J.S University

Assignment For B.TECH in computer science Engineering 8TH 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 2 long answer questions of 10 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 B.TECH

STREAM CS ……

SEM 8^{TH} SEM……

SUBJECT CODE ……

SUBJECT NAME ……

J. S. University

ASSIGNMENT

B.Tech CS 8th Semester

Non -Conventional Energy Resources

Part-1

1. Define the Various non-conventional energy resources.
2. Explain solar cell power plant and it's limitations.
3. Explain the flat plate collectors and their materials.
4. Describe the solar thermal power plants.
5. Explain the Principle of working of MHD Power plant.

Part-2

6. Define the classification of rotors.
7. Describe Waste Recycling Plants.

Digital Image Processing

Part-1

1. Explain the Components of Image Processing System.
2. Define A Simple Image Model, Sampling and Quantization.
3. Write about Correspondence Between Filtering in Spatial and Frequency Domain.
4. Describe the Gaussian Low pass Filters.
5. Explain the Basics of Spatial Filtering, Smoothing - Mean filter.

Part-2

6. Write about the Order Statistic Filters– Median Filter, Max and Min filters.
7. Explain about Minimum Mean-square Error Restoration.

REAL TIME SYSTEM

Part-1

1. Describe the Digital Control and High Level Controls.
2. Different between Hard Real Time Systems and Soft Real Time Systems.
3. Write about Optimality of Effective-Deadline-First (EDF) and Least-Slack-Time-First (LST) Algorithms.
4. Explain the Resources Sharing Effect of Resource Contention and Resource Access Control.
5. Write about the Use of Priority-Ceiling Protocol in Dynamic Priority Systems.

Part-2

6. Explain the Soft and Hard RT Communication systems.
7. Define Real Time Operating Systems and Databases Features of RTOS.

EMBEDDED SYSTEMS

Part-1

1. Characteristics and requirements of Embedded System.
2. Define the Timing and clocks in Embedded systems.
3. What is Signal Conditioning Processing?
4. Define the Modeling and Characterization of Embedded Computation System.
5. Describe the Embedded Control.

Part-2

6. What is Fault-Tolerance?
7. Define the Development Language.

ASSIGNMENT

ASSIGNMENT