.	Urvashi D. Banothe	9

Signature of the Teacher

Head
Department of Computer Science

SEAL

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur.

Session 2020-2021

Master of Science (M.Sc.) Semester-IV (Computer Science)

Data Mining (Paper-I)

Unit Test -I

Time :1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

A. Data Mining System Classification consists of? 2

a. Database Technology
b. Machine Learning
c. Information Science
d. All of the above

B. "Efficiency and scalability of data mining algorithms" issues comes under? 2

a. Mining Methodology and User Interaction Issues
b. Performance Issues
c. Diverse Data Types Issues
d. None of the above

C. Which of the following is correct application of data mining? 2

a. Market Analysis and Management
b. Corporate Analysis & Risk Management
c. Fraud Detection
d. All of the above

D. What is true about data mining? 2

a. Data Mining is defined as the procedure of extracting information from huge sets of data
b. Data mining also involves other processes such as Data Cleaning, Data Integration, Data Transformation
c. Data mining is the procedure of mining knowledge from data.
d. All of the above

E. _____ refers to the description and model regularities or trends for objects whose behavior changes over time. 2

a. Outlier Analysis
b. Evolution Analysis
c. Prediction
d. Classification

F. Which of the following statement is true about the classification? 2

a. It is a measure of accuracy
b. It is a subdivision of a set
c. It is the task of assigning a classification
d. None of the above

G. The analysis performed to uncover interesting statistical correlations between associated-attribute-value pairs is called? 2

a. Mining of Association
b. Mining of Clusters
c. Mining of Correlations
d. None of the above

H. The important characteristics of structured data are 2

a. Sparsity, Resolution, Distribution, Tuples
b. Sparsity, Centroid, Distribution , Dimensionality
c. Resolution, Distribution, Dimensionality ,Objects
d. Dimensionality, Sparsity, Resolution, Distribution

I. Classification rules are extracted from_____. 2

a. root node.
b. decision tree.
c. siblings.
d. branches.

In Data Characterization, class under study is called as? 2

a. Study Class
b. Intial Class
c. Target Class
d. Final Class

Signature of the Teacher **Head**
Department of Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur.

Department of Computer Science

M. Sc. Semester-IV (Computer Science) Session 2020-21

Unit Test - I

Name of the Teacher: Mrs. Swati S Khandalkar **Date: 07/05/2021**

Subject: Data Mining (Paper-I) **Maximum Marks :20**

Sr. No.	Name of Students	Obtained Marks
1.	Aishwarya Manoharv Kadu	12
2.	Aishwarya N.Jadhav	16
3.	Akash Vijay Rajurkar	17
4.	Alpa Babu Shinde	12
5.	Ambika Dhanraj Nagpure	19
6.	Archana C.Waghmare	13
7.	Ayshu Ashutosh Pandey	13
8.	Bhavana Suresh Kamble	13
9.	Damini Banduji Shende	10
10.	Darshana Sanjay Maske	17

11.	Kalyani P. Dhumankhede	Absent
12.	Karuna Ashok Kapgate	15
13.	Kasturi Shyam Nisal	18
14.	Manisha Mahendra Mari	7
15.	Naina BabbanYadav	Absent
16.	Nikita Nitendra Wakodkar	15
17.	Payal Kishor Shete	16
18.	Piyu Vinayak Nagpure	19
19.	Pooja Chopdeo Nandanwar	11
20.	Pratiksha Rajendra Fulkar	13
21.	Priya Laxmanrao Latare	19
22.	Priya Narayan Fule	20
23.	Renu Asharfi Sah	16
24.	Rutuja Diwakar Takit	12
25.	Roshani Khiran Mandlekar	18
26.	Roshani P. Gajbhiye	12
27.	Ruchira Rajesh Bhanarkar	10
28.	Sandhya Suroshe	18
29.	Shivani Yashwant Naitam	15
30.	Shweta A. Jaiswal	16
31.	Suraj Sevak Gawande	19
32.	Swathi Rathnam Premar	Absent
33.	Urvashi D. Banothe	9

Signature of the Teacher

Head
Department of Computer Science

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur.

