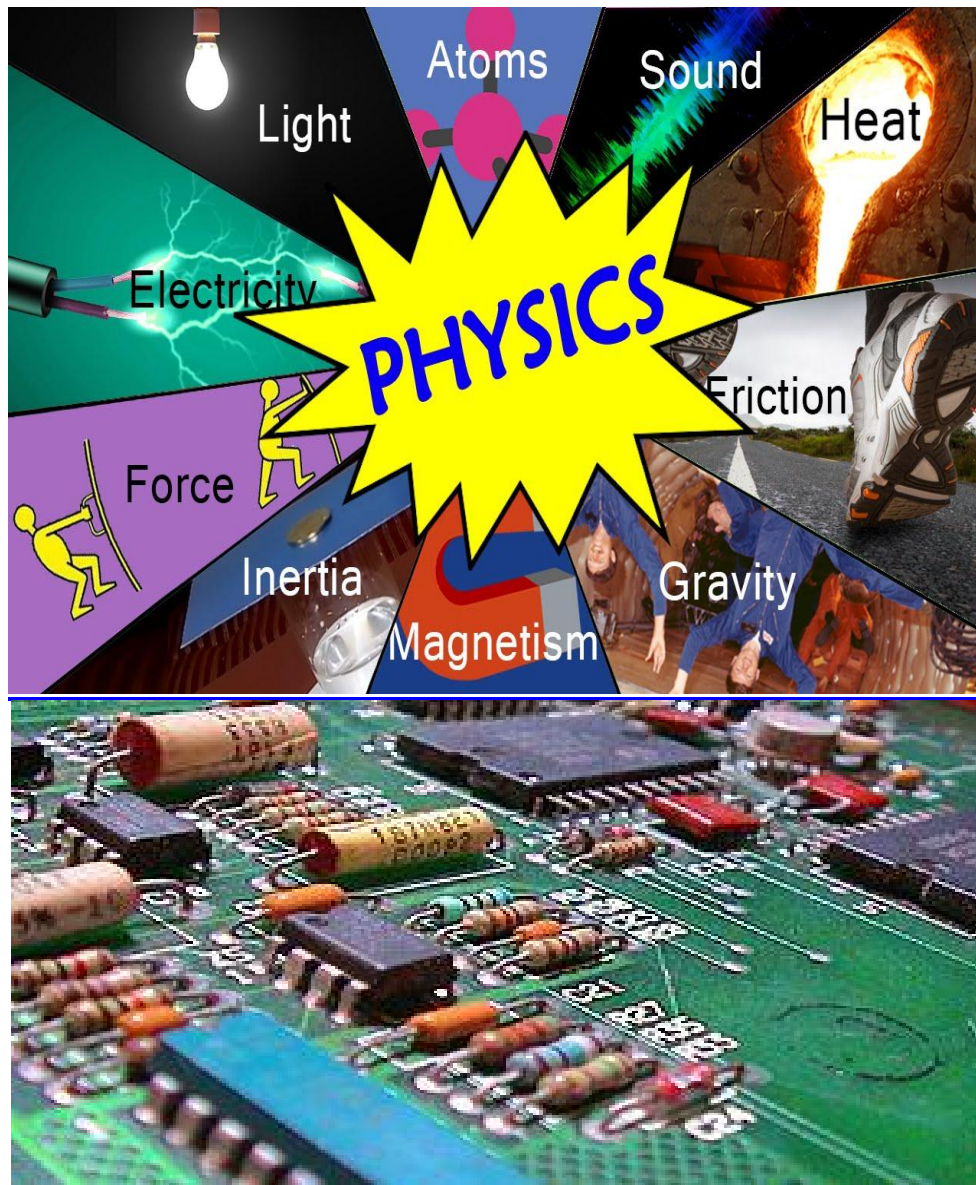


**Sarojini Naidu Vanita Maha Vidyalaya  
Exhibition Grounds, Hyderabad**

**Department of Physics & Electronics  
PG Profile (2018-24)**



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## EVOLUTION OF THE DEPARTMENT

Department of Physics & Electronics stands tall today with nearly six decades of experience, growth, confidence and vision. It has aims and aspirations soaring high into challenging future. The united effort of the department cuts the woods easily, makes the journey of progress smooth and steady and continue to strive to improve each day.

Vanita Physics Department has begun in the year 1964 with Pre-university course under Osmania University.

The department had the privilege of having Sri Kabir Mohinuddin as its inception Head of the Department, who left after two years to join IAS. Ms. Shantha Ramchander, Dr. A.K. Priyadarshini, Mr. D. Anji Reddy, Mr. S.Upender Reddy and Mr K.Subba Rao had served as Heads subsequently. Ms. V.Anuradha took over as the Head of the Department in the year 2022.

The Intermediate courses were started in the year 1972 with MPC and BiPC groups in both English and Telugu media. B.Sc. Program with Mathematics, Physics and Chemistry (MPC) was started in the year 1986 with 75 students.

Addition of Electronics course has broadened the horizon of the department further. The first batch of Mathematics, Physics and Electronics (MPE) students entered in the year 1992 and emerged out with excellent record in the year 1995.

In tune with the global developments, the year 2000, marked beginning of new courses with computer sciences as one of the optionals. The two new streams are Mathematics, Physics, Computer Science (MPCS) and Mathematics, Electronics, Computer Science (MECS).

Each year more and more number of students have begun showing enthusiasm to opt Physics and Electronics courses offered by the Department. Consequent on increasing number of courses, the number of teaching and non-teaching staff also has grown proportionately. Thus, the Physics & Electronics Department stands out as one of the major science faculties of the institution.

Post Graduate program M.Sc. Physics with Electronic Instrumentation as specialization, started in the year 2006. A new block was constructed and laboratories with latest equipment was established.

MPE was discontinued in the year 2009. One additional section each in MPCS and MECS were started in 2009 with 30 students intake.

Additional equipment was added to Physics & Electronics laboratories in accordance with the changed syllabus. Simulation Lab with six systems and necessary software was established in the year 2011.

