DEPARTMENT OF B.C.A. (SCIENCE)

BCA(Science)

Program Outcomes:

After successful completion of **BCA(Science)** Programme students will be able to:

PO1: SCIENCE KNOWLEDGE :

Apply the knowledge of mathematics, science, electronics, computers science fundamentals, and a specialization to the solution of complex science problems.

PO2: DESCRIBE / DESIGN/DEVELOPMENT OF SOLUTIONS :

Design solutions for complex computer science problems and design system components or processes or programs that meet the specified needs with appropriate consideration for public health and safety and cultural, societal, and environmental considerations. i.e. to Discuss /design software development fundamentals, including programming, data structures, algorithms and complexity.

PO3: CONDUCT INVESTIGATIONS OF COMPLEX PROBLEMS :

Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions. i.e. Illustrate the concepts of systems fundamentals, including architectures and organization, operating systems, networking and communication.

PO4: MODERN TOOLS/SOFTWARE /PROGRAMMING LANGUAGE USAGE:

Create, select, and apply appropriate techniques, resources, and modern IT tools, including prediction and modeling to complex activities, with an understanding of the limitations. i.e., Gain the knowledge about software engineering fundamentals, including software analysis and design, evaluation and testing, and software Engineering processes.

PO5: ENVIRONMENT AND SUSTAINABILITY:

Understand the impact of the professional IT solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO6: PROFESSIONAL SKILLS:

Develop hard skills and soft skills through various tools, case studies. Ability to express thoughts and ideas effectively in writing and orally; Communicate with others using appropriate media; confidently share the views and express herself/himself; demonstrate the ability to listen carefully, read and write analytically, and present complex information in a clear and concise manner to different groups. Understand the roles and responsibilities of the professional.

PO7: PRACTICAL IMPLEMENTATION:

Apply computer literacy of students and basic understanding of operative systems and working knowledge of software commonly used in academic and professional environments.

PO8: COOPERATION AND TEAMWORK:

Ability to work effectively and respectfully with diverse teams; facilitate cooperative or coordinated effort on the part of a group, and act together as a group or a team in the interests of a common cause and work efficiently as a member of a team.

PO9: ENTREPRENEURIAL DEVELOPMENT:

Impart knowledge required for planning, designing, and building Complex Software Application, automated systems. Develop business expertise, analytical skills, and financial literacy necessary in the IT industry.

PO10: GOAL ORIENTED AND LIFELONG LEARNING:

Ability to acquire knowledge and skills, including learning how to learn that are necessary for participating in learning activities throughout life. Develop technical knowledge for immediate employment and for life-long learning in advanced areas of computer science and related fields.

PO11: CRITICAL THINKING FOR PROBLEM SOLVING:

Identify, analyze, formulate, Design and develop the real-world requirements by critical thinking for complex problems in IT enabled services.