Session 2020-2021

Master of Science (M.Sc.) Semester-IV (Computer Science)

Data Mining (Paper-I)

Unit Test -II

Time :1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

A. ——— is the output of KDD. 2
   a. Query
   b. Useful Information
   c. Data
   d. information

B. How to define Classification accuracy? 2
   a. A subdivision of a set of examples into a number of classes
   b. The task of assigning a classification to a set of examples
   c. Measure of the accuracy of the classification of a concept that is given by a certain theory
   d. None of these

C. Which of the following statement is true about the classification? 2
   a. It is a measure of accuracy
   b. It is a subdivision of a set
   c. It is the task of assigning a classification
   d. None of the above

D. The classification of the data mining system involves: 2
   a. Database technology
   b. Information Science
   c. Machine learning
   d. All of the above

E. Bayesian classifiers is 2
   a. A class of learning algorithm that tries to find an optimum classification of a set of examples using the probabilistic theory.
   b. Any mechanism employed by a learning system to constrain the search space of a hypothesis.
   c. An approach to the design of learning algorithms that is inspired by the fact that when people encounter new situations, they often explain them by reference to familiar experiences, adapting the explanations to fit the new situation.
   d. None of these

F. Naive prediction is 2
   a. A class of learning algorithms that try to derive a Prolog program from examples.
   b. A table with n independent attributes can be seen as an n- dimensional space.
   c. A prediction made using an extremely simple method, such as always predicting the same output.
   d. None of these

G. In _____ each cluster is represented by one of the objects of the cluster located near the center. 2
   a. k-medoid.

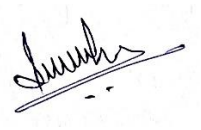
b. k-means.
c. stirr.
d. rock.

H. K-means clustering consists of a number of iterations and not deterministic. 2

a. True
b. False

I. Which clustering technique requires a merging approach? 2
a. Partitional
b. Hierarchical
c. Naive Bayes
d. None of the mentioned

J. Find odd man out 2
a. DBSCAN
b. K-mean
c. PAM
d. None of these



Signature of the Teacher **Head**
Department of Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's
Science College, Congress Nagar, Nagpur
Department of Computer Science
M.Sc. Semester-IV (Computer Science)Session 2020-2021
Unit Test - I

Name of Teacher:S.P.Jagre **Date:17/03/2021**

Subject: Artificial Intelligence & Expert System (Paper II) Maximum Marks: 20

Sr. No.	Name of Students	Obtained Marks
1.	Aishwarya Manohar Kadu	17
2.	Aishwarya N.Jadhav	12
3.	Akash Vijay Rajurkar	16
4.	Alpa Babu Shinde	17
5.	Ambika Dhanraj Nagpure	Absent
6.	Archana C.Waghmare	18
7.	Ayshu Ashutosh Pandey	17
8.	Bhavana Suresh Kamble	Absent
9.	Damini Banduji Shende	16

10.	Darshana Sanjay Maske	13
11.	Kalyani P. Dhumankhede	16
12.	Karuna Ashok Kapgate	18
13.	Kasturi Shyam Nisal	17
14.	Manisha Mahendra Mari	Absent
15.	Naina Babban Yadav	18
16.	Nikita Nitendra Wakodkar	17
17.	Payal Kishor Shete	12
18.	Piyu Vinayak Nagpure	16
19.	Pooja Chopdeo Nandanwar	Absent
20.	Pratiksha Rajendra Fulkar	12
21.	Priya Laxmanrao Latare	17
22.	Priya Narayan Fule	12
23.	Renu Asharfi Sah	16
24.	Rutuja Diwakar Takit	17
25.	Roshani Khiran Mandlekar	Absent
26.	Roshani P. Gajbhiye	16
27.	Ruchira Rajesh Bhanarkar	16
28.	Sandhya Suroshe	13
29.	Shivani Yashwant Naitam	13
30.	Shweta A. Jaiswal	17
31.	Suraj Sevak Gawande	12
32.	Swathi Rathnam Premar	16
33.	Urvashi D. Banothe	17

Signature of the Teacher

Head
Department of Computer Science

SEAL

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College.
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur

Session 2020-2021

Master of science (M. Sc.) Semester-IV (Computer Science)

