J S University

Assignment For B.Tech. in electrical Engineering 4th 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 - 41	SCIENCE BASED OPEN ELECTIVES
BTEE - 41	ANALOG AND DIGITAL ELECTRONICS
BTEE - 42	ELECTRO-MECHANICAL ENERGY CONVERSION - II
BTEE - 43	NETWORK ANALYSIS AND SYNTHESIS
BTEE - 44	ELECTRICAL INSTRUMENTATION AND PROCESS CONTROL
BTIS - 41	Industrial Sociology
BTAC - 41	Cyber Security

J S UNIVERSITY

Cover page of Assignment

ID NUMBER ……………………………………

NAME …………………………………

COURSE Diploma Engineering …(New Batch)

STREAM ELECTRICAL…………………………

SEM 4th …………………………………

SUBJECT CODE ……………………………………

SUBJECT NAME …………………………………

Assignments will be completed by the Student in his/her own handwriting.

BTECH ELECTRICAL [BTOE-41]

SCIENCE BASED OPEN ELECTIVES

4th SEMESTER

Assignment

PART A

1. What are the main structures of the synapse?
2. What is the perception and convergence rule in soft computing?
3. What is the difference between a single layer neural network and a deep neural network?
4. What are the general limitations of backpropagation?
5. What are the four operations in fuzzy set theory?

PART B

1. What are the five phases of a genetic algorithm?
2. What is a real world example of genetic algorithm?

Assignment For B.Tech. in electrical Engineering 4 th Sem.

BTEE - 41   ANALOG AND DIGITAL ELECTRONICS

PART A

1. What is the application of LED?
2. What is varactor diode and its function?
3. What is high frequency response of source and emitter follower?
4. What are the characteristics of positive and negative feedback amplifier?
5. What is the difference between shunt and series feedback?

PART B

1. What are the basic principles of oscillator with the help of a circuit?
2. What are the applications of RC phase shift and Wien bridge oscillator?

Assignment For B.Tech. in electrical Engineering 4 th Sem.

BTEE - 42 ELECTRO-MECHANICAL ENERGY CONVERSION - II

PART A

1. What is the construction of the DC machine emf equation?
2. What is MMF method for calculation of voltage regulation of synchronous alternator?
3. What is the difference between cylindrical pole and salient pole construction?
4. What is the influence of varying field excitation current on the synchronous motor?
5. Why is the V curve important in a synchronous motor?

PART B

1. What is the principle of operation for a three-phase induction machine based on rotating magnetic field theory?
2. What is the difference between single cage and double cage rotors?

Assignment For B.Tech. in electrical Engineering 4 th Sem.

BTEE - 43 NETWORK ANALYSIS AND SYNTHESIS

PART A

1. What is loop current method of circuit analysis?
2. What is the superposition theorem for two voltage sources?
3. What is Thevenin's theorem and Norton's theorem _____?
4. What is difference between steady-state response and transient response?
5. What is the transfer impedance function of a two-port network?

PARTN B

1. When two two-port networks are connected in parallel which parameter should be found and why?
2. What is the LC immittance function?

BTECH ELECTRICAL

BTEE - 44 ELECTRICAL INSTRUMENTATION AND PROCESS CONTROL

4th SEMESTER

Assignment

PART A

1. What are the uses of electrical transducers?
2. What are the characteristics of classification in biology?
3. What are the two types of potentiometers?
4. What are the different types of Hall effect transducers?
5. What are the components of a digital data acquisition system?

PART B

1. What is the basic principle of a digital storage oscilloscope?
2. What is the XY recorder in instrumentation?

BTECH ELECTRICAL

[BTIS-41]   Industrial Sociology

4th SEMESTER

Assignment

PART   A

1. What is industrial sociology and describe its meaning and scope?
2. What are the different types of social relations?
3. What is the domestic system and the factory system?
4. What is the grievance handling procedure in industrial relations?
5. What is the difference between bipartite and tripartite?

PART   B

1. What is the difference between Labour court and Industrial Tribunal?
2. What are the limitations of industrialization in economic development?

BTECH ELECTRICAL

[BTAC-41] Cyber Security

4th SEMESTER

Assignment

PART A

1. What IS introduction to information system?
2. What are the steps involved in the development of information systems?
3. What are the security issues in e-commerce explain security measures of e-commerce?
4. What are application security methods?
5. Why do you think defining our policy is important to address company wide?

PART   B

1. Why policies should be developed in cyber security?
2. How many cyber laws are there in India?