The Department is fortunate to have had Mr.D.Anji Reddy who was bestowed with Telangana Government's Best Teacher Award -2016

## **VISION**

Foster the spirit of inquiry and to expand the potential of students with the objective to enhance their intellectual growth to the highest possible levels of academic achievement.

## **MISSION**

- Encourage and equip the students with diverse abilities to pick and analyze by keenly observing the nature through the lens of physics.
- Impart education through adoption of methods that create interest, stimulate curiosity and inculcate critical, abstract and independent thinking.
- Interactive teaching, guest lectures and relevant field visits that uncover the minds of students.
- The scientific fervor should drive students to seamlessly choose and pursue higher education in Physics and Electronics in interdisciplinary and/or multidisciplinary areas as demanded by the needs of the application.

## DEPARTMENT STATISTICS

Academic Year	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Faculty	06	05	04	04	04	03
No. of Support staff	03	03	03	03	03	03

## FACULTY PROFILE (2023-24)

### FACULTY

S. No	Name	Designation	Qualification	Experience in Years
1.	Ms. V.Anuradha	Assoc. Prof. & HOD	M.Sc	29
2.	Dr. E. Rukmini	Associate Professor	M.Sc., B.Ed, Ph.D	24
3.	Ms. K. Vijaya	Associate Professor	M.Sc	17
5.	Ms. Gayatri	Guest Faculty	M.Sc, M.Phil	09

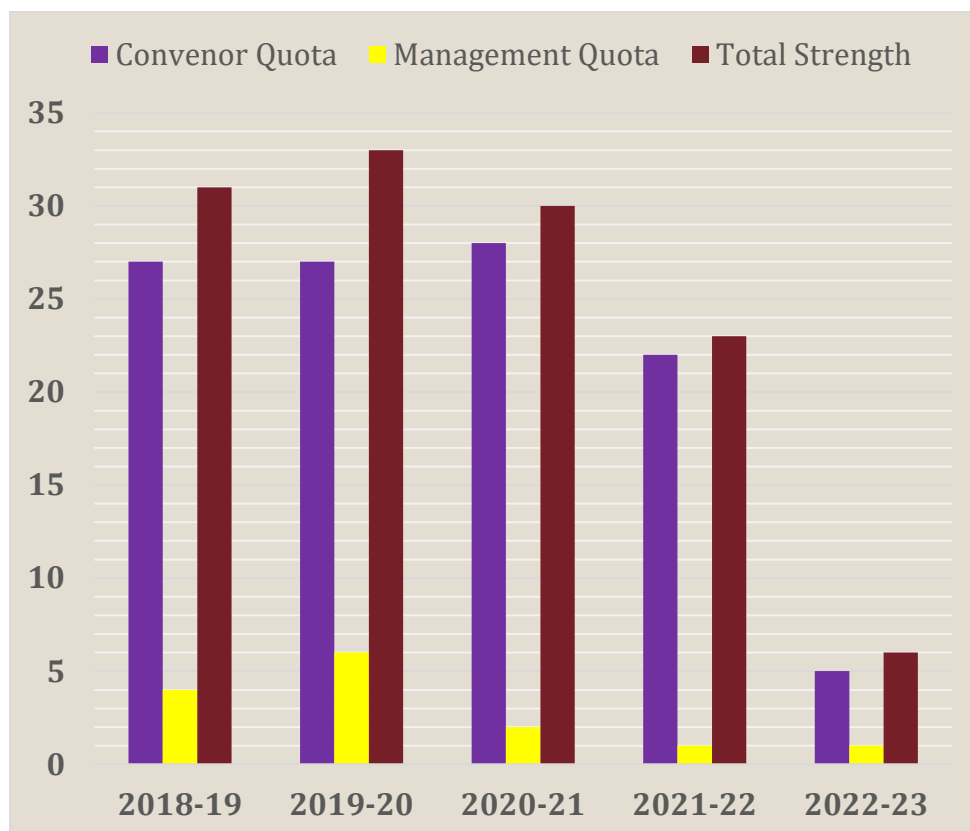
### SUPPORT STAFF

S. No	Name	Designation	Qualification	Experience in Years
1.	Ms. S.Navaneetha	Lab Asst.	B.Sc.	03
2.	Ms. G. Anuradha	Aaya	7 <sup>th</sup> class	24
3.	Mr. G.Aditya	Store keeper	10 <sup>th</sup> class	1

## STUDENT STRENGTH (2018-23)

Program: M.Sc (Physics)  
Specialization - Electronic Instrumentation

Year	Convenor Quota	Management Quota	Total Strength
2018-19	27	04	31
2019-20	27	06	33
2020-21	28	02	30
2021-22	22	01	23
2022-23	05	01	06





## Work Load Per Week

(2023-24)

### SEM - III

PROGRAM	SEMESTER	THEORY	PRACTICALS	TOTAL
M.Sc (Final)	III	12	12	24

**Total work Load : 24 Periods / week**

### SEM - IV

PROGRAM	SEMESTER	THEORY	PRACTICALS	TOTAL
M.Sc (Final)	IV	09	12	21

**Total work Load : 21 Periods / week**

## M.Sc (Physics)

### III Semester time table 2023-24

DAY	10:00-11:00 I	11:00-12:00 II	12:00-1:00 III	1:00-1:30	1:30-2:30 IV	2:30-3:30 V	3:30-4:30 VI
<b>MON</b>	P-I	P-III	P-IV	LUNCH	←----- III SEM-----→ General Physics Lab		
<b>TUE</b>	P-I	Seminar	P-II		P-III	Library	
<b>WED</b>	P-IV	←----- III SEM-----→ --→ Special Lab		BREAK	←----- III SEM-----→ General Physics Lab		
<b>THU</b>	P-III	←----- III SEM-----→ --→ Special Lab			Library		
<b>FRI</b>	P-I	P-II	P-II		←----- III SEM-----→ Special Lab		
<b>SAT</b>	P-IV	←----- III SEM-----→ --→ Special Lab			Seminar		