Artificial Intelligence & Expert System (Paper II)

Unit Test - I

Time: 1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

1.How do you represent "All dogs have tails"? 2

a) ∀x: dog(x) àhastail(x)
b) ∀x: dog(x) àhastail(y)
c) ∀x: dog(y) àhastail(x)
d) ∀x: dog(x) àhasàtail(x)

2.The application/applications of Artificial Intelligence is/are 2

a. Expert Systems
b. Gaming
c. Vision Systems
d. All of the above

3.Which rule is applied for the Simple reflex agent? 2

a. Simple-action rule
b. Simple &Condition-action rule
c. Condition-action rule
d. None of the above

4.Which agent deals with the happy and unhappy state? 2

a. Utility-based agent
b. Model-based agent
c. Goal-based Agent
d. Learning Agent

5.Rational agent always does the right things. 2

a. True
b. False

6.What is state space? 2

a) The whole problem
b) Your Definition to a problem
c) Problem you design
d) Representing your problem with variable and parameter

7.A search algorithm takes as an input and returns as an output. 2

a) Input, output
b) Problem, solution
c) Solution, problem
d) Parameters, sequence of actions

8.A problem in a search space is defined by one of these state. 2

a) Initial state
b) Last state
c) Intermediate state
d) All of the mentioned

9.The process of removing detail from a given state representation is called 2

a) Extraction
b) Abstraction
c) Information Retrieval
d) Mining of data

10.A problem solving approach works well for 2

a) 8-Puzzle problem
b) 8-queen problem
c) Finding a optimal path from a given source to a destination
d) Mars Hover (Robot Navigation)

Signature of the Teacher

Head
Department of Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur

Department of Computer Science

M.Sc. Semester-IV (Computer Science) Session 2020-2021

Unit Test - II

Name of Teacher:S.P.Jagre **Date: 27/04/2021**

Subject: Artificial Intelligence & Expert System (Paper II) **Maximum Marks: 20**

Sr. No.	Name of Students	Obtained Marks
1.	Aishwarya Manohar Kadu	16
2.	Aishwarya N.Jadhav	Absent
3.	Akash Vijay Rajurkar	12
4.	Alpa Babu Shinde	11
5.	Ambika Dhanraj Nagpure	16
6.	Archana C.Waghmare	13
7.	Ayshu Ashutosh Pandey	17
8.	Bhavana Suresh Kamble	12
9.	Damini Banduji Shende	13
10.	Darshana Sanjay Maske	12
11.	Kalyani P. Dhumankhede	18
12.	Karuna Ashok Kapgate	17
13.	Kasturi Shyam Nisal	17
14.	Manisha Mahendra Mari	Absent
15.	Naina Babban Yadav	14
16.	Nikita Nitendra Wakodkar	13

17.	Payal Kishor Shete	16
18.	Piyu Vinayak Nagpure	Absent
19.	Pooja Chopdeo Nandanwar	12
20.	Pratiksha Rajendra Fulkar	11
21.	Priya Laxmanrao Latare	16
22.	Priya Narayan Fule	13
23.	Renu Asharfi Sah	17
24.	Rutuja Diwakar Takit	12
25.	Roshani Khiran Mandlekar	13
26.	Roshani P. Gajbhiye	12
27.	Ruchira Rajesh Bhanarkar	18
28.	Sandhya Suroshe	17
29.	Shivani Yashwant Naitam	17
30.	Shweta A. Jaiswal	Absent
31.	Suraj Sevak Gawande	14
32.	Swathi Rathnam Premar	13
33.	Urvashi D. Banothe	16

Signature of the Teacher

Head
Department of Computer Science

SEAL

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College.
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's
Science College, Congress Nagar, Nagpur
Session 2020-2021
Master of science (M. Sc.) Semester-IV (Computer Science)
Artificial Intelligence & Expert System (Paper II)
Unit Test - II

