

# **J.S University**

## **Assignment For B.TECH in electronic and communication Engineering 4<sup>TH</sup> Sem.**

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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.

<b>Subject code</b>	<b>Subject name</b>
<b>BEC 1</b>	SCIENCE BASED OPEN ELECTIVE
<b>BEC2</b>	DATA STRUCTURE
<b>BEC3</b>	ELECTRONIC CIRCUIT
<b>BEC 4</b>	ELECTRONIC MEASUREMENT AND INSTRUMENTATION
<b>BEC 5</b>	ELECTROMAGNETIC FIELD THEORY
<b>BEC 6</b>	INDUSTRIAL SOCIOLOGY
<b>BEC 7</b>	CYBER SECURITY

# **J.S UNIVERSITY**

## **Cover page of Assignment**

ID NUMBER .....  
NAME .....  
COURSE B.TECH  
STREAM EC .....  
SEM 4<sup>TH</sup> SEM.....  
SUBJECT CODE .....  
SUBJECT NAME .....

**ASSIGNMENT FOR B.TECH 4<sup>TH</sup> SEM EC ENGINEERING**

**DATA STRUCTURE**

**Part A**

1. EXPLAIN THE TIME AND SPACE COMPLEXITY?
2. EXPLAIN ARRAYS AND ALL TYPES ?
3. EXPLAIN BASIC TERMINOLOGY OF TREE AND BINARY TREE?
4. WHAT IS HUFFMAN ALGORITHM ?
5. WHAT IS TRANSVERSING THREADED BINARY TREES?

**Part B**

1. WRITE THE DIFFERENCE BETWEEN HEAP SORT AND RADIX SORT ?
2. WRITE SHORT NOTE ON ACTIVITY NETWORKS ?

## ASSIGNMENT FOR B.TECH 4<sup>TH</sup> SEM EC ENGINEERING

### ELECTRONIC CIRCUIT

#### Part A

1. **1 qus.** What is the Difference between voltage and power amplifier?
2. **2 qus.** Describe the Classification of power amplifier class A, B and C?
3. **3 qus.** What is the working of Heat sinks in power amplifiers?
4. **4 qus** what is the advantage of Push-pull amplifier:?
5. **5 qus.** What is Tuned Voltage Amplifier?

#### 6. **Part B**

7. **1 qus** what is positive and negative feedback and their need?
8. **2 qus.** Write the short note on Emitter follower and its applications?

## **ASSIGNMENT FOR B.TECH 4<sup>th</sup> SEM EC ENGINEERING**

### **ELECTRONIC MEASUREMENT AND INSTRUMENTATION**

#### **PART A**

- 1 qus explain the working principle of PMMC instrument?
- 2 qus what is wheatstone bridge ? explain all working principle .
- 3 qus what is CRO? explain its working
- 4 qus write the difference between ammeter and voltmeter?
- 5 qus. what is digital multimeter? explain

#### **PART B**

- 1 qus draw the capacitance and inductance bridge ? and derive the formula .
- 2 qus what is Q meter ? explain its working .

## **ASSIGNMENT FOR B.TECH 4<sup>TH</sup> SEM EC ENGINEERING**

### **ELECTROMAGNETIC FIELD THEORY**

#### **PART A**

- 1 Qus** What Is Poisson's Equation? Derive The Equation
- 2 Qus Write Short Note On Gauss's Law And Maxwell Equations
- 3 Qus What Is Biot-Savart Law ? Derive The Equations
- 4 Qus Explain All Faraday's Law
- 5 Qus Define The Stokes Theorem?

#### **Part B**

- 1 Qus What Are The Properties Of Magnetic Material?
- 2 Qus Define Ampere's Circuit Law?

**ASSIGNMENT FOR B.TECH 4<sup>th</sup> SEM EC ENGINEERING**

**BTIP 31**  
**[ INDUSTRIAL SOCIOLOGY]**

**PART A**

- 1) write the definition and scope of industrial sociology
- 2) explain the stress management
- 3) write the brief information of leadership
- 4) what are the types of productive system for early industrialism?
- 5) explain the performance and management training

**PART B**

- 1) what are the causes of strike and lockouts ?
- 2) what are the scheme of worker participation in management?

**ASSIGNMENT FOR B.TECH 4<sup>th</sup> SEM EC ENGINEERING**

**BTAC 31  
[Cyber Security]  
PART A**

- 1 What Is Information System ?And What Are The Types Of Information System?**
- 2 What Is Cyber Security And Security Risk Analysis?**
- 3 What Are The Benifits Of Electronics Payment System?**
- 4 What Are The Cyber Laws In India?**
- 5 What Is Security Policies ?Why Policies Should Be Developed ?**

**Part B**

- 1 What Is Intellectual Property Law ? Explain**
- 2 What Is Semiconductor Lawand Patent Law?**