**P- I Modern Physics**

**P- II Advanced Solid State Physics**

**P- III Electronic Instrumentation P- IV Embedded Systems & their Applications**

**M.Sc (Physics)**

**IV Semester Time Table 2023-24**

<b>DAY</b>	<b>10:00-11:00 I</b>	<b>11:00-12:00 II</b>	<b>12:00-1:00 III</b>	<b>1:00-1:30</b>	<b>1:30-2:30 IV</b>	<b>2:30-3:30 V</b>	<b>3:30-4:30 VI</b>
<b>MON</b>	P-I	P-III		<b>LUNCH</b>	←----- IV SEM-----→ General Physics Lab		
<b>TUE</b>	P-I	Seminar	P-I		←----- IV SEM-----→ General Physics Lab		
<b>WED</b>	P-III	←----- IV SEM-----→ Special Lab		<b>BREAK</b>	←----- IV SEM-----→ General Physics Lab		
<b>THU</b>	P-III	←----- IV SEM-----→ Special Lab			Seminar		
<b>FRI</b>	P-I	P-II	P-II		Seminar		
<b>SAT</b>	Project work				Project work		

**P-I Nuclear Physics**

**P-II Spectroscopy**

**P- III Instrumentation for Measurement & Data Transmission**

## DEPARTMENT ACTIVITIES

- Review of the common core syllabus prescribed by affiliated university
- Preparation of annual academic plan for current academic year
- Individual teaching plan
- Monthly meetings regarding syllabus covered, tests conducted and any other academic matters
- Guest Lectures
- Student seminars as part of student evaluation
- The academic progress of students is monitored and recorded regularly by mentors
- Remedial classes for slow learners and backlog students
- Intensive Experimental Training for advanced learners
- “Academic proficiency medals list of science students is prepared based on university annual examination results
- Projects are assigned to students in Physics and Electronics to provide hands on experience
- Conduct intercollegiate and interclass competitions for students in poster presentations, quizzes, working models of Physics concepts
- Carrier Guidance
- Organizing Outreach programs
- Field visits to premier Laboratories / Industries
- Release of quarterly Newsletter **Photon**
- Sir C.V. Raman Birth Anniversary celebrations
- National Science Day Celebrations

## **TEACHING METHODS AND AIDS**

- Conventional Lectures
- Demonstration method
- Question answer method
- Class room seminars
- Use of LCD Projector
- Use of charts, models, graphs etc
- Problem solving method
- Online classes
- Field visits
- You tube channels
- Mobile Apps
- Guest Lectures

## **STUDENT EVALUATION METHODS**

- Regular tests at the end of each chapter / concepts
- Home assignments
- Seminars by students
- Two Internal examinations per each semester
- Weekly Assignments
- Project work & viva
- Practical Sessions- CCE
- End Semester Examinations ( Theory & practical)

## STUDENT EVALUATION PLAN

S. No	Semester	No. of Tests (including 2 internals)	No. of Assignments
1	I	3	04
2	II	3	04
3	III	3	04
4	IV	3	04

## PROGRAM OUTCOMES

Name of the Program	Program Outcomes
<b>M.Sc. Physics with Electronic Instrumentation-Specialisation</b>	<b>PO-1:</b> Gain conceptual knowledge in General Physics and Electronic Instrumentation.
	<b>PO-2:</b> Identify, formulate and Analyse complex scientific problems for higher studies and to excel in competitive examinations.
	<b>PO-3:</b> Apply appropriate techniques with computational tools
	<b>PO-4:</b> Apply and demonstrate the basic Physics in environmental context for sustainable development.
	<b>PO-5:</b> Enhance and adopt skills through lab experiments and field trips will promote confidence to pursue research for the benefit of mankind within the framework of respecting professional ethics and value system.
	<b>PO-6:</b> Have fundamental and advanced level knowledge in the field of Microprocessors and Micro controllers, embedded systems, Instrumentation and general Physics with their applications
	<b>PO-7:</b> Gain skills in interfacing various components with Microprocessor and Microcontroller

## COURSE OUTCOMES

### SEMESTER – I

Paper	Name of the course	Course Outcomes
I	Mathematical Physics	<p><b>CO1.</b> Analyse &amp; understands the Legendre's and Bessel's Differential Equations.</p> <p><b>CO2.</b> Gain Knowledge in Hermite and Laguerre Differential Equations.</p> <p><b>CO3.</b> Gain conceptual knowledge in the difference between Laplace and Fourier Transform Tensors and Matrices.</p>
II	Classical Mechanics	<p><b>CO1.</b> Gain knowledge in Newtonian Mechanics, Lorentz Transformation.</p> <p><b>CO2.</b> Understands the concepts of Lagrangian Mechanics, basic mechanical concepts related to discrete and continuous mechanical systems.</p> <p><b>CO3.</b> Gain conceptual knowledge about Hamiltonian Mechanics.</p>
III	Quantum Mechanics-I	<p><b>CO1.</b> Analyse mathematical space that contains all possible states of a physical system using Dirac's notation.</p> <p><b>CO2.</b> Students compute the energy eigen values and evolution of the quantum simple harmonic oscillator, space and time displacements equations.</p> <p><b>CO3.</b> Student finds the commutation relations for linear angular momentum.</p>
IV	Electronics	<p><b>CO1.</b> Gain Knowledge about Analog Circuits and their Applications.</p> <p><b>CO2.</b> Understands basic function of OP-Amp and its applications and gain knowledge about IC 555.</p> <p><b>CO3.</b> Gain knowledge about Digital systems and its applications &amp; understand basic architecture of 8-bit microprocessor, develop skills in assembly language programme.</p>

