



NEWS LETTER

Dec-2023

DEPARTMENT

OF

COMPUTER APPLICATIONS

Department of Computer Applications

Highlights of the Department

- 1) The Zest 2k23 started with the enthusiasm and it brought good news for the BCA Department. Prerna a student of 2nd year and Ankit a student of 3rd year, has made college proud by winning 1st prize in the Duet Singing. Numerous colleges and university from across the region participated in the Zest. The selection process was rigorous and each event had its panel of judges. This was the greatest opportunity for a student to highlight his/her college and both did very well.
- 2) Kshitiz a student of 1st Year also got prize in Band Singing.







"The ultimate promise of **Technology** is to make us Master of a world that we command by the push of a button."

"Exploring the Cutting-Edge Horizons of Computer Science: A Student's Perspective"



Introduction:

In an era defined by technological marvels and rapid advancements, the realm of Computer Science stands as the beating heart of innovation. As students passionate about unraveling the mysteries of code, algorithms, and the digital landscape, we are thrilled to embark on this journey in the Department of Computer Applications at [Your College]. In this article, we aim to shed light on the captivating world of computer science and the role it plays in shaping the future.

The Dynamic Landscape of Computer Science:

Computer Science is not just a field of study; it's a dynamic ecosystem constantly evolving with each passing day. From the early days of punch cards and mainframes to the current era of cloud computing, artificial intelligence, and blockchain, the discipline has witnessed an extraordinary transformation. As students, we are excited to dive into the diverse branches of computer science, including software development, data science, cybersecurity, and more.

♣ The Art of Coding:

At the core of computer science lies the art of coding. It's not just about creating lines of commands; it's about crafting solutions to real-world problems. Whether it's developing a user-friendly app, optimizing algorithms for efficiency, or creating secure software systems, coding is the language through which we bring ideas to life. The Department of Computer Applications at [Your College] equips us with the knowledge and skills needed to become proficient coders capable of navigating the complexities of the digital age.

Real-World Applications:

One of the most exciting aspects of studying computer science is witnessing the tangible impact it has on the real world. Whether it's revolutionizing healthcare with predictive analytics, transforming education through elearning platforms, or enhancing communication through social media algorithms, computer science has permeated every aspect of our lives. Through hands-on projects and industry collaborations, [Your College] ensures that we, as students, are not just learning theories but actively applying our knowledge to solve real-world challenges.

The Collaborative Community:

In the Department of Computer Applications, we are not merely students; we are part of a collaborative community driven by a shared passion for technology. The exchange of ideas, collaborative projects, and mentorship opportunities create an environment that nurtures creativity and critical thinking. As students, we are not just learning from textbooks; we are learning from each other, fostering a culture of innovation and camaraderie.

4 Conclusion:

As students embarking on this exciting journey in the Department of Computer Applications at [Your College], we are not just gaining an education; we are becoming pioneers in a field that shapes the future. The fusion of theoretical knowledge, practical skills, and a collaborative community sets the stage for a transformative learning experience. We are ready to embrace the challenges, celebrate the victories, and contribute our part to the everevolving tapestry of computer science. The possibilities are limitless, and we are eager to explore them all.

Syllabus to be covered

Ist Year	2nd Year	3 rd Year	
Subject :- C Programming UNIT IV: math.h, string.h, process.h., Usage of command line arguments	Subject:- OOP's Using C++ UNIT IV: Inheritance and Polymorphism error handling during file operations, file pointers and their manipulations, sequential access to file, random input and output operations, persistent objects, command line arguments.	Subject-CLOUD COMPUTING UNIT IV: , VMware: full virtualization, Types of hardware virtualization: Full virtualization - partial virtualization - para virtualization	
Subject:-Fundamentals of Computer IT UNIT IV Digital and Analog Transmission, Network topologies, Network Types (LAN, WAN and MAN), Basics of Internet and Intranet.	Subject:- Python UNIT IV File handling: Types of Files (Text file, Binary Files, CSV file), Creation, writing, appending, Insertion, deletion, updating, modification of Data in into the files.	Subject:-Computer Graphics – UNIT IV Hidden Surface Removal: Depth-Buffer (z-buffer) method, Depth-sorting Method (Painter"s algorithm)	
Subject:-Discrete mathematics – UNIT IV Isomorphic graphs, path and circuit (Floyd"s and Warshall algorithms), Connected graph, Hamiltonian graph, Euler graph, Graph coloring (Vertex, Edges and Map).	UNIT IV: Transport and upper layers in OSI Model: Transport layer functions and Protocols, connection management, functions of session layers, Presentation layer, and Application layer	Subject: Machine learning with Python: UNIT IV: Implementation of Unsupervised algorithms. Feature selection and Dimensionality reduction, Principal Component Analysis	
Subject- Web Technology UNIT IV Web Hosting Concepts: Concept of domain- Physical domain, virtual domain, registering a domain, need of IP addressing, Web Hosting and Publishing Concepts	Subject:-Computer Organization & Architecture UNIT IV:- Memory Organization: Main Memory, Auxiliary Memory, Associative Memory, Cache Memory, Virtual Memory.	Subject:- operating system UNIT IV :- Linux File Security: Permission types, Examining permissions, changing permissions (symbolic method numeric method)	
Subject:- Bridge course in Mathematics – UNIT II Simple problems based on Methods of Integration Substitution, By Parts, Partial Fractions, Integration of Algebraic and transcendental Functions.	Subject:- Asp.net - Advanced control programming, Tracking user sessions, web servers controls, Error handling	Subject:- BCA 5 th Sem Summer Training Presentation	

ACTIVITIES

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
04.12.2023 Internal Exam of all the semester	05.12.2023 Internal Exam of all the semester	06.12.2023 Internal Exam of all the semester	7.12.2023 Internal Exam of all the semester	8.12.2023 Internal Exam of all the semester	
			14.12.2023 External Viva	15.12.2023 External Viva	16.12.2023 External Viva
18.12.2023 External Viva	19.12.2023 External Viva	20.12.2023 External Viva	21.12.2023 External Viva	22.12.2023 External Viva	23.12.2023 External Viva
25.12.2023 Christmas Eve		Subject Revisions by concern Teachers	Subject Revisions by concern Teachers	Subject Revisions by concern Teachers	Subject Revisions by concern Teachers



By: Department Of Computer Applications

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