J.S University

Assignment For MCA 3rd 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

Cover page of Assignment

ID NUMBER ……

NAME ……

COURSE: MCA

STREAM CS ……

SEM 3rd SEM……

SUBJECT CODE ……

SUBJECT NAME ……

J.S. University

MCA 3rd Semester

Artificial Intelligence

Part-A

Q1-What is Artificial Intelligence?

Q2-What are some real-life applications of Artificial Intelligence?

Q3-What is the future of Artificial Intelligence?

Q4-What are the types of Artificial Intelligence?

Q5-What is the difference between Artificial Intelligence, Machine learning, and Deep learning?

Part-B

Q1-How are Artificial Intelligence and Machine Learning related?

Q2-What is Q-learning?

Q3-What is the difference between a strong AI and a weak AI?

Q4-What is Computer Vision in AI?

Q5-What is Overfitting?

Software Engineering

Part-A

Q1-What is Software Engineering?

Q2-What are the various categories of software?

Q3-What are the characteristics of software?

Q4-Describe the Software Development Process in Brief.

Q5-What is Debugging?

Part-B

Q1-What is the waterfall method and what are its use cases?

Q2-What are the drawbacks of the spiral model?

Q3-What is SRS?

Q4-What are Verification and Validation?

Q5-Define black box testing and white box testing?

Computer Based Optimization Techniques

Part-A

Q1-What do you mean by Linear Programming?

Q2-Explain the queuing system.

Q3-What is the degeneracy in L.P. Problem.

Q4-Discuss the Bellman's principle of optimality.

Q5-Discuss steady state in terms of Queuing theory.

Part-B

Q1-Discuss EOQ with its formula.

Q2-Differentiate between Slack Variables and Surplus Variables.

Q3-What is the dynamic recursive relation?

Q4-Describe the problem of inventory control.

Q5-What is queuing system?

Introduction to Machine Learning

Part-A

Q1-Why was Machine Learning Introduced?

Q2-Why is the Machine Learning trend emerging so fast?

Q3-What are Different Types of Machine Learning algorithms?

Q4-What is Supervised Learning?

Q5-What is Unsupervised Learning?

Part-B

Q1-What is a Neural Network?

Q2-What are Loss Function and Cost Functions?

Q3-What is a Random Forest?

Q4-What is Clustering?

Q5-What are Recommender Systems?

Cloud Computing

Part-A

Q1-What is cloud computing?

Q2-What are the benefits of cloud computing?

Q3-What are the different layers in cloud computing?

Q4-What do you mean by software as a service?

Q5-What is on-demand functionality?

Part-B

Q1-What are the different models for deployment in cloud computing?

Q2-What are Hybrid clouds?

Q3-What is the difference between cloud computing and mobile computing?

Q4-What is the difference between scalability and elasticity?

Q5-What are the advantages of cloud services?