MARWADI SIKSHA SAMITHI
Ramnath Guljarilal Kedia College of Commerce
(Affiliated to Osmania University, NAAC Re-Accredited)
3-1-336, Esamia Bazar, Opp. New Chaderghat Bridge, Hyderabad- 500027.

ELECTRONICS(2022-2023)

BSc Electronics Program Outcome

- Understand the basic concepts of electronics components, network theorem,digital electronics, solid state semi conductor devices, amplifier theory,Analog and Digital circuits, basic circuits, design using circuit maker software and their application.
- Analyze different parameters of various circuits.
- Understand the use of electronics in the field of computer science.
- Perform and testing of different electronics components and circuits.
- Analyze the Input, Output V-I characteristics of the circuits.
- Understand the application of Electronics in domestic appliances.
- Analyze the relationship between analogue and digital circuits.
- Repair small household electrical and electronics appliances.

COURSE OUTCOME

SUBJECT:E1-CIRCUIT ANALYSIS

- Will be able to understand the concept of electronic components and its arrangement to retrieve the results.
- Apply Kirchhoff's laws to any network circuit to get the output.
- Understanding the concept of Node, Mesh, loop and retrieving the current and voltage outcome.
- Measuring the properties like time, frequency, current, wavelength, phase, voltage etc by using circuits and formula.
- Will be able to solve any kind of network which consists of R,L,C components in series and parallel form

SUBJECT: E2-ELECTRONIC DEVICES

- To construct PN junction diode with P-type and N-type materials and calculates its current and voltage parameters.
- To construct Zener, Tunnel, and Varactor diodes and calculates its characteristics.
- How temperature is affected by using different diodes in forward and reverse bias conditions.
- How to construct Transistors in Bi-directional and Uni-directional depending on their terminals.
- How to form Metal oxide semiconductor and to calculate depletion and enhancement modes.
- How to construct LED, LDR, SCR, Photo diode, photo transistor.

SUBJECT: E3- ANALOG CIRCUITS

- How to convert AC signal into DC signal by using Rectifier and Filters.
- How three terminal devices work and how to use SMPS AND UPS technique.
- Calculation of feedback in circuit as positive or negative form.
- How Oscillations are constructed and their types.
- How to generator multiple wave form by using different components.

SUBJECT: E4- LINEAR INTERGRATED CIRCUITS AND BASICS OF COMMUNICATION

- Arranging circuits in linear form and calculating the output.
- Calculation of different operations like addition, subtraction, logarithmic, comparator, differentiation and integration using Amplifier and how to generate Sine, Square, Triangular, A-stable multi-vibrator, Mono stable multi-vibrator.
- Understanding the operation of IC 555 Timer and retrieving Astable and Mono stable multi-vibrators.
- Need of modulation process in communication and generation of AM, FM PM Waves.

SUBJECT: E5-DIGITAL ELECTRONICS (DSE-1)

- How communication is possible between user and any system by using Number systems.
- Applying the laws like Boolean algebra, De-Morgan's to the given circuits and reduces the operation on it.
- How sequential and combinational circuits are formed and used in day to day life.
- Knowing the difference between Analog and Digital signals.
- Application to serial communication.
- Understanding the concept of Microprocessor and how it is used in the process of digital communication.

S**UBJECT: E6- 8051 MICRO CONTROLLER AND APPLICATION**

- Along with Processor how Controller works in process of digital and analog communication.
- How to write assemble language program using different instruction set and addressing modes.
- How it is applicable to LCD, Keyboard, seven segments LED, ADC and DAC etc.
- How to convert analog to digital form vice-versa.

Principal
R.G.Kedia College of Commerce
Ramnia Basti, Hyderabad