Government Degree College Nowshera, J&K

Department Of Computer Applications

PROGRAM OUTCOMES

PO1. Scientific knowledge: Apply the knowledge of mathematics, science, and computing to the solution of complex scientific problems.

PO2. Problem analysis: Identify, formulate, research literature, and analyze complex scientific problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and applied sciences. PO3.

Design/development of solutions: Design solutions for complex problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4.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.

PO5. Modern tools usage: Create, select, and apply appropriate techniques, resources, and modern computing and IT tools including prediction and modelling to complex scientific activities with an understanding of the limitations.

PO6. The software engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional practice.

PO7. Environment and sustainability: Understand the impact of the professional software engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PROGRAM SPECIFIC OUTCOMES

Programme	**Programme Specific Outcomes.**
BSc Computer Science	A graduate with a B.Sc. in Computer Science will have the ability to PSO1. Demonstrate mastery of Computer Science in the following core knowledge areas Data Structures and Programming Languages o Databases, Software Engineering and Development Computer Hardware and Architecture PSO2. Apply problem-solving skills and the knowledge of computer science to solve real world

Course Outcomes:

SEM-I

Course Code	Course Name	Learning Outcome
UCTAC-101	Computer Fundamentals and IT Tools	After completing this course, students will be able to: **LO1.** Understand different Computer Peripherals **LO2**. Understand and apply different Software components **LO3**. Learn WWW & Browsers **LO4**. Learn E-Commerce architectures and applications
UCAPC-150	Practicals based on DOS, windows MS-Office	**LO1**. Apply knowledge of computing to produce effective designs and solutions for specific problems **LO2.** Students will learn basics of Office which includes word, powerpoint. **LO3**. Explore DOS commands i.e Character based OS

SEM-II

Course Code	Course Name	Learning Outcome
UCTAC-201	Problem Solving using C language	After completing this course, students will be able to: **LO1.** Create and initialize variables, constant, arrays, pointers, structures and unions. **LO2**. Manipulate values of variables, arrays, pointers, structures, unions and files. **LO3**. Create the function that can receive variables, arrays, pointers and structures.
UCAPC-250	Practicals based on C language	**LO1.** Manipulate values of variables, arrays, pointers, structures, unions and files. **LO2.** Learn Basic C language programming

SEM-III

Course Code	Course Name	Learning Outcome
UCTAC-301	Data and File Structures using C language	After completing this course satisfactorily, a student will be able to: **LO1.** Describe how arrays, records, linked structures, stacks, queues, trees, and graphs are represented in memory and used by algorithms [ABET (a, b, c, i)]. **LO2.** Describe common applications for arrays, records, linked structures, stacks, queues, trees, and graphs [ABET (a, b, c) .
UCAPC-350	Practicals based on Data and File Structures	**LO1**. Demonstrate different methods for traversing trees [ABET (a)]. **LO2.**Compare alternative implementations of data structures with respect to performance [ABET (a, b, c)]. • Compare and contrast the benefits of dynamic and static data structures implementations [ABET (a, b, c)].
UCAPS-351	Skill Enhancement Course	**LO1.** Develop skills of PC Assembly and Installation

SEM-IV

Course Code	Course Name	Learning Outcome
UCTAC-401	Data and File Structures using C language	After completing this course satisfactorily, a student will be able to: LO1. Describe how arrays, records, linked structures, stacks, queues, trees, and graphs are represented in memory and used by algorithms [ABET (a, b, c, i)]. LO2. Describe common applications for arrays, records, linked structures, stacks, queues, trees, and graphs [ABET (a, b, c) .
UCAPC-450	Practicals based on Data and File Structures	LO1. Demonstrate different methods for traversing trees [ABET (a)]. LO2. Compare alternative implementations of data structures with respect to performance [ABET (a, b, c)]. • Compare and contrast the benefits of dynamic and static data structures implementations [ABET (a, b, c)].

SEM-V

Course Code	Course Name	Learning Outcome
UCTAC-501	Fundamentals of Operating System	After completing this course, students will be able to: LO1. Allocate Main Memory based on various memory management techniques LO2. Compare Memory allocation using Best fit, Worst fit, and first fit policies LO3. Apply page replacement policies for dynamic memory management LO4. Schedule CPU time using scheduling algorithm for processors
UCAPC-550	Practicals based on (LINUX/UNIX)	LO1. Execute Linux commands LO2. Learn basics of LINUX, operating System , kernel ,shell
UCAPS-551	Multimedia Computing	LO1. understand the characteristics of different media; understand the representations of different multimedia data; understand different data formats; be able to take into considerations in multimedia system designs; LO2 .understand the characteristics of human's visual system; understand the characteristics of human's audio system; be able to take into considerations in multimedia techniques design and

SEM-VI:

Course Code	Course Name	Learning Outcome
UCTAC-601	Networking and Internet	After completing this course, students will be able to: LO1. Create a new protocol and test its efficiency. **LO2**. Design a new network architecture using protocols and interfaces. **LO3**. Create a hybrid topologies using the existing topologies, and check in efficiency.

UCAPC-650	Practicals based on HTML , Javascript	**LO1**. Apply different encoding and decoding mechanisms involved in different types of transmission media and to measure the transmission impairments. **LO2**. Design a model internet with various categories of networks and test the transmission rate