MASTER OF COMPUTER APPLICATION

ASSIGNMENTS

MCA – 1ST SEMESTER

(SESSON 2023-2024)

Directorate of Distance Education Guru Jambheshwar University of Science & Technology Hisar - 125001

Course Name: Database Management System   **Semester: 1st**
Code: MCA-11   **Total Marks: 30**

Important Instructions

1. Attempt all questions from each assignment given below.
2. Each assignment carries 15 marks.
3. All questions are to be attempted in legible handwriting on plane white A-4 size paper and upload the scanned copy of the assignments on student's portal.

ASSIGNMENT-I

Q1.   Explain the advantages of Database Management System over File Management System. Also explain the responsibilities of Database Administrator.
Q2.   Construct an ER diagram of a car insurance company whose customers own one or more cars each. Each car has associated with it zero to any number of recorded accidents.
Q3.   Use SELECT, INSERT, UPDATE and DELETE commands in SQL.

ASSIGNMENT-2

Q1.   Differentiate between primary key, candidate key and super key
Q2.   What do you mean by normalization? Explain in detail 1 NF, 2NF, 3NF
Q3.   Describe transaction. Explain the properties and life cycle of transaction.

Prepared By:
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GURU JAMBHESHWAR UNIVERSITY OF SCIENCE & TECHNOLOGY, HISAR
DIRECTORATE OF DISTANCE EDUCATION
Programme: Master of Computer Application

Course Name: Web Designing   **Semester: 1st**
Code: MCA-12   **Total Marks: 30**

Important Instructions
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2. Each assignment carries 15 marks.
3. All questions are to be attempted in legible handwriting on plane white A-4 size paper and upload the scanned copy of the assignments on student's portal.

ASSIGNMENT-I

Q1.   Explain various organization schemes and organization structures.   5
Q2.   Explain various core attributes in HTML with proper example.   5
Q3.   Explain Navigation System and its types.   5

ASSIGNMENT-2

Q1.   Explain JavaScript Object model in detail.   5
Q2.   What is PERL? Explain various data structures in PERL.   5
Q3.   Explain ASP and JSP Lifecycle in detail.   5

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GURU JAMBHESHWAR UNIVERSITY OF SCIENCE & TECHNOLOGY, HISAR
DIRECTORATE OF DISTANCE EDUCATION
Programme: Master of Computer Application

Course Name: Java Programming   **Semester: 1ˢᵗ**
Code: MCA-13   **Total Marks: 30**

Important Instructions
1. Attempt all questions from each assignment given below.
2. Each assignment carries 15 marks.
3. All questions are to be attempted in legible handwriting on plane white A-4 size paper and upload the scanned copy of the assignments on student's portal.

ASSIGNMENT-I

Q1.   Discuss looping structures (For, While and Do-while) in Java with proper example.   5
Q2.   Explain different types of Inheritance with proper example.   5
Q3.   Differentiate between overloading and overriding methods with example.   5

ASSIGNMENT-2

Q1.   Explain Byte Stream classes with example.   5
Q2.   Explain various types of Events in Java.   5
Q3.   What do you understand by Frame? Write down a program to create frame.   5

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GURU JAMBHESHWAR UNIVERSITY OF SCIENCE & TECHNOLOGY, HISAR
DIRECTORATE OF DISTANCE EDUCATION
Programme: Master of Computer Application

Course Name: Software Engineering   **Semester: 1ˢᵗ**
Code: MCA-14   **Total Marks: 30**

Important Instructions
1. Attempt all questions from each assignment given below.
2. Each assignment carries 15 marks.
3. All questions are to be attempted in legible handwriting on plane white A-4 size paper and upload the scanned copy of the assignments on student's portal.

ASSIGNMENT-I

Q1.	Define SRS. Explain different types of technique?	5
Q2.	Explain waterfall model in detail?	5
Q3.	Difference between cohesion and coupling.	5

ASSIGNMENT-2

Q1.	Write note on DFD and data dictionary?	5
Q2.	Write note on feasibility and oral presentation?	5
Q3.	Explain various types of testing technique?	5

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GURU JAMBHESHWAR UNIVERSITY OF SCIENCE & TECHNOLOGY, HISAR
DIRECTORATE OF DISTANCE EDUCATION
Programme: Master of Computer Application

Course Name: Computer Networks and Internet Protocols   **Semester: 1ˢᵗ**
Code: MCA-15   **Total Marks: 30**

Important Instructions
1. Attempt all questions from each assignment given below.
2. Each assignment carries 15 marks.
3. All questions are to be attempted in legible handwriting on plane white A-4 size paper and upload the scanned copy of the assignments on student's portal.

ASSIGNMENT-I

Q1.   Define Network Topology. Explain different types of network topologies in detail.   5
Q2.   Give a complete description of ISO-OSI reference Model with proper diagram.   5
Q3.   Discuss Flow Control Protocols in detail.   5

ASSIGNMENT-2

Q1.   What is IP addressing? Explain IPV4 and IPV6 in detail.   5
Q2.   Explain various routing algorithms in detail.   5
Q3.   Explain TCP, UDP and Internet Protocol.   5

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