MASTER OF COMPUTER APPLICATION

ASSIGNMENTS

MCA – 4th SEMESTER

(SESSON 2023-2024)

Centre for Distance and Online Education (CDOE)
Guru Jambheshwar University of Science & Technology
Hisar - 125001

CENTRE FOR DISTANCE AND ONLINE EDUCATION (CDOE)
GURU JAMBHESHWAR UNIVERSITY OF SCIENCE & TECHNOLOGY, HISAR

Course Name: IoT and Cloud Computing **Semester: 4th**
Paper Code: MCA-41 **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 andupload the scanned copy of the assignments on student's portal.

ASSIGNMENT-I

Q1. Explain an information driven value chain for IoT with a neat diagram.

Q2. Explain how gateways are used for data management, local applications and device management in IoT.

Q3. What is the difference between Real Time and Local Analytics?

ASSIGNMENT-2

Q1. Explain various IoT Applications. And also explain the Legal challenges in IoT.

Q2. Explain about Wireless Technologies for the IoT and discuss about Edge Connectivity in IPBased Protocol for IoT.

Q3. Write short notes on Arduino function libraries.

Prepared By:
Dr. Ritu
Assistant Professor (CSE)
CDOE, GJUS&T, Hisar

CENTRE FOR DISTANCE AND ONLINE EDUCATION (CDOE)
GURU JAMBHESHWAR UNIVERSITY OF SCIENCE & TECHNOLOGY, HISAR

Course Name: Mobile Application Development **Semester: 4th**
Paper Code: MCA-42 **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 andupload the scanned copy of the assignments on student's portal.

ASSIGNMENT-I

Q1. What is operating system? Discuss various services provided by operating system.

Q2. Discuss Android framework libraries with their classes.

Q3. What is interpreter? explain it uses in program.

ASSIGNMENT-2

Q1. Define Activity. Explain its lifecycle with diagram.

Q2. What are the various functions of the Menu class.

Q3. What is SQLite? What are the advantages of using SQLite? Explain various data types supported by SQLite?

Prepared By:
Er. Vinod Goyal
Assistant Professor (CSE)
CDOE, GJUS&T, Hisar

CENTRE FOR DISTANCE AND ONLINE EDUCATION (CDOE)
GURU JAMBHESHWAR UNIVERSITY OF SCIENCE & TECHNOLOGY, HISAR

Course Name: High Speed Network **Semester: 4th**
Code: MCA-43(iv) **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 andupload the scanned copy of the assignments on student's portal.

ASSIGNMENT-I

Q1. Explain throughput, delay and reliability in high-speed LAN.

Q2. Explain Frame Relay protocol architecture in detail

Q3. What is ATM adaption layer? Explain in detail.

ASSIGNMENT-2

Q1. What do you understand by Wireless Network? Describe Bluetooth network in detail.

Q2. Explain in detail GSM with its architecture.

Q3. Describe in detail IPv6 with its header format. Also differentiate IPv4 and IPv6.

Prepared by:
Mr. Neeraj Verma
Assistant Professor (CSE)
CDOE, GJUS&T, Hisar

CENTRE FOR DISTANCE AND ONLINE EDUCATION (CDOE)
GURU JAMBHESHWAR UNIVERSITY OF SCIENCE & TECHNOLOGY, HISAR

Programme: MCA **Course: Computer Graphics**
Semester: 4th **Total Marks=30**
Paper Code: MCA-44(iv)

Important Instructions

I. **Attempt all questions from each assignment given below.**
II. **Each assignment carries 15 marks.**
III. **All questions are to be attempted in legible handwriting on plane white A-4 sizepaper.**

ASSIGNMENT-I

Q1. Explain raster scan with neat and clean diagram in detail.

Q2. Define DDA line drawing algorithm, also take a example to explain DDA algorithm.

Q3. Explain mid-point algorithm? Write algorithm in your own words.

ASSIGNMENT-II

Q1. Discuss about 2D transformation. Why we use 2D transformation in computer graphics?

Q2. What do mean by polygon clipping algorithm, explain any polygon clipping algorithm with example.

Q3 Explain parallel projection & their types with example.

Prepared by:
Ms. Kapila Devi
Assistant Professor (CSE)
CDOE, GJUS&T, Hisar