

J S University

Assignment For B.Tech. in electrical Engineering 5th 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:

➤ Session-2023

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 ELECTRICAL.....

SEM 5th

SUBJECT CODE

SUBJECT NAME

ASSIGNMENT FOR B.TECH 5th SEM ELECTRICAL ENGINEERING

CONTROL SYSTEM-I

PART 1

1. What is the effect of feedback on time constant of a control system?
2. What are the basic elements used for modeling electrical mechanical translational and mechanical rotational systems?
3. What is the decomposition of transfer functions?
4. What is the response of a first order system to a ramp input?
5. What is the transient response of the first and second order system?

PART 2

1. What is meant by bounded input bounded output stability?
2. What is the effect of adding a zero to closed loop transfer function of second order system?

ASSIGNMENT FOR B.TECH 5th SEM ELECTRICAL ENGINEERING

ELEMENTS OF POWER SYSTEM

Part-1

1. How do you draw a single line diagram of a power system?
2. What is the principle of synchronous?
3. What are the different type of electric supply system?
4. What is the skin effect and proximity effect?
5. How to calculate inductance and capacitance of transmission line?

Part-2

1. What is the formula of the potential gradient?
2. What are the methods of improving voltage distribution across insulator strings?

ASSIGNMENT FOR B.TECH 5th SEM ELECTRICAL ENGINEERING

Engineering Economics

PART 1

1. What is the concept of efficiency in engineering economics?
2. What is meant by elasticity of demand?
3. What are the three scope of managerial economics?
4. What is the market structure of perfect and imperfect competition?
5. What are the characteristics of demand forecasting?

PART 2

1. What is the importance of time horizon for forecasting?
2. Why do you calculate material variance?

ASSIGNMENT FOR B.TECH 5th SEM ELECTRICAL ENGINEERING

FUNDAMENTALS OF E.M.THEORY

PART 1

1. What is the summary of vector analysis?
2. What is the difference between polar and cylindrical coordinates?
3. What is divergence gradient and curl operations in Cartesian coordinate system?
4. What is the relation between capacitor and dielectric?
5. Does steady magnetic field produce electric current?

PART 2

1. What is the inductance of a magnetic material?
2. What is the difference between reflection and dispersion?

ASSIGNMENT FOR B.TECH 5th SEM ELECTRICAL ENGINEERING

MICROPROCESSOR

PART 1

1. What are the classification of instructions set of 8085 microprocessor?
2. What is the main memory organization in a computer?
3. What is the assembly language programming technique?
4. What is DA and AD converter?
5. What is interrupt structure and interrupt vector table of 8086?

PART 2

1. What is the interfacing of 8259 interrupt controller with 8085 microprocessor?
2. What is serial communication standards and data transfer schemes?

ASSIGNMENT FOR B.TECH 5th SEM ELECTRICAL ENGINEERING

POWER ELECTRONICS

PART 1

1. What are the characteristics of semiconductor power devices?
2. What is the difference between a switching transistor and a power transistor?
3. What is the principle of step up and step down chopper?
4. What is the principle difference between a step-up and step down transformer?
5. What is the principle of operation of single phase transformer with emf equation?

PART 2

1. How many controlled switching devices are required for a three-phase bridge inverter?
2. What is harmonic reduction techniques in inverter?