

K.T.S.P. Mandal
Hutatma Rajguru Mahavidyalaya, Rajgurunagar

Department of Computer Science

A.Y.2021-22

Course Outcome (SEM- I)
S.Y.B.Sc.(Computer Science)

CS-231- Computer Science Paper-I – Data Structures and Algorithms-I

On completion of the course, student will be able to

CO1- To use well-organized data structures in solving various problems.

CO2- To differentiate the usage of various structures in problem solution

CO3- Implementing algorithms to solve problems using appropriate data structures.

Course Outcome (SEM- I)
S.Y.B.Sc.(Computer Science)

CS-232-Computer Science Paper-II–Software Engineering

On completion of the course, student will be able to

CO1- Compare and chose a process model for a software project development.

CO2- Identify requirements analyze and prepare models.

CO3- Prepare the SRS, Design document, Project plan of a given software system.

Course Outcome (SEM- I)
S.Y.B.Sc. (Computer Science)

**CS-233- Practical course on CS 231 (Data Structures and Algorithms I) and CS 232
(Software Engineering)**

On completion of the course, student will be able to

CO1- Select appropriate data structures as applied to specified problem definition. Implement operations.

CO2- like searching, insertion, and deletion, traversing mechanism etc. on various linear data structures.

CO3- Students will be able to implement Linear structures.

CO4- Implement appropriate sorting/searching technique for given problem

CO5- Determine and analyze the complexity of given Algorithms

Course Outcome (SEM- I)
S.Y.B.Sc. (Computer Science)

ELC-231– Electronic Science Paper-I – Microcontroller architecture & Programming

On completion of the course, student will be able to

CO1- To write programs for 8051 microcontroller

CO2- To interface I/O peripherals to 8051 microcontroller

CO3- To design small microcontroller based projects

Course Outcome (SEM- I)
S.Y.B.Sc. (Computer Science)

ELC-232– Electronic Science Paper-II –Digital communication & Networking

On completion of the course, student will be able to

CO1- Define and explain terminologies of data communication

CO2- Understand the impact and limitations of various digital modulation techniques

CO3- communication to acknowledge the need of spread spectrum schemes.

CO4- Identify functions of data link layer and network layer while accessing communication link

CO5- To choose appropriate and advanced techniques to build the computer network

Course Outcome (SEM- I)
S.Y.B.Sc. (Computer Science)

ELC-233–Electronic Science Paper-III- Practical Course

On completion of the course, student will be able to

CO1- To design and build his/her own microcontroller based projects.

CO2- To acquire skills of Embedded C programming

CO3- To know multiplexing and modulation techniques useful in developing wireless
Application

CO4- Do build and test own network and do settings.

Course Outcome (SEM- II)
S.Y.B.Sc.(Computer Science)

CS-241- Computer Science Paper-I – Data Structures and Algorithms-II

On completion of the course, student will be able to

CO1- Implementation of different data structures efficiently

CO2- Usage of well-organized data structures to handle large amount of data

CO3- Usage of appropriate data structures for problem solving

Course Outcome (SEM- II)
S.Y.B.Sc.(Computer Science)

CS-242-Computer Science Paper-II– Computer Networks-I

On completion of the course, student will be able to

CO1- Have a good understanding of the OSI and TCP/IP Reference Models and in particular have a good knowledge of Layers.

CO2- Understand the working of various protocols.

CO3- Analyze the requirements for a given organizational structure and select the most appropriate networking architecture and technologies

Course Outcome (SEM- II)
S.Y.B.Sc. (Computer Science)

CS-243- Practical course on CS 241 (Data Structures and Algorithms II) and CS 242 (Computer Networks-I)

On completion of the course, student will be able to

CO1- . Implement operations like searching, insertion, and deletion, traversing mechanism etc. on trees data structures.

CO2- Students will be able to implement Non-Linear data structures.

CO3- Design advance data structure using Non-Linear data structure.

Course Outcome (SEM- II)
S.Y.B.Sc. (Computer Science)

ELC-241– Electronic Science Paper-I – Embedded System Design

On completion of the course, student will be able to

CO1- To understand the difference between general computing and the embedded systems.

CO2- To know the fundamentals of embedded systems.

CO3- Understand the use of Single board Computer (Such as Raspberry Pi) for an embedded system application.

CO4- Familiar with the programming environment to develop embedded systems and their interfaces with peripheral devices.

CO5- To develop familiarity with tools used to develop in an embedded environment.

Course Outcome (SEM- II)
S.Y.B.Sc. (Computer Science)

ELC-242– Electronic Science Paper-II –Wireless Communication and Internet of Things (IoT)

On completion of the course, student will be able to

CO1- Know working of wireless technologies such as Mobile communication, GSM, GPRS.

CO2- Become familiar with 3G and 4G Cellular Network Technologies for Data Connections.

CO3- Understand working principles of short-range communication application

CO4- Get introduce to upcoming technology of Internet of Things

CO5- Explore themselves and develop new IoT based applications

Course Outcome (SEM- II)
S.Y.B.Sc. (Computer Science)

ELC-243–Electronic Science Paper-III- Practical Course

On completion of the course, student will be able to

CO1- To design and develop own smart applications using Rasberry-Pi.

CO2- To write Python program for simple applications.

CO3- To build own IoT based system.