**SEMESTER – II**

Paper	Name of the course	Course Outcomes
<b>I</b>	<b>Electromagnetic Theory</b>	<p><b>CO1:</b> Understands various concepts of static fields and time varying electromagnetic systems.</p> <p><b>CO2:</b> Analyse the propagation of plane em waves in different media and gain knowledge of reflection and refraction of plane em waves at boundaries.</p> <p><b>CO3:</b> Understands Fresnel’s equations, metallic reflection &amp; oscillating source.</p>
<b>II</b>	<b>Statistical Mechanics</b>	<p><b>CO1.</b> Understands the basic idea of phase space, micro state, macro state and provides the idea of probability to the particles.</p> <p><b>CO2.</b> Analyse the insight of postulates of statistical physics and learn which particles follow which statistics and why.</p> <p><b>CO3.</b> Apply the statistical distribution in real life problem.</p>
<b>III</b>	<b>Quantum Mechanics -II</b>	<p><b>CO1.</b> Understands &amp; able to explain the Dirac equation and its free-particle solutions.</p> <p><b>CO2.</b> Analyse the WKB approximation method and understand time independent perturbation theory.</p> <p><b>CO3.</b> Applications to relativistic quantum mechanics.</p>
<b>IV</b>	<b>Solid State Physics</b>	<p><b>CO1.</b> Gain basic knowledge of crystal systems and spatial symmetries and crystal growth techniques.</p> <p><b>CO2.</b> Understands crystal imperfections, vibrational properties of solid state system, their dispersive and thermal properties.</p> <p><b>CO3.</b> Gain knowledge about energy bands, fundamental principles of semiconductors and to estimate the charge carrier mobility and density.</p>



**SEMESTER – III**

Paper	Course	Course Outcomes
<b>I</b>	<b>Modern Optics</b>	<p><b>CO1:</b> Able to evaluate conditions for lasing phenomenon &amp; properties of Laser .</p> <p><b>CO2:</b> Able to appraise different types of Lasers with respect to design &amp; working principles.</p> <p><b>CO3:</b> Able to identify the parameters which differentiate holograms from photographs.</p> <p><b>CO4:</b> Able to distinguish between various types of holograms &amp; to analyse the different parameters of holographic recording materials.</p> <p><b>CO5:</b> Able to evaluate intensity dependent material properties like refractive indices, optical mixing&amp; self- focussing of Light</p>
<b>II</b>	<b>Advanced Solid State Physics</b>	<p><b>CO1:</b> Able to understand and gain knowledge of electrical, dielectric and magnetic properties of solids &amp; superconductivity and its applications.</p> <p><b>CO2:</b> Able to construct the Brillouin zones and Fermi surfaces and to identify the energy bands in solids.</p> <p><b>CO3:</b> Able to distinguish between different types of Polari abilities and their behaviour in AC fields and to classify the ferroelectric materials and their properties.</p> <p><b>CO4:</b> Able to identify different types of magnetic materials and their applications.</p> <p><b>CO5:</b> Able to understand superconductivity ,its properties &amp; applications</p>
<b>III</b>	<b>Electronic Instrumentation</b>	<p><b>CO1:</b> Enable the students to understand the accuracy and precision in measurement.</p> <p><b>CO2:</b> Able to understand the response of the system.</p> <p><b>CO3:</b> Able to measure power and voltage measurement</p> <p><b>CO4:</b> Able to read Oscilloscope measurement</p> <p><b>CO5:</b> Able to understand LED and seven segment display systems</p>
<b>IV</b>	<b>Embedded systems &amp; its applications</b>	<p><b>CO1:</b> Enable the students to understand the working of Microcontroller(8051).</p> <p><b>CO2:</b> Able to program Microcontroller(8051)</p> <p><b>CO3:</b> Able to interface Microcontroller(8051) with keyboard, LED, 7 – segments displaced.</p> <p><b>CO4 :</b> Able to measure strain gauge.</p> <p><b>CO5:</b> Able to understand working of LVDT,PID &amp; relay systems</p>

**SEMESTER - IV**

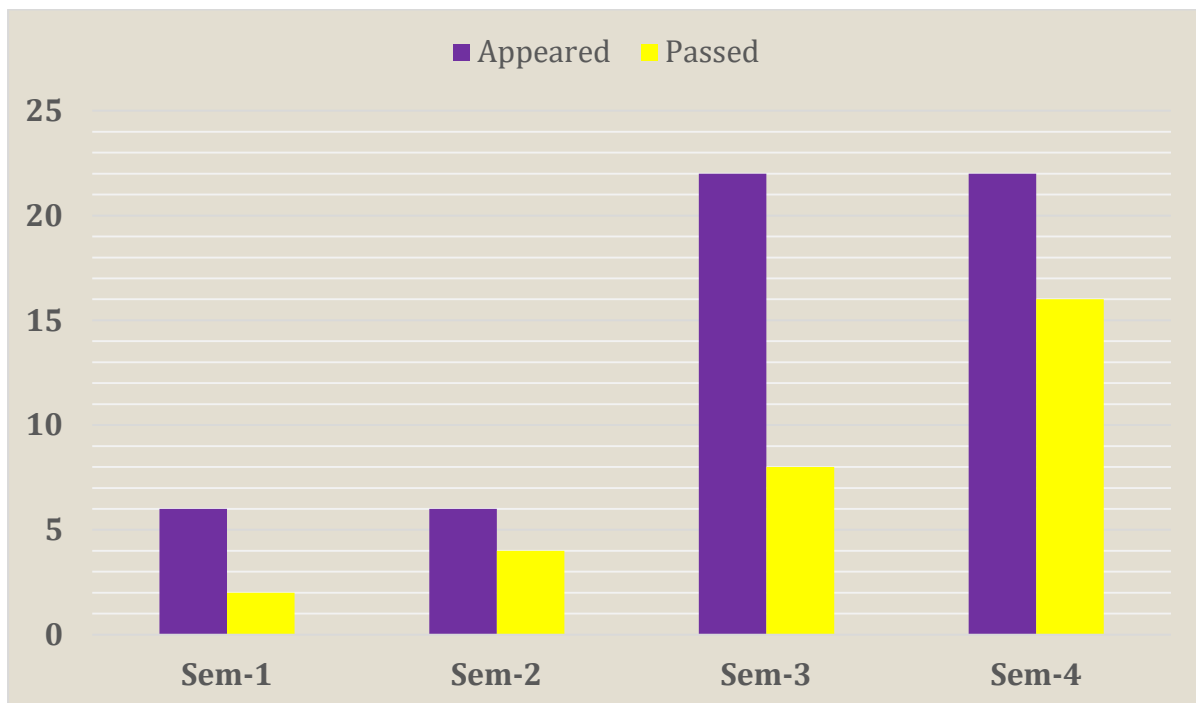
Paper	Course	Course Outcomes
<b>I</b>	<b>Nuclear Physics</b>	<p><b>CO1:</b> Demonstrate the concepts of nuclear force, nuclear decay processes, detection mechanism and reactions</p> <p><b>CO2:</b> Analyse the Deuteron problem, exchange force theories, <math>\alpha</math>-decay, <math>\beta</math>-decay, Bethe's formula, Photo electric effect, Compton effect and pair production.</p> <p><b>CO3:</b> Understand the neutrino hypothesis, Bohr's theory working of <math>\gamma</math>-ray detectors, kinematics of nuclear actions, nuclear reactors.</p> <p><b>CO4:</b> Evaluate the importance of knowledge of handily radioactive materials for various applications in day to day like food irradiation, radiation therapy &amp; diagnosis</p> <p><b>CO5:</b> Develop skills in critical thinking and problem - solving and apply them effectively in both academic and professional contexts.</p>
<b>II</b>	<b>Spectroscopy</b>	<p><b>CO1:</b> Determinate spectroscopic terms for equivalent and non-equivalent electron atom</p> <p><b>CO2:</b> Analyze the hyperfine splitting of spectral lines</p> <p><b>CO3:</b> Understand the nuclear spin and magnetic moment, origin of nuclear magnetic resonance</p> <p><b>CO4:</b> Evaluate the vibrational and rotational Raman Spectra</p> <p><b>CO5:</b> Develop skills in estimating the hyperfine Structure of ESR absorptions.</p>
<b>III</b>	<b>Instrumentation for Measurement and Data Transmission</b>	<p><b>CO1:</b> Explain the functionality of various transducers.</p> <p><b>CO2:</b> Compare the various temperature measuring devices.</p> <p><b>CO3:</b> Evaluate the ultrasonic flow meter.</p> <p><b>CO4:</b> Explain interfacing transducers to electronic control and measuring systems.</p> <p><b>CO5:</b> Appreciate the multiplexing in telemetering system.</p>

