

## Government City College (A) Nayapul, Hyderabad



Affiliated to Osmania University Accredited with B<sup>++</sup> Grade & CGPA 2.76

## **PROGRAMME SPECIFIC OUTCOMES**

## **PHYSICAL SCIENCES**

	PSO1	Understand the basic concepts of Mathematics, get
	-	equipped with problem solving skills and should be able
		to use appropriate formula for arriving at solution,
		should acquire updated knowledge in mathematical
		sciences, should have knowledge on the areas of
		research in the course and get prepared for higher
		education, able to develop communication skills for
		better presentation of the knowledge acquired.
	PSO2	Understand the economic conditions of the nation and
		critically examine in comparison with the other nations.
		Will understand the important sectors of economy like
		Agricultural Sector, Industry Sector and Service Sector
		etc and analyze the reasons for income inequalities,
		poverty and unemployment. Will be able to critically
		evaluate the propose ideas for sustainable utilization of
		environmental and economic resources
Mathematics	PSO3	Understand the political theories related to national,
Economics		international politics and public policy formulation,
Political Science		analyze state centre relations; Will be able to discuss
		major theories and concepts of political science and its
		subfields; Develop critical thinking and inculcate
		research skills; Develop well-articulated presentation
		skills on the constitutional rights, duties and directive
		principles, electoral system, parliamentary proceedings etc.,
	PSO4	Hone their research skills, making and testing of
	F 304	hypothesis, learning about collection, organization,
		tabulation, analysis of data through data sampling
		techniques, random interviews, questionnaires and
		participate in such research conducted by NGOs, Think
		tanks, Media, or Academic Institutions, Understand the
		Inter-disciplinary linkages and connections with which
		students will be able to understand, differentiate the
		prudent and profligate ways of resource use, learning
		the art of prioritizing environment over economy and
		move towards sustainable living.
	PSO1	Understand the basic concepts of Mathematics, get
		equipped with problem solving skills and should be able
		to use appropriate formula for arriving at solution,
		should acquire updated knowledge in mathematical
		sciences, should have knowledge on the areas of
		research in the course and get prepared for higher
		education, able to develop communication skills for
Mathematics	DCCC	better presentation of the knowledge acquired.
Economics	PSO2	Understand the economic conditions of the nation and
Statistics		critically examine in comparison with the other nations.
		Will understand the important sectors of economy like

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	PSO3	Agricultural Sector, Industry Sector and Service Sector etc and analyze the reasons for income inequalities, poverty and unemployment. Will be able to critically evaluate the propose ideas for sustainable utilization of environmental and economic resources  Understand the basic concepts of data collection designs and tools of descriptive statistics, knowledge of data analysis, get equipped with the knowledge on computational techniques; understand the use of statistical methods in areas like agriculture, business, finance etc, able to formulate new problems and identifying solutions for real time problems, areas of research and get prepared for higher education  Hone their research skills, making and testing of hypothesis, learning about collection, organization, tabulation, analysis of data through data sampling techniques, random interviews, questionnaires and participate in such research conducted by NGOs, Think tanks, Media, or Academic Institutions, Understand the Inter-disciplinary linkages and connections with which students will be able to understand, differentiate the prudent and profligate ways of resource use, learning the art of prioritizing environment over economy and move towards sustainable living.
Mathematics Physics Chemistry	PSO1	Understand the basic concepts of Mathematics, get equipped with problem solving skills and should be able to use appropriate formula for arriving at solution, should acquire updated knowledge in mathematical sciences, should have knowledge on the areas of research in the course and get prepared for higher education, able to develop communication skills for better presentation of the knowledge acquired. Understand the basic concepts of methodology of science and the fundamentals of mechanics, properties of matter and thermodynamics, Understand the theoretical basics of quantum mechanics, spectroscopy, electromagnetism, Optics, Nuclear Physics, Solid state Physics, statistical Physics, low temperature physics and electronics in designing of analog and digital circuits, Craft a foundation for higher learning, be initiated into the Basics of research, Attain skills of digital technology application,  Gain the knowledge of Chemistry through theory and practical: able to explain nomenclature, stereochemistry, structures, reactivity and mechanism of the chemical reactions; identify chemical formulae and solve numerical problems; use modern chemical tools, models, chem-draw, charts and equipment; know
	PSO4	structure-activity relationship; Understand good laboratory practices and safety; Develop research-oriented skills, Make aware and handle the sophisticated instruments/equipment Will be able to perform short research projects, pursue higher education in any of the courses, opt for bachelors in education, with value added skills acquired in the program will be able to take up a suitable position industry

