St. Pious X Degree & PG College for Women

Autonomous College, Affiliated to oU
Re-Accredited with A+ Grade by NAAC
Snehapuri Colony, Nacharam, Hyderabad

DEPARTMENT OF PHYSICS

COURSE OUTCOMES

SEMESTER I

Title of the Course: MECHANICS & OSCILLATIONS				
Sem-I	Credits: 4	Course Code:PHY102	Year/Group: IMPCS	HPW: 4
Course Outcomes				Blooms Level
CO1	State basic Theorems of Vector Analysis applicable to Physics.			R
CO2	Examine the Collisions in Two and Three Dimensions and study the relation between scattering cross section and Impact Parameter			Az
CO3	Understand the principles of Central Forces and Special Theory of Relativity.			U
CO4	Compare different types of Oscillations, Complex Wave Analysis Using Fourier Theorem.			Az

Practicals:

Name of the Course: MECHANICS & OSCILLATIONS				
SemI	Credits: 1	Course Code: PHY102P	Year/Group: IMPCs.	HPW: 03
Course Outcomes				
CO1	Demonstrate different typed of Pendulums			
CO2	Interpret Basic Laws of Physics			

SEMESTER II

Title of the Course: THERMAL PHYSICS				
Sem-II	Credits: 4	Course Code:PHY202	Year/Group: IMPCS HPW: 4	
Course Outcomes				Blooms Level
CO1	Understand the Laws of Thermodynamics.			U
CO2	Obtain Knowledge about Maxwell's Equations.			Ap
CO3	Learn about Quantum theory of Radiation.			C
CO4	Gain knowledge about Statistical Mechanics.			R

Practical:

Name of the Course: THERMAL PHYSICS			
Sem VI	Credits: 1	Course Code: PHY202P	Year/Group: IMPCs. HPW: 02
Course Outcomes			
CO1	Examine the the difference between Heat and Temperature		
CO2	Classify thermal Expansion of different materials		

SEMESTER III

Remember, Understand, Apply, Analyze, Evaluate, Create : R, U, Ap, Az, E, C

Title of the Course: ELECTROMAGNETIC THEORY				
Sem-III	**Credits: 4**	**Course Code:PHY302**	**Year/Group: II MPCS**	**HPW: 4**
Course Outcomes				Blooms Level
CO1	Understand the concepts of Electro statistics			**U**
CO2	To become cognizant of basics of Magneto statistics			C
CO3	Infer the concepts of electromagnetic Induction			Ap
CO4	Analyse phase relation between current and voltage in R,L,C and their combinations and implications			Az

Practical:

Name of the Course: ELECTROMAGNETIC THEORY				
SemIII	**Credits: 1**	**Course Code: PHY302P**	**Year/Group: II MPCs.**	**HPW: 02**
Course Outcomes				
CO1	**Development of Network theorems**			
CO2	**Provide insight of Electronics circuits**			

SEMESTER IV

Remember, Understand, Apply, Analyze, Evaluate, Create : R, U, Ap, Az, E, C

Title of the Course: WAVES & OPTICS				
Sem-IV	**Credits: 4**	**Course Code:PHY402**	**Year/Group: II MPCS**	**HPW: 4**
Course Outcomes				Blooms Level
CO1	Realize the concepts of Waves in strings and bars			R
CO2	Comprehend the concepts in Interference			U
CO3	Understand the basics of Diffraction			U
CO4	Analyse and apply the concept of Polarization			Az

Practical:

Name of the Course: WAVES & OPTICS				
SemIV	**Credits: 1**	**Course Code: PHY402P**	**Year/Group: II MPCs.**	**HPW: 02**
Course Outcomes				
CO1	Provide insights into concepts of wave along strings and Bars.			
CO2	Develop hands on experience in experiments based on Interference, Diffraction and Polarization			

Theory

SEMESTER V

Remember, Understand, Apply, Analyze, Evaluate, Create : R, U, Ap, Az, E, C

Title of the Course: MODERN PHYSICS				
Sem-V	Credits: 4	Course Code:PHY502A	Year/Group: III MPCS	HPW: 4
Course Outcomes				Blooms Level
CO1	Understand the concepts of Atomic & Molecular Spectroscopy			U
CO2	To Analyse Quantum mechanical problems			Az
CO3	Remember Particle Interactions and Decays			R
CO4	Apply Bravais Lattices and studt Cristal Structures			Ap

Practical:

SEMESTER V

Title of the Course: MODERN PHYSICS				
Sem-V	Credits: 2	Course Code:PHY102	Year/Group: IMPCS	HPW: 2
Course Outcomes				Blooms Level
CO1	Evaluate Planks Constant.			E
CO2	Apply Photo Electric Equation			Ap

Theory

SEMESTER VI

Remember, Understand, Apply, Analyze, Evaluate, Create : R, U, Ap, Az, E, C

Title of the Course: ELECTRONICS				
Sem-VI	**Credits: 4**	**Course Code:PHY602A**	**Year/Group: III MPCS**	**HPW: 4**
Course Outcomes				Blooms Level
CO1	**Understand the Band Theory of Solids**			**U**
CO2	**Analyse Electronic Devices and Circuits**			**Az**
CO3	**Evaluate Various Special Devices**			**E**
CO4	**Develop problem solving and critical thinking skills in Number system in Digital Electronics.**			**C**

Practical:

SEMESTER VI

Title of the Course: ELECTRONICS				
Sem-V	**Credits: 1**	**Course Code:PHY102**	**Year/Group: IMPCS**	**HPW: 2**
Course Outcomes				Blooms Level
CO1	**Understand**			**U**
CO2	**Evaluate and Verify De Morgan's Theorems**			**E**

SEMESTER VI

Title of the Course: ELECTRONICS				
Sem-VI	**Credits: 5**	**Course Code:PHY**	**Year/Group: IMPCS**	**HPW: 4**
Course Outcomes				Blooms Level
CO1	Learn fundamental knowledge of the Nanoscience and related fields			**U**
CO2	Acquire an understanding the Nanoscience and Applications			**E**
CO3	Understand the broad outline of Nanoscience and Nanotechnology.			**E**
CO4	Understand the synthesis of nanomaterials and their application and their impact on the Environment			**E**