

# **DEPARTMENT OF COMPUTER SCIENCE**

## **Introduction :**

Department of B.Com with (Computer Science) is established in the academic year 2015-16. The sanctioned student's strength is 60. The highlights of the department as follows,

- ✓ The department provides in-depth knowledge about the subjects through quality education.
- ✓ The course involves design and development of programs like MS-Office, C, SQL, Tally, VB, and HTML.
- ✓ The department conducts Guest Lectures, Seminars, Workshops and takes students to industrial visits.
- ✓ The department prepares students to pursue post Graduation Courses and professional courses like CA, ICWA.
- ✓ The course provides dual employment opportunities in the field of both Commerce and IT.
- ✓ The department grooms the students as outstanding professionals in harmony with corporate expectation.

## **Department Vision**

To provide quality education in the field of Commerce with Computer Applications and transform the students into competent Commerce professionals enabling attainment of social and economic goals.

## **Department Mission**

The mission of the Computer Science Department is to prepare students for careers as software professionals and for advanced studies in Computer Science. We develop and work with a range of technologies to build systems and applications that help solve today's problems, and share skills and knowledge with the community.

## **Programme Educational Objective (PEO)**

### *The graduate will*

- PEO1 :** To get in depth knowledge in Commerce and Computer Application courses.
- PEO2 :** Posses competent skills in micro areas like Accounting, Taxation, Banking, Insurance and E-Commerce.
- PEO3 :** Be able to find solutions to the real time problems in the business with the specialized knowledge developed through practical training.
- PEO4 :** Develop a programme for system based applications and web page creation for business enterprises.
- PEO5 :** Work in teams with enriched communication and intellectual skills.

## **Programme Outcome (PO)**

At the end of the programme, graduating students/graduates will be able to

- PO1 :** Gain knowledge in commerce and accounting software for corporate requirements.
- PO2 :** Get employment in IT fields, Software, Banks, Companies, BPOs and KPOs.
- PO3 :** Demonstrate professional ethics in the social and legal aspects of commerce.
- PO4 :** Motivate to pursue higher education
- PO5 :** Integrate the ethical behavior in self-learning, apply towards lifelong learning and acquiring knowledge in modern corporate and the IT sector.

## **Program Specific Outcome (PSO)**

- PSO1:** Understand the concepts of commerce and computer application operations.
- PSO2:** Apply the current techniques, skills, and tools necessary for computing practices.
- PSO3:** Ability to design, implement domain knowledge for computer programming.

## Department of Computer Science

**Course : B.Com (Computers)**

**Year : I Semester : I**

**Subject Name : Introduction to Computers**

**Subject Code : SC1.5**

- CO1 Exploring the components and working principles of computer.
- CO2 Understand how the graphical data stored in memory and processing textual data
- CO3 Get to know about memory units, input and output devices
- CO4 Learn about computer software and the types of software.
- CO5 Gain knowledge about word-processing and presentation skills using MS-Office.
- CO6 Students can create text documents; insert header/footer and do formatting.
- CO7 Explore the features of MS Office and get to know about the tools like spell check
- CO8 Learn to insert pictures, objects, use the template and mail merge option.
- CO9 Learn to create professional presentations using MS Powerpoint
- C10 Explore the features of MS Powerpoint and get to know about presentation tools like Slide Transition, Custom Animation.

**Course : B.Com (Computers)**

**Year : I Semester : I**

**Subject Name : Programming in C**

**Subject Code : SC1.6**

- CO1 Exploring the characteristics and application of C Program.
- CO2 Understand the concept of Constants, Variables and Data Types.
- CO3 Get to know about operators and its expression.
- CO4 Learn about formatted and unformatted input and output statements.
- CO5 Gain knowledge about control statements like conditional and unconditional statements
- CO6 Learn about looping statements
- CO7 Learn about arrays and types of arrays.
- CO8 Learn about handling characters and strings.
- CO9 Understand the concept of functions, types of functions.
- C010 Learn to write C Programs on different applications.