Time: 1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

1.From where did the new fact inferred on new iteration is derived? 2

a) Old fact
b) Narrow fact
c) New fact
d) All of the mentioned

2.There exist only two types of quantifiers, Universal Quantification and Existential Quantification. 2

a) True
b) False

3.Translate the following statement into FOL.
"For every a, if a is a philosopher, then a is a scholar" 2

a) ∀ a philosopher(a) scholar(a)
b) ∃ a philosopher(a) scholar(a)
c) All of the mentioned
d) None of the mentioned

4._____is used to demonstrate, on a purely syntactic basis, that one formula is a logical consequence of another formula. 2

a) Deductive Systems
b) Inductive Systems
c) Reasoning with Knowledge Based Systems
d) Search Based Systems

5.Which will solve the conjuncts of the rule so that the total cost is minimized? 2

a) Constraint variable
b) Conjunct ordering
c) Data complexity
d) All of the mentioned

6.What is Mindless processing? 2

a) careful, critical thinking
b) inaccurate and faulty processing
c) information processing that relies heavily on familiar schemata
d) processing that focuses on unusual or novel events

7.What is the name for space inside which a robot unit operates? 2

a) environment
b) spatial base
c) work envelope
d) exclusion zone

8.Which are partially captured by triphone model? 2

a) Articulation effects
b) Coarticulation effects
c) Both Articulation & Coarticulation effects
d) None of the mentioned

9.Which of the following terms IS NOT one of the five basic parts of a robot? 2

a) peripheral tools
b) end effectors
c) controller
d) drive

10.What are periodic changes in pressure that propagate through the air? 2

a) Air waves
b) Sound waves
c) Rate
d) None of the mentioned

Signature of the Teacher

Head
Department of Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College.
Congress Nagar. Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur

Department of Computer Science

M.Sc. Semester-IV (Computer Science) Session 2020-2021

Unit Test - I

Name of Teacher:S.B.Raipure **Date:5/02/2021**

Subject: Embedded System (Paper - III) **Maximum Marks: 20**

Sr. No.	Name of Students	Obtained Marks
1.	Aishwarya Manohar Kadu	18
2.	Aishwarya N.Jadhav	17
3.	Akash Vijay Rajurkar	12
4.	Alpa Babu Shinde	16
5.	Ambika Dhanraj Nagpure	17
6.	Archana C.Waghmare	Absent
7.	Ayshu Ashutosh Pandey	18
8.	Bhavana Suresh Kamble	17
9.	Damini Banduji Shende	Absent
10.	Darshana Sanjay Maske	17
11.	Kalyani P. Dhumankhede	13
12.	Karuna Ashok Kapgate	18
13.	Kasturi Shyam Nisal	17
14.	Manisha Mahendra Mari	12
15.	Naina Babban Yadav	16
16.	Nikita Nitendra Wakodkar	17
17.	Payal Kishor Shete	12
18.	Piyu Vinayak Nagpure	18
19.	Pooja Chopdeo Nandanwar	17

20.	Pratiksha Rajendra Fulkar	17
21.	Priya Laxmanrao Latare	13
22.	Priya Narayan Fule	17
23.	Renu Asharfi Sah	16
24.	Rutuja Diwakar Takit	13
25.	Roshani Khiran Mandlekar	17
26.	Roshani P. Gajbhiye	12
27.	Ruchira Rajesh Bhanarkar	Absent
28.	Sandhya Suroshe	16
29.	Shivani Yashwant Naitam	Absent
30.	Shweta A. Jaiswal	13
31.	Suraj Sevak Gawande	17
32.	Swathi Rathnam Premar	14
33.	Urvashi D. Banothe	13

Signature of the Teacher

Head
Department of Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

SEAL

Shri Shivaji Education Society Amravati's
Science College, Congress Nagar, Nagpur
Session 2020-2021
Master of Science (M.Sc.) Semester-IV (Computer Science)
Embedded System (Paper III)
Unit Test - I

Time: 1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

1. What is an embedded system? 2
   a) A standalone computer system
   b) A system with a processor embedded into a larger system
   c) A system with only hardware components
   d) A system with no software components
2. Which technology is commonly used for designing Embedded System-on-chip (SoC)? 2

a) Mechanical Engineering
b) VLSI Circuit Design
c) Civil Engineering
d) Chemical Engineering

3. Which of the following is an example of an embedded system? 2
a) Smartphone
b) Desktop computer
c) Refrigerator
d) Television