## STUDENT PERFORMANCE

Semester (I, II, III & IV)

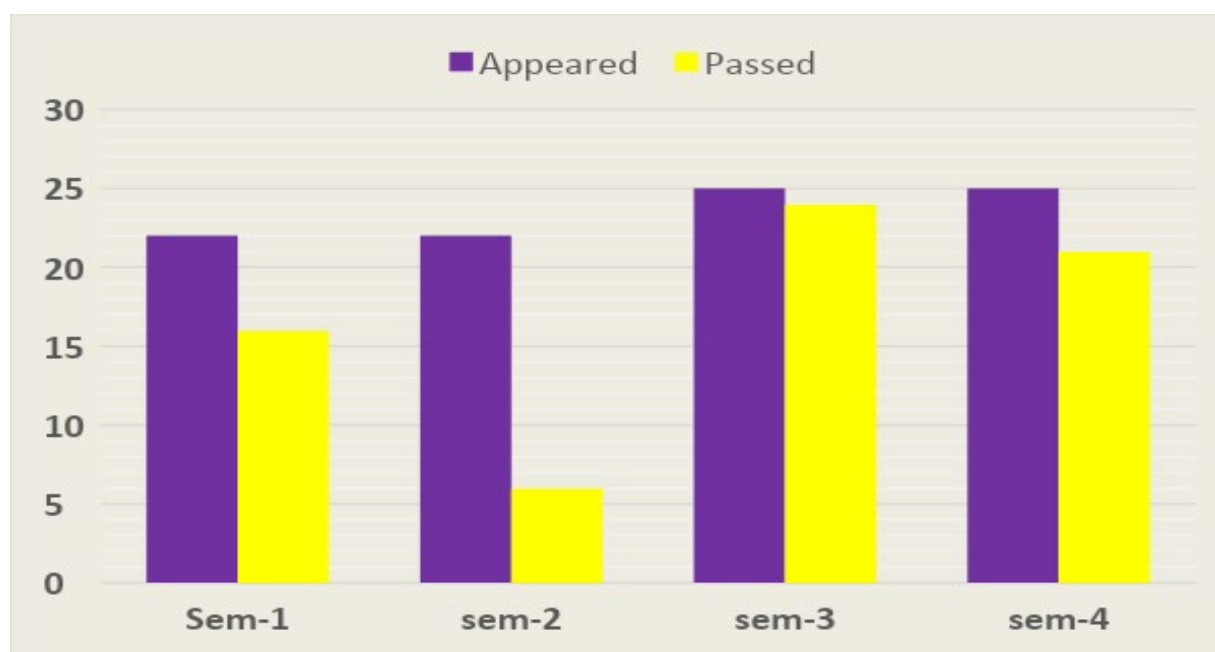
2022-23

Semester	Appeared	Passed	Pass %
Sem-1	6	2	33
Sem-2	6	4	67
Sem-3	22	8	36
Sem-4	22	16	73