## **Department of B.Com (Computers)**

**Course : B.Com (Computers)**

**Year : I Semester : II**

**Subject Name : Numerical & Statistical Methods**

**Subject Code : SC2.5**

- CO1 Describes the meaning and concepts of Statistics and numerical computing.
- CO2 Learn about computer arithmetic operations, polynomial interpolation solution to linear and non-linear equation.
- CO3 Demonstrates different measures of central tendency, variations and identifies the significance of coefficient of variation.
- CO4 Identifies the various types of correlation and its significance.
- CO5 Estimates the value of unknown variable using regression.
- CO6 Learn about probability, normal and exponential probability distribution.
- CO7 Reveals the components of time series and analyze the causes of variations in Time Series.
- CO8 Learn to write C programs to solve statistical problems.

**Course : B.Com (Computers)**

**Year : I Semester : II**

**Subject Name : System Analysis and Design**

**Subject Code : SC2.6**

- CO1 Exploring the concept of Information and Data, Management Structure and qualities of information.
- CO2 Understand the role & task of System Analyst.
- CO3 Get to know about information gathering and system specific requirement.
- CO4 Learn about feasibility analysis, data flow diagrams, decision tables.
- CO5 Gain knowledge about database, data input methods and designing output.
- CO6 Learn about implementation of information system.
- CO7 Gain knowledge about Tally to maintain business records.
- CO8 Understand the concept of company, creating company in Tally
- CO9 Learn to create groups, ledgers, vouchers in Tally
- CO10 Gain knowledge about profit and loss account and balance sheet in Tally

## Department of B.Com (Computers)

**Course : B.Com (Computers)**

**Year : II Semester : III**

**Subject Name : Database Management System**

**Subject Code : SC3.5**

- CO1 Understand the basic concepts of DBMS
- CO2 Gain the knowledge of functions, structure and types of DBMS
- CO3 Learn about physical and logical database models.
- CO4 Understand the concept of RDBMS, Keys and Normal Forms.
- CO5 Identifies the basic needs of SQL.
- CO6 Learn to create, alter and remove database in SQL.
- CO7 Understand the concept of retrieval data from database.
- CO8 Learn to create computed fields, sorting, built-in-functions.
- CO9 Gain the knowledge of join, union, views and indexes.
- CO10 Understand the concept of database backup, importance & causes of backup.
- CO11 Learn about database recovery, recovery techniques.

**Course : B.Com (Computers)**

**Year : II Semester : III**

**Subject Name : Management Information System-I**

**Subject Code : SC3.6**

- CO1 Understand the basic concepts of MIS.
- CO2 Gain the knowledge of MIS and other academic disciplines, sub systems of MIS.
- CO3 Learn about MIS professionals, structure of MIS, decision making, uses of MIS.
- CO4 Understand the concept of computer system, communication facilities and communication networks.
- CO5 Gain knowledge about storage and retrieval of data, physical storage devices, file and database organization.
- CO6 Learn about transaction processing, document preparation.
- CO7 Gain knowledge about information processing control.
- CO8 Understand the concept of information system availability controls and case study.

## **Department of B.Com (Computers)**

**Course : B.Com (Computers)**

**Year : II Semester : IV**

**Subject Name : Business Computing**

**Subject Code : SC4.5**

- CO1 Understand the basic concepts of HTML & HTML Documents.
- CO2 Gain the knowledge of creating HTML documents, Markup tags & Heading tags
- CO3 Learn about Text Formatting tags, Ordered & Unordered List tags.
- CO4 Understand the concept of Linking, Hyperlink, Bookmark.
- CO5 Gain the knowledge of creating Frames and Tabs.
- CO6 Learn about basic principles of web designing, navigation bar & page layout.
- CO7 Understand the concept of spreadsheet program like MS Excel.
- CO8 Learn to create workbook, mathematical calculations using functions in MS Excel.
- CO9 Gain the knowledge of manipulating data, sorting data, filtering data.
- CO10 Understand the concept of graphical representation of data using Charts.
- CO11 Learn about database management manipulating sheet.