4. What is the role of a Watchdog Timer in embedded systems? 2
a) It counts the number of instructions executed
b) It resets the system if it detects a malfunction
c) It measures the clock cycle time
d) It monitors the temperature of the system

5. Which of the following is NOT a memory type commonly used in embedded systems? 2
a) ROM
b) RAM
c) EEPROM
d) SSD

6. What is the purpose of a Device Driver in embedded systems? 2
a) To connect the system to the internet
b) To enable communication between hardware devices and the operating system
c) To display graphics on the screen
d) To manage the power supply of the system

7. What does ISR stand for in the context of embedded systems? 2
a) Internet Service Request
b) Interrupt Service Routine
c) Input Signal Reception
d) Instruction Set Revision

8.Which programming language is commonly used for embedded programming? 2
a) Python
b) Java
c) C
d) HTML

9.Which of the following is NOT a program modeling concept? 2
a) Data Flow Graph (DFG) models
b) State Machine Programming
c) Object-Oriented Programming
d) UML Modeling

10. Which type of memory is typically used for storing program instructions in embedded systems? 2
a) RAM
b) ROM
c) Cache memory
d) SSD

Signature of the Teacher

Head
Department of Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur

Department of Computer Science

M.Sc. Semester-IV (Computer Science) Session 2020-2021

Unit Test – I

Name of Teacher:S.B.Raipure **Date: 12/03/2021**

Subject: Embedded System (Paper - III) **Maximum Marks: 20**

Sr. No.	Name of Students	Obtained Marks
1.	Aishwarya Manohar Kadu	17
2.	Aishwarya N.Jadhav	13
3.	Akash Vijay Rajurkar	17
4.	Alpa Babu Shinde	16
5.	Ambika Dhanraj Nagpure	13
6.	Archana C.Waghmare	17
7.	Ayshu Ashutosh Pandey	12
8.	Bhavana Suresh Kamble	17
9.	Damini Banduji Shende	Absent
10.	Darshana Sanjay Maske	18
11.	Kalyani P. Dhumankhede	17
12.	Karuna Ashok Kapgate	12
13.	Kasturi Shyam Nisal	16
14.	Manisha Mahendra Mari	17
15.	Naina Babban Yadav	Absent
16.	Nikita Nitendra Wakodkar	18
17.	Payal Kishor Shete	17
18.	Piyu Vinayak Nagpure	Absent
19.	Pooja Chopdeo Nandanwar	18
20.	Pratiksha Rajendra Fulkar	17

21.	Priya Laxmanrao Latare	12
22.	Priya Narayan Fule	16
23.	Renu Asharfi Sah	17
24.	Rutuja Diwakar Takit	Absent
25.	Roshani Khiran Mandlekar	18
26.	Roshani P. Gajbhiye	17
27.	Ruchira Rajesh Bhanarkar	Absent
28.	Sandhya Suroshe	17
29.	Shivani Yashwant Naitam	13
30.	Shweta A. Jaiswal	17
31.	Suraj Sevak Gawande	12
32.	Swathi Rathnam Premar	13
33.	Urvashi D. Banothe	14

Signature of the Teacher

Head
Department of Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's
Science College, Congress Nagar, Nagpur
Session 2020-2021
Master of Science (M.Sc.) Semester-IV (Computer Science)
Embedded System (Paper III)
Unit Test - II

Time: 1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

1.What is the purpose of semaphore functions in interprocess communication? 2

a) Managing memory allocation
b) Handling device interrupts
c) Synchronizing access to shared resources
d) Sending messages between processes

2.Which of the following is NOT a method of interprocess communication? 2

a) Semaphore functions
b) Pipe functions

c) Timer functions
d) Socket functions

3.Which real-time operating system (RTOS) is commonly used in embedded systems? 2
a) Linux
b) Windows
c) VxWorks
d) macOS

4.What is the primary role of an interrupt routine in an RTOS environment? 2
a) Handling errors in the system
b) Scheduling tasks
c) Managing memory
d) Responding to external events

5.Which RTOS is known for its real-time capabilities and is widely used in industrial applications? 2
a) Windows CE
b) OSEK
c) VxWorks
d) Linux

