

Sai Nath University

Assignment For Diploma in electrical Engineering 6th 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 code	Subject name
DEE 1	Employability skills – ii
DEE 2	Utilization of electrical energy
DEE 3	Electrical power-ii
DEE 4	Programmable logic controllers and microcontrollers
DEE 5	(Elective) energy management
DEE 6	(Elective) optical fiber communication
DEE 7	(Elective) installation and maintenance of electrical equipment
DEE 8	Entrepreneurship development and management



SAI NATH UNIVERSITY

Cover page of Assignment

ID NUMBER
NAME
COURSE	Diploma Engineering
STREAM	ELECTRICAL.....
SEM	6 th
SUBJECT CODE
SUBJECT NAME

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

EMPLOYABILITY SKILLS – II

Part A

- 1 qus what is Group discussion?
- 2 qus write short note on Mock interview?
- 3 qus. What are the Elements of good presentation?
- 4 qus. What are the Structure and tools of presentation?
- 5 qus write short note on Seminar presentation?

Part B

- 1 qus . what are the benefits of power point presentation?
- 2 qus what are the Structure and tools of presentation?

UTILIZATION OF ELECTRICAL ENERGY

Part A

1 Qus explain the construction and working of incandescent and discharge lamps?

2 qus what are the Laws of illumination ?

3 qus draw and explain the visibility spectrum curve of relative sensitivity of human eye and wave length of light?

4 qus explain the Resistance heating – direct and indirect resistance heating?

5 qus what is Dielectric heating and its applications in various industrial fields?

Part B

1 qus write the Advantages of electric welding?

2 qus explain Electric braking ? and explain

- Plugging
- Rheostatic braking
- Regenerative braking

ELECTRICAL POWER-II

Part A

- 1 qus explain** Common type of faults in both overhead and underground systems?
- 2 qus write the Difference between switch, isolator and circuit breakers.?
- 3 qus what is air SF6 circuit breakers ? explain
- 4 qus explain Fuses? What are the function of fuse and its Types ? explain
- 5 qus what is Electromagnetic relay? Explain their construction and working?

Part B

- 1 qus what are the causes of over voltages?
- 2 qus explain the working of Buchholtz relay protection?

PROGRAMMABLE LOGIC CONTROLLERS AND MICROCONTROLLERS

Part A

- 1 qus **what are the** Advantages of PLCs over electromagnetic relay?
- 2 qus draw tha Building blocks of PLCand explain the all Functions of various blocks?
- 3 qus what are the difference between Memory structures, I/O structure?
- 4 qus write the short note on latch, master control self holding relays.?
- 5 qus what is RTC(Real Time Clock Function)? Explain

Part B

- 1 qus what are the Comparison instructions like equal, not equal, greater, greater than equal, less than, less than equal?
- 3 qus what are the Application of Micro controllers?

ELECTIVE
ENERGY MANAGEMENT

Part A

- 1 qus** what are the need for energy conservation? And explain brief description of oil and coal crisis.
- 2 qus** what are the Macro Level approach for energy conservation at design stage.
- 3 qus** write short note on Initial cost versus life cycle, cost analysis on life cycle basis?
- 4 qus** what are the BIS standards for energy efficient motors, BIS salient design features?
- 5 qus** how to do Calculation of size of capacitor and also explain shunt capacitors, series capacitors?

Part B

- 1 qus** what is Energy audit methodology?
- 2 qus** explain the Construction and design characteristics of energy efficient motors?

ELECTIVE
OPTICAL FIBER COMMUNICATION

Part A

1 qus what are the advantages optical fiber communication and also explain application of fiber optic communication?

2 qus what is Light emitting diodes (LEDs) and explain its Operating characteristics ?

3 qus what are the Comparison between PIN diode and APD.?

4 qus explain the different types of lasers?

5 qus what is the Principles of photo detection? Explain

Part B

1 qus write the difference between directional couplers and star couplers?

2 qus write the short note on wave length division multiplexing?

ELECTIVE

INSTALLATION AND MAINTENANCE OF ELECTRICAL EQUIPMENT

Part A

- 1 qus what are the Tools, accessories and instruments required for installation?
- 2 qus what are the Indian Electricity rules, safety codes?
- 3 qus what are the Types of arrangement for suspension and strain insulators?
- 4 qus write the short note on Testing of insulation resistance to earth?
- 5 qus what are the cable filling compounds?

Part B

- 1 qus write the short note on Maintenance of Transmission and Distribution System?
- 2 qus explain all HT/LT circuit breakers?

ENTREPRENEURSHIP DEVELOPMENT AND MANAGEMENT

Part A

- 1 qus what are the** functions of entrepreneur and barriers in entrepreneurship?
- 2 qus explain Types and conduct of market survey?
- 3 qus what are the Common errors in project report preparations?
- 4 qus write the short note on Principles of management (Henri Fayol, F.W. Taylor)?
- 5 qus what are the Qualities and functions of a leader?

Part B

- 1 qus what are the Theories of motivation (Maslow, Herzberg, McGregor)?
- 2 qus what is Customer Relation Management (CRM)? Explain the Types of CRM