	PSO1	Understand the basic concepts of Mathematics, get equipped with problem solving skills and should be able to use appropriate formula for arriving at solution, should acquire updated knowledge in mathematical sciences, should have knowledge on the areas of research in the course and get prepared for higher education, able to develop communication skills for better presentation of the knowledge acquired. Understand the basic concepts of methodology of science and the fundamentals of mechanics, properties of matter and thermodynamics, Understand the theoretical basics of quantum mechanics, spectroscopy, electromagnetism, Optics, Nuclear Physics, Solid state Physics, statistical Physics, low temperature physics and
Mathematics Physics Computer Science	PSO3	electronics in designing of analog and digital circuits, Craft a foundation for higher learning, be initiated into the Basics of research, Attain skills of digital technology application Understand the basic concepts and insight into main theories, aware of the latest knowledge in the relevant field, can apply the basic elements of information technology, understand the social, legal, ethical, and cultural issues inherent in the discipline of computing,
	PSO4	develop knowledge about Software development fundamentals, including programming, data structures, algorithms and complexity, operating systems, networking and communication, parallel and distributed computation and security Will be able to perform short research projects, pursue higher education in any of the courses, serve as programmers or software engineers with sound knowledge of practical and theoretical concepts, work as hardware designers/ engineers with the knowledge of networking concepts, work as system engineers and system integrators, serve as system administrators with
	PSO1	Understand the basic concepts of Mathematics, get equipped with problem solving skills and should be able to use appropriate formula for arriving at solution, should acquire updated knowledge in mathematical sciences, should have knowledge on the areas of research in the course and get prepared for higher education, able to develop communication skills for better presentation of the knowledge acquired. Understand the basic concepts of methodology of science and the fundamentals of mechanics, properties of matter and thermodynamics, Understand the theoritical basics of quantum mechanics, spectroscopy, electromagnetism, Optics, Nuclear Physics, Solid state
Mathematics Physics Statistics	PSO3	Physics, statistical Physics, low temperature physics and electronics in designing of analog and digital circuits, Craft a foundation for higher learning, be initiated into the Basics of research, Attain skills of digital technology application, Understand the basic concepts of data collection designs and tools of descriptive statistics, knowledge of data analysis, get equipped with the knowledge on

PSO4	computational techniques; understand the use of statistical methods in areas like agriculture, business, finance etc, able to formulate new problems and identifying solutions for real time problems, areas of research and get prepared for higher education Will be able to perform short research projects, pursue higher education in any of the courses, opt for bachelors in education, with value added skills acquired in the program will be able to take up a suitable position in the industry
PSO1	Understand the basic concepts of Mathematics, get equipped with problem solving skills and should be able to use appropriate formula for arriving at solution, should acquire updated knowledge in mathematical sciences, should have knowledge on the areas of research in the course and get prepared for higher education, able to develop communication skills for better presentation of the knowledge acquired. Understand the political theories related to national, international politics and public policy formulation, analyze state centre relations; Will be able to discuss major theories and concepts of political science and its subfields; Develop critical thinking and inculcate research skills; Develop well-articulated presentation skills on the constitutional rights, duties and directive principles, electoral system, parliamentary proceedings etc.,
PSO3	Understand the basic concepts and insight into main theories, aware of the latest knowledge in the relevant field, can apply the basic elements of information technology, understand the social, legal, ethical, and cultural issues inherent in the discipline of computing, develop knowledge about Software development fundamentals, including programming, data structures, algorithms and complexity, operating systems, networking and communication, parallel and distributed computation and security  Acquire knowledge of various components of hardware and system software, identify and illustrate desktop, network and server environments, able to apply networking concepts to build efficient networks, Able to employ cloud concepts to illustrate cloud computing solutions, have knowledge on basic and advanced elements of information security to solve problems and foresee threats, will be competent in object oriented programming languages, can work as a team
	PSO1 PSO2