6.In an RTOS, what is the purpose of task scheduling models? 2
a) To manage memory allocation
b) To optimize power consumption
c) To determine the order in which tasks are executed
d) To handle device drivers

7.What is interrupt latency in the context of real-time systems? 2
a) The time taken to respond to an interrupt
b) The time taken to boot up the system
c) The time taken to execute a task
d) The time taken to access shared memory

8.Which operating system is commonly used in automotive embedded systems? 2
a) Linux
b) Windows
c) VxWorks
d) macOS

9.What is the purpose of real-time operating system programming? 2
a) To optimize battery usage
b) To ensure timely response to external events
c) To increase processing speed
d) To improve graphics performance

10.Which testing technique is commonly used for embedded software development? 2
a) Manual testing
b) White-box testing
c) Load testing
d) Boundary testing

Signature of the Teacher

Head
Department of Computer Science

SEAL

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College.
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur

Department of Computer Science

M. Sc. Semester – IV (Computer Science) Session 2020-21

Unit Test - I

Name of Teacher: Mr. M. T. Wanjari **Date: 13/04/2021**

Subject: Parallel Computing (Paper-IV) **Maximum Marks: 20**

Sr. No.	Name of Students	Obtained Marks
1.	Aishwarya Manohar Kadu	12
2.	Aishwarya N. Jadhav	10
3.	Akash Vijay Rajurkar	12
4.	Alpa Babu Shinde	14
5.	Ambika Dhanraj Nagpure	14
6.	Archana C.Waghmare	18
7.	Ayshu Ashutosh Pandey	20
8.	Bhavana Suresh Kamble	14
9.	Damini Banduji Shende	12
10.	Darshana Sanjay Maske	20
11.	Kalyani P. Dhumankhede	14
12.	Karuna Ashok Kapgate	12
13.	Kasturi Shyam Nisal	18
14.	Manisha Mahendra Mari	18
15.	Naina Babban Yadav	12
16.	Nikita NitendraWakodkar	14
17.	Payal Kishor Shete	16
18.	Piyu Vinayak Nagpure	14
19.	Pooja Chopdeo Nandanwar	16
20.	Pratiksha Rajendra Fulkar	14
21.	Priya Laxmanrao Latare	12
22.	Priya Narayan Fule	14

23.	Renu Asharfi Sah	16
24.	Rutuja Diwakar Takit	14
25.	Roshani Khiran Mandlekar	14
26.	Roshani P. Gajbhiye	12
27.	Ruchira Rajesh Bhanarkar	14
28.	Sandhya Suroshe	18
29.	Shivani Yashwant Naitam	14
30.	Shweta A. Jaiswal	16
31.	Suraj Sevak Gawande	12
32.	Swathi Rathnam Premar	12
33.	Urvashi D. Banothe	14

Signature of the Teacher

Head
Department of Computer Science

SEAL

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur

Session 2020-21

Master of Science (M. Sc.) Semester – IV (Computer Science)

Parallel Computing (Paper-IV)

Unit Test – I

Time: 1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

1. FLOPS Stands for 2

   A. floating point operations per second B. floating pin operation per second

   C. floating purpose operation per second D. None of these

2. The infeasibility of collecting this data at a Outer location for analysis requires effective parallel and distributed algorithms. 2