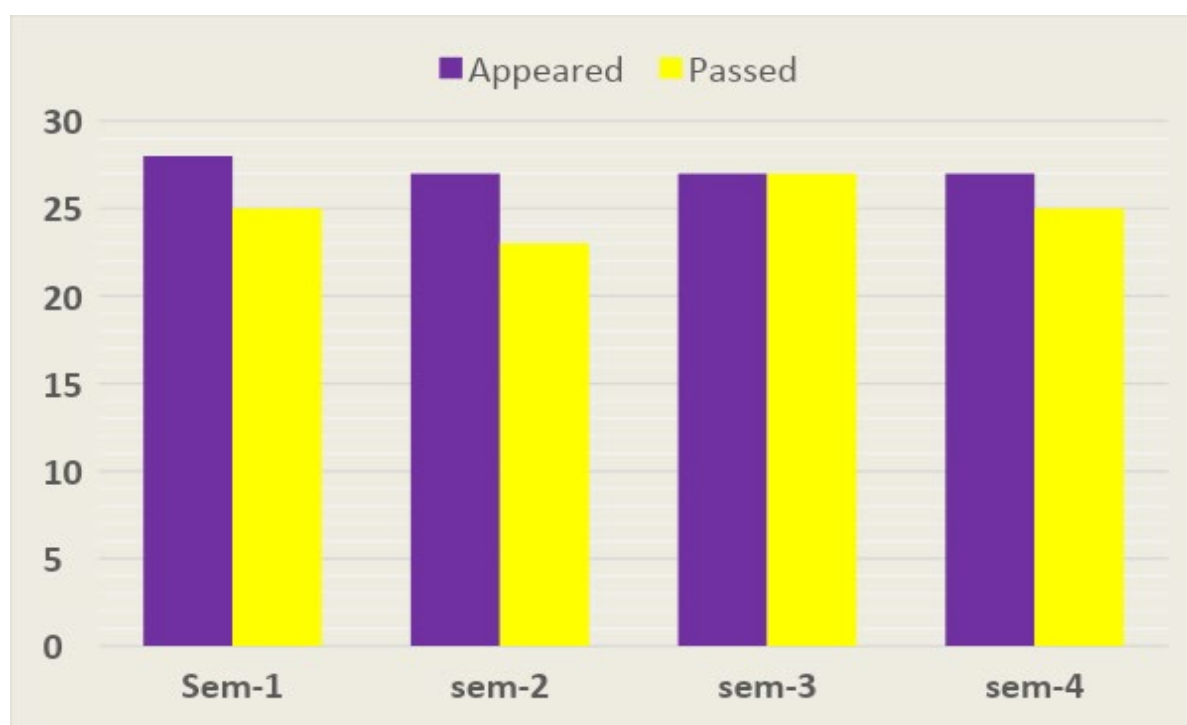
## 2021-22

Semester	Appeared	Passed	Pass %
Sem-1	22	16	73
Sem-2	22	06	27
Sem-3	25	24	96
Sem -4	25	21	84



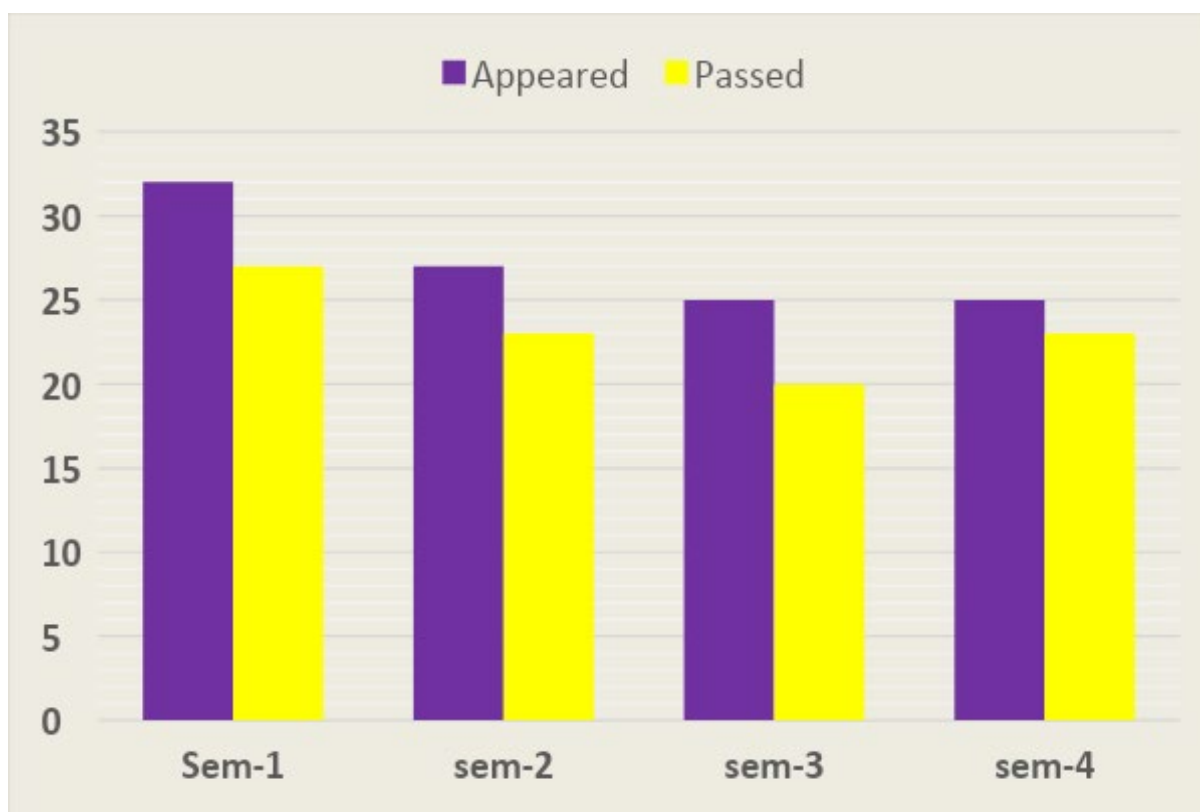
## 2020-21

Semester	Appeared	Passed	Pass %
Sem-1	28	25	89
Sem-2	27	23	85
Sem-3	27	27	100
Sem-4	27	25	93