Mathematics Political Science Geography(MOOCs)	PSO1 PSO2	Understand the basic concepts of Mathematics, get equipped with problem solving skills and should be able to use appropriate formula for arriving at solution, should acquire updated knowledge in mathematical sciences, should have knowledge on the areas of research in the course and get prepared for higher education, able to develop communication skills for better presentation of the knowledge acquired. Understand the political theories related to national, international politics and public policy formulation, analyze state centre relations; Will be able to discuss major theories and concepts of political science and its subfields; Develop critical thinking and inculcate research skills; Develop well-articulated presentation skills on the constitutional rights, duties and directive principles, electoral system, parliamentary proceedings etc.,  Understand theoretical and practical aspects of Geography, evaluate economic behavior inconsonance with geographical factors, gain ability to understand the
	PSO4	with geographical factors, gain ability to understand the socio-economic problems in geographical indicators, able to offer palatable solutions for socio-economic and geographical challenges, attain proficiency to analyze the economic decision of government and non-govt. entities that correlate with geographical factors, gain requisite knowledge to evaluate land use pattern and demographical profile, apply GIS for understanding market situation, transport problem change in weather condition, cropping pattern, and natural calamities and so on  Will be able to perform short research projects, pursue higher education in any of the courses, serve as programmers or software engineers with sound knowledge of practical and theoretical concepts, work as hardware designers/ engineers with the knowledge of networking concepts, work as system engineers and system integrators, serve as system administrators with
Mathematics Statistics Computer Science	PSO1 PSO2	Understand the basic concepts of Mathematics, get equipped with problem solving skills and should be able to use appropriate formula for arriving at solution, should acquire updated knowledge in mathematical sciences, should have knowledge on the areas of research in the course and get prepared for higher education, able to develop communication skills for better presentation of the knowledge acquired. Understand the basic concepts of data collection designs and tools of descriptive statistics, knowledge of data analysis, get equipped with the knowledge on computational techniques; understand the use of statistical methods in areas like agriculture, business, finance etc, able to formulate new problems and identifying solutions for real time problems, areas of research and get prepared for higher education Understand the basic concepts and insight into main
		theories , aware of the latest knowledge in the relevant field, can apply the basic elements of information

	PSO4	technology, understand the social, legal, ethical, and cultural issues inherent in the discipline of computing, develop knowledge about Software development fundamentals, including programming, data structures, algorithms and complexity, operating systems, networking and communication, parallel and distributed computation and security Will be able to perform short research projects, pursue higher education in any of the courses, serve as programmers or software engineers with sound knowledge of practical and theoretical concepts, work as hardware designers/ engineers with the knowledge of networking concepts, work as system engineers and system integrators, serve as system administrators with thorough knowledge of DBMS.  Understand the basic concepts of Mathematics, get
Mathematics Statistics Data Science PSO	PSO2	equipped with problem solving skills and should be able to use appropriate formula for arriving at solution, should acquire updated knowledge in mathematical sciences, should have knowledge on the areas of research in the course and get prepared for higher education, able to develop communication skills for better presentation of the knowledge acquired. Understand the basic concepts of data collection designs and tools of descriptive statistics, knowledge of data analysis, get equipped with the knowledge on computational techniques; understand the use of statistical methods in areas like agriculture, business, finance etc, able to formulate new problems and identifying solutions for real time problems, areas of
	PSO3	research and get prepared for higher education Identify the components of a computer and their functions; Understand the concept of networking, LAN, Internet, and working of www, Understand the notion of problem solving using computer by programming, Understand the notion of Software Project and the Process of software development
	PSO4	Will be able to perform short research projects, pursue higher education in any of the courses, serve as programmers or software engineers with sound knowledge of practical and theoretical concepts, work as hardware designers/ engineers with the knowledge of networking concepts, work as system engineers and system integrators, serve as system administrators with thorough knowledge of DBMS.
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	PSO2	better presentation of the knowledge acquired. Gain the knowledge of Chemistry through theory and practicals: able to explain nomenclature, stereochemistry, structures, reactivity and mechanism of the chemical reactions; identify chemical formulae

Mathematics Chemistry Computer Science	PSO3	and solve numerical problems; use modern chemical tools, models, chem-draw, charts and equipment; know structure-activity relationship; Understand good laboratory practices and safety; Develop research-oriented skills, Make aware and handle the sophisticated instruments/equipment Understand the basic concepts and insight into main theories, aware of the latest knowledge in the relevant field, can apply the basic elements of information
	PSO4	technology, understand the social, legal, ethical, and cultural issues inherent in the discipline of computing, develop knowledge about Software development fundamentals, including programming, data structures, algorithms and complexity, operating systems, networking and communication, parallel and distributed computation and security  Will be able to perform short research projects, pursue higher education in any of the courses, serve as programmers or software engineers with sound knowledge of practical and theoretical concepts, work as hardware designers/ engineers with the knowledge of networking concepts, work as system engineers and system integrators, serve as system administrators with thorough knowledge of DBMS.