**Course : B.Com (Computers)**

**Year : II Semester : IV**

**Subject Name : Management Information System-II**

**Subject Code : SC4.6**

- CO1 Understand the basic concepts of system, types of system & sub system.
- CO2 Gain the knowledge of system stress and system change.
- CO3 Learn about organizational planning, characteristics of control process & information system support for control.
- CO4 Understand the concept of basic model of organizational structure, information processing model, organizational culture and power & organizational change.
- CO5 Gain knowledge about management theories, organizations as socio-technical systems and implementations of management theories.
- CO6 Learn about decision support system & expert system.
- CO7 Gain knowledge about planning support system.
- CO8 Understand the concept of support system for management of knowledge work.

## **Department of B.Com (Computers)**

**Course : B.Com (Computers)**

**Year : III Semester : V**

**Subject Name : Computer Networks**

**Subject Code : SC5.5**

- CO1 Understand the basic concepts of networks, data transmission.
- CO2 Gain the knowledge of classification of networks, transmission media & components of network.
- CO3 Learn about network standards, OSI Models & its layers.
- CO4 Understand the concept of IEEE standards, Ethernet, IEEE 802.4 & IEEE 802.5
- CO4 Gain the knowledge of token bus, token ring & X.25 protocol.
- CO5 Learn about LAN architecture, advantages and services.
- CO6 Understand the characteristics of LAN, LAN topologies & CSMA/CD based LAN
- CO7 Learn about IBM token ring network, high speed LAN& Fast Ethernet.
- CO8 Gain the knowledge of Gigabit Ethernet, FDDI Network & Wireless LAN.

**Course : B.Com (Computers)**

**Year : III Semester : V**

**Subject Name : Visual Programming**

**Subject Code : SC5.6**

- CO1 Understand the basic concepts of Visual Programming.
- CO2 Gain the knowledge of creating programs, running the programs & basic commands.
- CO3 Learn about drawing on the screen, drawing on the window, object & norms.
- CO4 Understand the concept of If Then command, adding menu bar & popup menus.
- CO5 Gain knowledge of array variables, saving programs and creating an EXE program.
- CO6 Learn about creating user interface programs & building address book.
- CO7 Gain knowledge about editing tools, searching, printing, sorting and deleting data.
- CO8 Understand the concept of data aware control, creating menu bar & writing code.

## **Department of B.Com (Computers)**

**Course : B.Com (Computers)**

**Year : III Semester : VI**

**Subject Name : Internet & E-Governance**

**Subject Code : SC6.5**

- CO1 Understand the basic concepts of communication networks, LAN & WAN.
- CO2 Gain the knowledge of Protocols, OSI Model and its layers.
- CO3 Learn about Internet, TCP/IP & Client Server Model.
- CO4 Understand the concept of E-mail, USENET, WWW, Hyper Text.
- CO4 Gain the knowledge of HTTP, URL & HTML Programming.
- CO5 Learn about E-Commerce, Applications of E-Commerce & NSFNET
- CO6 Understand the concept of architecture and component of E-Commerce.
- CO7 Learn about Internet Governance, Internet Society & Internet Applications.
- CO8 Gain the knowledge of Client Server network security & Encrypted document.
- CO9 Understand the concept of Hypertext publishing, EDI & Information based marketing, advertising on the Internet.
- CO10 Learn about E-Governance applications in administration and planning.

**Course : B.Com (Computers)**

**Year : III Semester : VI**

**Subject Name : Multimedia**

**Subject Code : SC6.6**

- CO1 Understand the basic concepts of multimedia & elements of multimedia.
- CO2 Gain the knowledge of growth & categories of multimedia.
- CO3 Learn about hardware components of multimedia system – playback system & development system.
- CO4 Understand the concept of texts & graphics, sound, animation and video.
- CO5 Gain knowledge about multimedia authoring programs, delivering multimedia.
- CO6 Learn about developing multimedia titles – planning, creating and testing phase.
- CO7 Gain knowledge about basic design principles of multimedia, interactive design.
- CO8 Understand the concept of producing and distributing multimedia titles.
- CO9 Learn about the internet and world wide web.
- CO10 Gain the knowledge of issues and trends in multimedia.