   A. True B. False

3. The flow of control through a program enforces a_____form of dependency between instructions. 2

   A. third B. second

C. first D. None of these

4. The rate at which data can be pumped from the memory to the processor determines the_____of the memory system. 2

A.frequency B. latency

C. bandwidth D. None of above

5. MEMS Stands for_____. 2

A. micro electro-mechanical system B. medium electro-mechanical system

C. micro electric-mechanical system D. None of these

6. The gather operation is exactly the inverse of the 2

A. Scatter operation B. Broadcast operation

C. Prefix Sum D. Reduction operation

7. Which of the following is not an example of explorative decomposition? 2

A. queens problem B. 15 puzzal problem

C. tic tac toe D. quick sort

8. Which of the following is not an parallel algorithm model ? 2

A. data parallel model B. task graph model

C. task model D. work pool model

9. The gather operation is exactly the _____ of the scatter operation. 2

A. Inverse B. Reverse

C. Multiple D. Same

10. Which is the type of Microcomputer Memory? 2

A. Address B. Contents

C. data D. program

Signature of the Teacher

Head
Department of Computer Science

SEAL

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur

Department of Computer Science

M. Sc. Semester – IV (Computer Science) Session 2020-21

Unit Test - II

Name of Teacher: Mr. M. T. Wanjari **Date: 12/05/2021**

Subject: Parallel Computing (Paper-IV) **Maximum Marks: 20**

Sr. No.	Name of Students	Obtained Marks
1.	Aishwarya Manohar Kadu	12
2.	Aishwarya N. Jadhav	12

3.	Akash Vijay Rajurkar	14
4.	Alpa Babu Shinde	16
5.	Ambika Dhanraj Nagpure	14
6.	Archana C.Waghmare	16
7.	Ayshu Ashutosh Pandey	18
8.	Bhavana Suresh Kamble	14
9.	Damini Banduji Shende	14
10.	Darshana Sanjay Maske	20
11.	Kalyani P. Dhumankhede	16
12.	Karuna Ashok Kapgate	14
13.	Kasturi Shyam Nisal	20
14.	Manisha Mahendra Mari	16
15.	Naina Babban Yadav	14
16.	Nikita NitendraWakodkar	12
17.	Payal Kishor Shete	14
18.	Piyu Vinayak Nagpure	12
19.	Pooja Chopdeo Nandanwar	14
20.	Pratiksha Rajendra Fulkar	16
21.	Priya Laxmanrao Latare	14
22.	Priya Narayan Fule	12
23.	Renu Asharfi Sah	14
24.	Rutuja Diwakar Takit	16
25.	Roshani Khiran Mandlekar	16
26.	Roshani P. Gajbhiye	12
27.	Ruchira Rajesh Bhanarkar	12
28.	Sandhya Suroshe	16
29.	Shivani Yashwant Naitam	14
30.	Shweta A. Jaiswal	12

31.	Suraj Sevak Gawande	10
32.	Swathi Rathnam Premar	14
33.	Urvashi D. Banothe	12

Signature of the Teacher

Head
Department of Computer Science

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur

Shri Shivaji Education Society Amravati's

Science College, Congress Nagar, Nagpur

Session 2020-21

Master of Science (M. Sc.) Semester – IV (Computer Science)

Parallel Computing (Paper-IV)

Unit Test – II

Time: 1 Hour] **[Maximum Marks: 20**

Choose the correct option and answer the following:

1. What are the Performance Metrics for Parallel Systems? 2

A. Execution time B. Total parallel overhead

C. speedup D. all of the above

2. What reflects the sum of the time that each processing element spends solving the problem?2

A. Speedup B. Cost

C. Efficiency D. None of these

3. Which is the sources of overhead in parallel programs? 2

A. Interprocess Interaction B. Idling

C. Excess Computation D. All of the above

4. What are the other scalability metrics? 2

A. Scaled Speedup B. Serial Fraction f

C. Both A & B D. None of these

5. What are the basic concepts that are essential in writing correct and efficient message-passing programs using MPI? 2

A. Starting and Terminating the MPI Library B. Communicators

C. Getting Information D. All of the above

6. Message-passing programs are not often written using the ***asynchronous*** or ***loosely synchronous*** paradigms. 2

A. True B. False

7. What are the collective communication and computation operations? 2

A. Barrier B. Broadcast

C. Reduction D. Deadlock

8. We define the _____ of solving a problem on a parallel system as the product of parallel runtime and the number of processing elements used. 2

A. efficiency B. cost

C. speedup D. none of these

9. _____ is called prior to any calls to other MPI routines. 2

A. MPI_Init B. MPI_Finalize

C. MPI_SUCCESS D. none of these

10. Every process that belongs to a communicator is uniquely identified by its _____. 2

A. size B. rank

C. rank & size D. none of these

Signature of the Teacher

Head
Department of Computer Science

SEAL

Professor & Head
Department of Computer Science
S.S.E.S. Amt's Science College,
Congress Nagar, Nagpur