

Assignment For B.TECH in electrical 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:

➤ 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.

Subject code	Subject name
BTOE-81	Non Conventional Energy Resources
BTEE-81	Electrical & Electronics Engineering Material
BTEE-82	Utilization of Electrical Energy and Traction
BTEE-83	Power Quality
BTEE84P	Project

J.S UNIVERSITY

Cover page of Assignment

ID NUMBER

NAME

COURSE B.TECH

STREAM ELECTRICAL.....

SEM 8th

SUBJECT CODE

SUBJECT NAME

ASSIGNMENT FOR B.TECH 8 TH SEM ELECTRICAL ENGINEERING

[BTOE-81]NON-CONVENTIONAL ENERGY RESOURCES

Part A

1. What are various conventional and non-conventional sources of energy?
2. What is the theory of the solar cell?
3. What are the five main components of flat plate collectors?
4. How is geothermal energy converted to mechanical energy in geothermal power plants?
5. What is the working principle of MHD accelerator?

Part B

1. What is the principle of working of thermoelectric and thermionic conversion?
2. What are the methods of operation of tidal power generation?

ASSIGNMENT FOR B.TECH 8 TH SEM ELECTRICAL ENGINEERING

BTEE-81 ELECTRICAL & ELECTRONICS ENGINEERING MATERIALS

Part A

1. What are structural imperfections in crystalline materials?
2. What is the classification of metals conductors and semiconductors on the basis of energy band?
3. What are the properties of electrical conductors and insulators?
4. What is the difference between drift and diffusion in pn junction?
5. What are the properties of semiconducting materials?

Part B

1. What is the origin of permanent magnetic moment in magnetic materials?
2. What materials are permanently magnetic?

ASSIGNMENT FOR B.TECH 8 TH SEM ELECTRICAL ENGINEERING

BTEE-82 UTILIZATION OF ELECTRICAL ENERGY AND TRACTION

Part A

1. What are the three types of electric heating systems?
2. What is electric resistance welding and electric arc welding?
3. What is the working principle of electro deposition used in Mould making?
4. What is the law of electrolysis equation?
5. What is the electric arc heating?

Part B

1. What is dielectric heating and induction heating?
2. What is the principle of resistance heating?

ASSIGNMENT FOR B.TECH 8 TH SEM ELECTRICAL ENGINEERING

BTEE-83 Power Quality

Part A

1. What are the terms and definitions of transients in power quality?
2. What are the effects of voltage fluctuation on power system?
3. What is the most common source for voltage sags and interruption?
4. What are the different types of transient energy?
5. What are all the effects of voltage and current harmonics?

Part B

1. What are the 3rd and 5th harmonics in transformer?
2. What is the purpose of grounding test?

Project list

1. Photovoltaic Solar Power Generation with Maximum Power Point Tracking
2. Closed Loop Control of Brushless DC Motor
3. Automatic Room Light Controller using IR Sensors
4. Home Automation System Using Arduino Microcontroller
5. Electronic Soft Start for a 3-Phase Induction Motor
6. GSM based Substation Monitoring and Control System