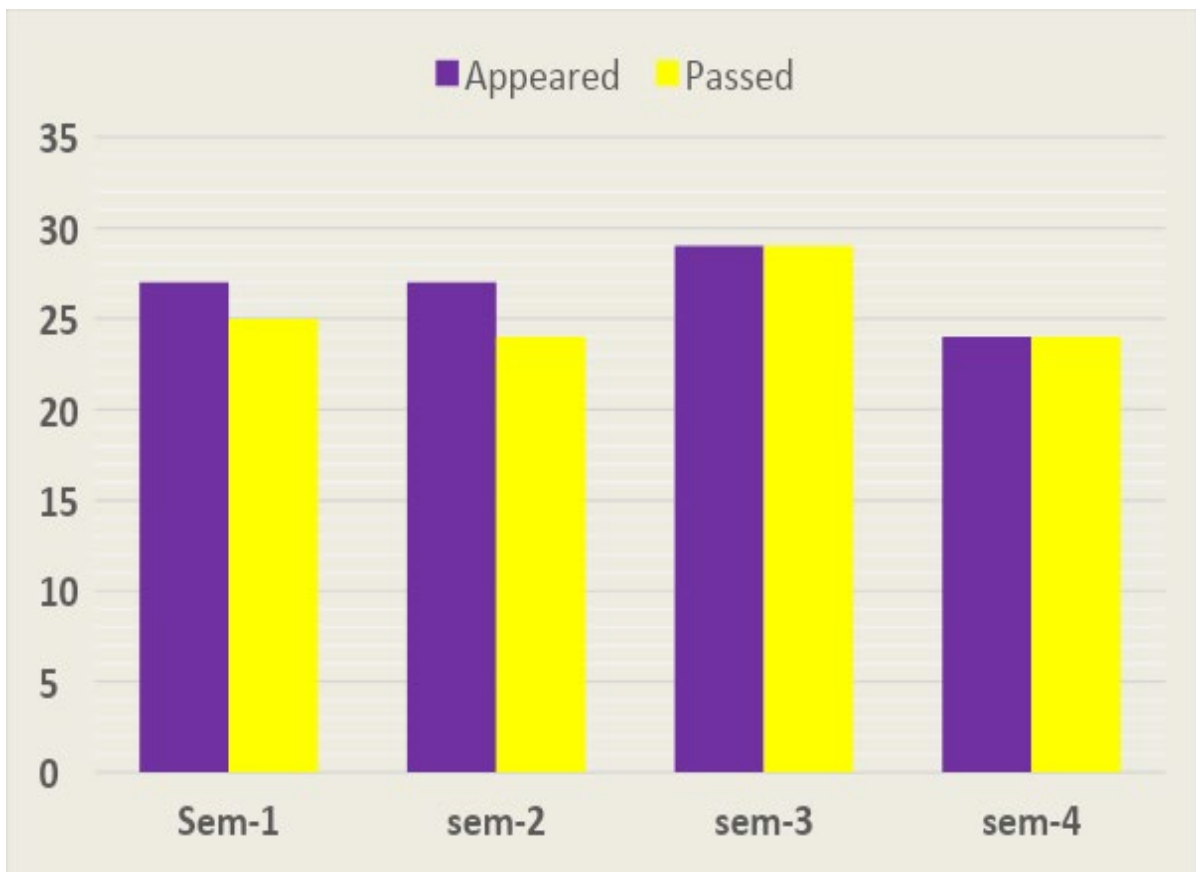
2019-20

Semester	Appeared	Passed	Pass %
Sem-1	32	27	84
Sem-2	27	23	85
Sem-3	25	20	80
Sem-4	25	23	92



2018-19

Semester	Appeared	Passed	Pass %
Sem-1	27	25	93
Sem-2	27	24	89
Sem-3	29	29	100
Sem-4	24	24	100



## COURSE WISE RESULT ANALYSIS – (2022-23)

### SEMESTER - III

<b>Course Title</b>	<b>Appeared</b>	<b>Passed</b>	<b>Pass %</b>
Modern Optics ( P- I)	22	19	86
Advanced Solid State Physics (P -II)	22	8	36
Electronic Instrumentation (P- III)	22	17	77
Microprocessor, DSP& Interfacing (P - IV)	22	18	82

### SEMESTER - I

<b>Course Title</b>	<b>Appeared</b>	<b>Passed</b>	<b>Pass %</b>
Mathematical physics (P -I)	6	5	83
Classical Mechanics (P- II)	6	2	33
Quantum Mechanics –I (P- III)	6	6	100
Electronics (P -IV)	6	6	100



### SEMESTER - IV

<b>Course Title</b>	<b>Appeared</b>	<b>Passed</b>	<b>Pass %</b>
Nuclear Physics (P -I)	22	19	86
Spectroscopy (P -II)	22	22	100
Instrumentation For Measurement and Data Transmission (P -III)	22	18	82
Embedded Systems and Their Applications (P -IV)	22	20	91

### SEMESTER - II

<b>Course Title</b>	<b>Appeared</b>	<b>Passed</b>	<b>Pass %</b>
Electromagnetic Theory (P -I)	06	05	83
Statistical Mechanics (P -II)	06	05	83
Quantum Mechanics –II (P -III)	06	05	83
Solid State Physics (P -IV)	06	04	67

### Workshops Organized (2018-24)

S. No	Date	Title	No. of Participants
1	05-10-2023	Experiments in Nuclear Physics	34
2	13-12-2021	Teaching Models in Physics	80
3	21-02-2019 & 22-02-2019	SPARK -2K19 in collaboration with TSCOST	65

### FACULTY PARTICIPATION IN WORKSHOPS/ SEMINARS/ WEBINARS/ CONFERENCES/FDPs

#### Workshops (2018-24)

S. No	Name of Faculty	Title	Conducted by	Date
1.	V.Anuradha	NEP.2020	OU	10-1-2023 to 12 -1-2023
		NPTEL	St. Ann's College	15-12-2022
		Innovative E.Labs	R.B.V.R.R	23-03-2021 to 25-3-2021
2.	Dr. E.Rukmini	Teaching Physics Effectively Online and Women in STEM	Gitam University	08-07-2023
		NEP-2020	OU	10-1-2023 to 12 -1-2023
		Innovative E-Labs	R.B.V.R.R	23-3-2021 to 25-3-2021
		Virtual Labs	Aurora's Degree & PG College	3-7-2020 to 4-7-2020
		A Technique of healthy life	St. Ann's College	21-6-2020
3.	K. Vijaya	Evaluation Reforms and Implementations of Continuous and Comprehensive Evaluation(CCE)	OU	05-10-2023 to 06-10-2023
		Innovative E-Labs	R.B.V.R.R	23-3-2021 to 25-3-2021
		Yoga at Home and Yoga with Family	SNVMV	20-6-2020
		Blended Teaching & Learning	SNVMV	14-4-2020 to 15- 4-2020
4.	S. Swetha	Fibber Optics	OU	28-1-2023

