

### Assignment For MCA 4<sup>th</sup> Sem.

The Assignment will consist of two parts, A and B. Part A will have 5 short answer questions(40-60 words) of 4 marks each. Part B will have 4 long answer questions of 5 marks each

### All questions are compulsory.

These Assignments should be completed and submitted in written form by the student to his/her respective Faculty/ Examiners. Assignment Submission Dates are:

### **List Of Suggested Questions**

The list of suggested questions are for students to practice. Although optional, we recommend that students solve these questions, as they will help them in preparing for exams as well as in clearing the important concepts of the subject.

### List of Practical and suggested practical's

The list of practical's should be done by the students in their Lab Sessions. These are the basic practical's, which each student should be able to do himself independently. While the list of suggested practicals are optional, but it is recommended that students should perform those practical so as to have a thorough knowledge of the subject

### **Education Delivery Schedule (EDS)**

As per University Semester scheme, the minimum contact hours of each paper has been Divided into two hours theory and practical class. The faculty will maintain this attendance paper wise for his/her batch.



# **J.S UNIVERSITY**

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ID NUMBER	
NAME	
COURSE:	MCA
STREAM	CS
SEM	4 <sup>th</sup> SEM
SUBJECT CODE	
SUBJECT NAME	



### J.S. University

## MCA 4<sup>th</sup> Semester

## Data Warehousing & Data Mining

## Part-A

- Q1-Define data warehouse?
- Q2-What does subject-oriented data warehouse signify?
- Q3-List any five applications of data warehouse.
- Q4-List the functions of data warehouse tools and utilities.
- Q5-What do you mean by Data Extraction?

## Part-B

- Q1-What is Normalization?
- Q2-What is Data Mining?
- Q3-Discuss the Life cycle of Data Mining projects?
- Q4-Explain Evolution and deviation analysis?
- Q5-What is Prediction?



## **Internet of Things**

## Part-A

- Q1-What is IoT (Internet of Things)
- Q2-Explain the characteristics of IoT.
- Q3-What are the different components of IoT?
- Q4-What are the challenges or risks associated with IoT?
- Q5-What are different types of sensors in IoT?

### Part-B

- Q1-What are different layers of the IoT protocol stack?
- Q2-Write some of the most common IoT applications.
- Q3-Explain the term 'smart city' in IoT.
- Q4-What do you mean by PWM (Pulse Width Modulation)?
- Q5-What do you mean by replication?



## Part-A

Q1-What is the difference between Machine Learning and Deep Learning?

Q2-What is a perceptron?

Q3-How is Deep Learning better than Machine Learning?

Q4-What are some of the most used applications of Deep Learning?

Q5-What is the meaning of overfitting?

## Part-B

Q1-What are activation functions?

Q2-What are the steps involved in training a perception in Deep Learning?

Q3-What is the use of the loss function?

Q4-What are some of the Deep Learning frameworks or tools that you have used?

Q5-What are auto encoders?