J.S University

Assignment for diploma in electrical engineering 2nd 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 LIST

Subject code	Subject name
DAS-22	Applied mathematics 2
DAS-23	Applied Physics-II
DEE-21	Basic Electrical Engg
DEC-21	Electronics - I
DDW-21	Engineering Drawing

J.S UNIVERSITY

Cover page of Assignment

ID NUMBER ……

NAME ……

COURSE DIPLOMA

STREAM ELECTRICAL……

SEM 2nd ……

SUBJECT CODE ……

SUBJECT NAME ……

ASSIGNMENT FOR DIPLOMA 2nd SEM ELECTRICAL ENGINEERING

Applied Mathematics 2

Part A

1. Show that cot2xcotx - cot3xcot2x - cot3xcotx=1
2. What is Simpson`s 1/3rd rule and Simpson`s 3/8 th rule? Explain with example ?
3. 3.Expand the Determinant

$$\begin{vmatrix} 2 & 4 & 5 \\ 6 & 2 & 1 \\ 3 & 4 & 2 \end{vmatrix}$$

4. Find inverse of matrix $\begin{vmatrix} 3 & 1 & 3 \\ 5 & 1 & 4 \\ 2 & 3 & 7 \end{vmatrix}$

5. Expand (2x+5)^5by the Binomial Theorem\

Part B

6. How many different words can we make using the letters A, B, E and L ?
7. Resolve 1/(x+1)(x+2) into partial fraction

ASSIGNMENT FOR DIPLOMA 2nd SEM ELECTRICAL ENGINEERING

Electronics-I

Part A

(1)- Explain the active and passive component.

(2)- Explain intrinsic and extrinsic semiconductor.

(3)-Explain P-type and N-type semiconductor.

(4)- Explain working of PN junction

(5)- What is LED and Photo diode.

Part B

(1)- Explain the working of npn transistor.

(2)- Draw Logic Gates - Symbol and truth tables of AND, OR, NOT, NAND, NOR and EX-OR gates

(3)- Derive the relation between β and α.

(4)- Draw the input and output characteristics of common base junction.

(5)-Explain effect of temperature in intrinsic and extrinsic semiconductor.

ASSIGNMENT FOR DIPLOMA 2nd SEM ELECTRICAL ENGINEERING

Engineering Drawing

Part A

1) Why are we use electrical symbols.

2) Draw electrical symbol of MSB And DB with switch.

3) Draw electrical symbol of fan regulator and bracket fan.

4) Draw electrical symbol of HRC switch and kit-kat fuse.

5) Draw electrical symbol of chain lamp fixer.

Part B

1) Draw scheme diagram of one light point control from two Place.

2) Draw scheme and multi line diagram of one light from three Place.

3) Draw scheme diagram of open corridor lighting.

4) Draw multiline diagram of close corridor lighting.

5) Draw scheme diagram of domestic room.

ASSIGNMENT FOR DIPLOMA 2nd SEM ELECTRICAL ENGINEERING

Applied Physics 2

Part A

1. What is dopplers effect? Deduce the expression of apparent frequency of sound for the relative motion between the source and observer.
2. Derive an expression of energy of plane progressive sound wave of sure form and hence obtain the expression for energy current (i.e., intensity of sound waves).
3. Differentiate between longitudinal and transverse waves. How are these produced.
4. What do you understand by superposition of waves ? Under what conditions the stationary waves, beats are interference are produced.
5. State the characteristics of a plane progressive waves. Deduce the expression of simple harmonic.

Part B

1. Explain systematic and random errors with the help of an example.
2. What do you mean by dimension of physical quantity? Give the dimensions and units of energy,

ASSIGNMENT FOR DIPLOMA 2nd SEM ELECTRICAL ENGINEERING

Basic Electrical Engg

Part A

1 qus what are the Effect of temperature on the resistance ofconductors,?

2 qus explain the Kirchhoff's laws with example ?(Voltage ansd current both)

3 qus explain the introduction to Thevenin and Superposition theorem?

4 qus what atre the types of capacity of parallel plate capacitor?

5 qus. Explain the Faraday's laws of electromagnetic induction?

Part B

1 quswhat ism Lenz's law,? Explain

2qus what are the Advantage of three phase system over single phase system?