GOVERNMENT COLLEGE ROPAR

(Affiliated To Punjabi University, Patiala)

PROGRAMME OUTCOMES

Post Graduate Programme Outcomes-

Post Graduate programme at Government College Ropar are outcome-based, with the following expected outcomes:

PO1	**Critical Thinking and Problem-Solving Skills:**Learners will gain advanced critical thinking and problem-solving abilities. They will be able to analyze complicated topics, assess evidence, examine many points of view, and develop novel solutions.
PO2	**Advanced Knowledge and Expertise:** Graduate programs aim to provide students with a deep understanding of their chosen field or specialization. Graduates will have acquired advanced knowledge, theories, methodologies, and skills specific to their area of study.
PO3	**Research and Scholarly Abilities:** Graduates will have the ability to design and conduct independent research, critically analyze existing literature, and contribute to the advancement of knowledge in their field.
PO4	**Effective Communication:**Focusing on developing strong communication skills. Students will be able to articulate complex ideas and research findings clearly and effectively, both in written and oral forms, to both specialized and non-specialized audiences.
PO5	**Cross-Disciplinary Knowledge:** Depending on the program, graduates may acquire cross-disciplinary knowledge, enabling them to integrate and apply concepts and methodologies from multiple fields to address complex problems and contribute to interdisciplinary collaboration.
PO6	**Professional Ethics and Responsibility:**emphasizing professional ethics, integrity, and social responsibility. Graduates will be equipped with ethical decision-making skills and an understanding of the social and ethical implications of their work.
PO7	**Professional and Career Development:**Providing students with opportunities for professional development, including internships, industry collaborations, and networking events.
PO8	**Adaptability and Lifelong Learning:** Programs aim to cultivate a growth mindset and a commitment to lifelong learning. Graduates will be prepared to adapt to new challenges, acquire new knowledge, and continuously develop their skills throughout their careers.

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PROGRAMME SPECIFIC OUTCOMES

P.G.D.C.A

The Post Graduate Diploma in Computer Application Government College Ropar is outcome-based, with the following PSOs required.

PSO1	**Proficiency in Computer Science**: Students will gain in-depth knowledge of computer science, including languages. They will understand the fundamental principles, laws, and theories governing these subjects and be able to apply them in practical applications.
PSO2	**Solid Foundation in Mathematics:** Graduates will have a strong understanding of mathematical concepts, including calculus, algebra, statistics, and numerical methods, providing them with a solid foundation for further study or careers in fields such as mathematics or computer science.
PSO3	**Lab Techniques and Project Work:** Learners will have practical experience in computerlabs, experimental design, data collection, analysis, and interpretation.
PSO4	**Research Methodology:** Graduates will have a good understanding of research methodologies and be able to design , analyze data, and draw meaningful conclusions.
PSO5	**Problem-Solving and Critical Thinking:** Graduates will be able to analyze complex problems, think critically, and apply logical reasoning.
PSO6	**EffectiveCommunication** :Effective communication is essential in the field of computer science, as it enables clear understanding, collaboration, and successful completion of projects. Here are some key aspects of effective communication in computer science:
PSO7	**Continuous Learning and Professional Development:** Program aim to instill a passion for continuous learning and professional development. Graduates will be equipped with the skills and motivation to pursue further education, such as postgraduate studies or professional certifications, and to keep up with advancements in their field.

The Post Graduate Diploma in Computer Application Programme at Government College Ropar is outcome-based, with the following COs required

P.G.D.C.A SEM 1		
Course Name	**Course Outcomes**	
Information Technology and E -commerce	CO1	E-commerce involves conducting business activities online. You'll learn about the principles and models of e-commerce, including B2C (Business-to-Consumer), B2B (Business-to-Business), C2C (Consumer-to-Consumer), and emerging models.
	CO2	Students gain skills in designing and developing e-commerce systems using relevant technologies and frameworks
Computer Programming Using C	CO1	C is a powerful programming language used for system-level programming and developing efficient algorithms
	CO2	C provides direct memory access, and understanding memory management is crucial
Windows Operating System and office automation	CO1	Students will gain a solid understanding of the Windows operating system, including its features, functionalities, and user interface.
	CO2	Student learn how to navigate the Windows interface effectively, customize the desktop environment, and manage files and folders.

P.G.D.C.A SEM 2		
Course Name	**Course Outcomes**	
Database Management System	CO1	Students will gain a solid understanding of fundamental database concepts, including data models, database architecture, relational algebra, normalization, and database design principles
	CO2	Students learn SQL statements and techniques for retrieving, updating, inserting, and deleting data from databases
Programming using PYTHON	CO1	Students will gain a solid understanding of the Python programming language, including its syntax, data types, control structures, functions, and object-oriented programming concepts.
	CO2	Python has a vast ecosystem of libraries and frameworks that extend its capabilities.
Web technology	CO1	Students will gain a solid understanding of HTML (Hypertext Markup Language) and CSS (Cascading Style Sheets), which are the foundational technologies for creating web pages and designing their visual appearance.
	CO2	Students learn technologies like JavaScript and frameworks like jQuery to add dynamic elements, handle user interaction