J.S University

Assignment For B.TECH in electrical Engineering 6th 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.

Subject code	Subject name
BEE 1	Power System Analysis
BEE 2	Switchgear & Protection
BEE 3	Special Electric Machine
BEE 4	Fundamentals of Digital Signal Processing
BEE 5	Conventional & CAD of Electrical Machines
BEE 6	Industrial Management
BEE 7	Minor Project
BEE 8	Seminar

J.S UNIVERSITY

Cover page of Assignment

ID NUMBER ……

NAME ……

COURSE B.TECH

STREAM ELECTRICAL……

SEM 6^{th} ……

SUBJECT CODE ……

SUBJECT NAME ……

ASSIGNMENT FOR B.TECH 6TH SEM ELECTRICAL ENGINEERING

BEE 1 POWER SYSTEM ANALYSIS

Part A

1. What are synchronous machines with examples?
2. What is the use of single line diagram impedance and reactance diagrams?
3. Why symmetrical component analysis is preferred for studying unbalanced faults?
4. How do you calculate synchronous reactance?
5. What are the methods used for formation of Z bus matrix?

Part B

1. What are the advantages of Newton Raphson power flow method over Gauss Seidel power flow method?
2. What is the equal area criterion to study transient stability?

ASSIGNMENT FOR B.TECH 6TH SEM ELECTRICAL ENGINEERING

BEE 2 SWITCHGEAR AND PROTECTION

Part A

1. What do you mean by protection system?
2. What are the desired qualities of a protective relaying scheme?
3. What is the difference between attraction and induction?
4. What is the difference between differential relay and Buchholz relay?
5. What is the difference between SSR and electromagnetic relay?

Part B

1. What are the methods of bus protection?
2. What is restriking and recovery voltage?

ASSIGNMENT FOR B.TECH 6TH SEM ELECTRICAL ENGINEERING

BEE 3 SPECIAL ELECTRICAL MACHINES

Part A

1. What is the difference between double cage and deep bar induction motor?
2. What is the use of start capacitors on split-phase motors?
3. What is capacitor start and capacitor run motor?
4. What is the difference between permanent magnet and hybrid stepper motor?
5. What is demagnetization of permanent magnet synchronous motor?

Part B

1. What are the applications of permanent magnet and electromagnet?
2. What are the difference between repulsion and induction motor?

ASSIGNMENT FOR B.TECH 6TH SEM ELECTRICAL ENGINEERING

BEE 4 FUNDAMENTALS OF DIGITAL SIGNAL PROCESSING

Part A

1. What is the frequency domain representation of discrete-time signals and systems?
2. What is the representation of signal in time and frequency domain?
3. How do you find linear convolution using DFT?
4. What is sampling in the frequency domain representation?
5. How do you find the frequency response of a transfer function?

Part B

1. What are the desirable characteristics of FIR filter using windows?
2. What is the relationship between DFT and convolution?

ASSIGNMENT FOR B.TECH 6TH SEM ELECTRICAL ENGINEERING

BEE 5 CONVENTIONAL & CAD OF ELECTRICAL MACHINES

Part A

1. What is the total MMF in a parallel magnetic circuit?
2. How do you calculate regulation from no load to full load?
3. How are specific electric loading and specific magnetic loading selected?
4. What is the difference between DC machine and synchronous machine?
5. What is the difference between a three-phase induction motor and a synchronous motor?

Part B

1. What is analysis and synthesis method of machine design?
2. What is the main purpose of a computer-aided design software?

ASSIGNMENT FOR B.TECH 6TH SEM ELECTRICAL ENGINEERING

BEE 6 INDUSTRIAL MANAGEMENT

PART A

1. What are the application area and scope of Industrial Management?
2. What is time & motion study in principles of management?
3. What is an example of inventory control?
4. What is the introduction of supply chain management?
5. What is the difference between flow diagram and process chart?

PART B

1. What is productivity and productivity index?
2. What are the classification of business on the basis of ownership?