### Seminars/ Webinars (2018-24)

S. No.	Name of Faculty	Title	Conducted by	Date
1.	V.Anuradha	Restructuring Physics Curriculum at UG Level-One Day State Level Teachers Colloquium	Dept. of Physics, OU	16-04-2024
		Economic implications of implementing renewable and alternative energy resources	Exhibition Society, Hyd.	24-11-2023
		Women's Health	Badruka College	20-05-2021
		Nano structured Materials	Sri YN College	5-6-2020
2.	Dr. E.Rukmini	Prospects of Higher Education in India in the Context of NEP-2020	Osmania Graduates' Association, Hyd.	16-04-2024
		Covid-19 vaccination myths and facts	KIM'S , Hyd	10-5-2021
		Intellectual Property rights	Nizam College	9-4-2021
		Awareness and adoption of MOOC course on Swayam & NPTEL	SNVMV	16-6-2020
		COVID -19 a Pandemic Corona virus	SNVMV	15-6-2020
		Role of Chemistry metegating Covid-19	SNVMV	13-6-2020
		Synergistic efforts of Academicians and industrialists in combating Covid-19	St. PIOUS College	2-6-2020
		Current trends in Nano Technology	Aurora's Degree & PG College	23-5-2020
		War with COVID detection and distraction	RBVVR College	19-5-2020
		Electronic Warfare	Little Flower College	16-5-2020
3.	K.Vijaya	Dielectric Materials and their Characterization studies in the Microwave frequency Region	Vignan's Institute of Management	14-8-2020
		Molecular communication for wireless body area net works	Aurora's Degree & PG College	8-6-2020
		Current trends in Nano Technology	Aurora's Degree & PG College	23-5-2020

### FDP's (2018-24)

S. No	Name of Faculty	Title	Conducted by	Date
1	V.Anuradha	Outcome based education	SNVMV	5-12-2022 to 9-12-2022
		Financial Planing & Mutual Funds	SNVMV	6-12-2021 to 10-12-2021
		Material characterisation Technique	Bhavan's Vivekananda	2-4-2021 to 6-4-2021
		Research trends in Physics and Electronics	Little Flower College	27-1-2021 to 1-2-2021
		Tools for Online Teaching learning and Evaluation	Swami Ramanandh teerth University	1-7-2020 to 6-7-2020
		Art of Teaching	SNVMV	23-09-2019 to 27-09-2019
		Blended Teaching and learning	SNVMV	27-08-2018 to 31-08-2018
2	Dr.E.Rukmini	Outcome based education	SNVMV	5-12-2022 to 9-12-2022
		Financial Planing & Mutual Funds	SNVMV	6-12-2021 to 10-12-2021
		Material characterisation Technique	Bhavan's Vivekananda	2-4-2021 to 6-4-2021
		Online course design development deliver	SNVMV	26-2-2021 to 27-2-2021
		Research trends in Physics and Electronics	Little Flower College	27-1-2021 to 1-2-2021
		Art of Teaching	SNVMV	23-09-2019 to 27-09-2019
		Blended Teaching and learning	SNVMV	27-08-2018 to 31-08-2018
3	K.Vijaya	Outcome based education	SNVMV	5-12-2022 to 9-12-2022
		Financial Planing & Mutual Funds	SNVMV	6-12-2021 to 10-12-2021
		Material characterisation Technique	Bhavan's Vivekananda	2-4-2021 to 6-4-2021
		Application of Artificial intelligence towards industry 4.0	Sai Ram engineering College	15-2-2021 to 20-2-2021
		Online course design development deliver	SNVMV	26-2-2021 to 27-2-2021
		Research trends in Physics and Electronics	Little Flower College	27-1-2021 to 1-2-2021
		Art of Teaching	SNVMV	23-09-2019 to 27-09-2019
4	D.Balakrishna Reddy	Financial Planing & Mutual Funds	SNVMV	06-12-2021 to 10-12-2021
		Blended Teaching and learning	SNVMV	27-08-2018 to 31-08-2018
5	E.Prachi	Art of Teaching	SNVMV	23-09-2019 to 27-09-2019
6	S.Prashanthi	Blended Teaching and learning	SNVMV	27-08-2018 to 31-08-2018
7	L. Shivarani	Blended Teaching and learning	SNVMV	27-08-2018 to 31-08-2018

### Workshops /Conferences/ FDP`s Sponsored by Institution (2018-24)

<b>Name of Faculty</b>	<b>Program</b>	<b>Title</b>	<b>Conducted by</b>	<b>Date</b>	<b>Amount INR</b>
V.Anuradha	<b>Work Shop</b>	NEP Orientation & Sensitization Program	UGC-MMTTC,OU	06-11-2023 to 15-11-2023	1000
	<b>Membership</b>	Member (14077)	IAPT	Mar 2023 to Mar2024	250
	<b>Conference</b>	Pure Earth Environment conference	Pure Earth Foundation	27-11-2021	250
	<b>Conference</b>	Pure Earth Environment conference	Pure Earth Foundation	06-11-2019	250
Dr.E.Rukmini	<b>Work Shop</b>	NEP Orientation & Sensitization Program	UGC-MMTTC,OU	12-10-2023 to 21-10-2023	1000
	<b>Membership</b>	Member (14079)	IAPT	Mar 2023 to Mar2024	250
	<b>Conference</b>	Pure Earth Environment conference	Pure Earth Foundation	27-11-2021	250
	<b>Conference</b>	Pure Earth Environment conference	Pure Earth Foundation	06-11-2019	250
K.Vijaya	<b>Work Shop</b>	NEP Orientation & Sensitization Program	UGC-MMTTC,OU	12-10-2023 to 21-10-2023	1000
	<b>Membership</b>	Member (14078)	IAPT	Mar2023toMar2024	250
	<b>Conference</b>	Pure Earth Environment conference	Pure Earth Foundation	27-11-2021	250
	<b>Conference</b>	Pure Earth Environment	Pure Earth	06-11-2019	250

		conference	Foundation		
D.Balakrishna Reddy	<b>Conference</b>	Pure Earth Environment conference	Pure Earth Foundation	27-11-2021	250
	<b>Conference</b>	Pure Earth Environment conference	Pure Earth Foundation	06-11-2019	250
	<b>Conference</b>	Evolution Technologies in Telecommunication	Aurora's Degree & PG College	29-12-2018	300
E. Prachi	<b>Conference</b>	Pure Earth Environment conference	Pure Earth Foundation	06-11-2019	250
S.Swetha	<b>Work Shop</b>	Fiber Optics	Osmania University	28-01-2023	1000

### Online / Short Term Courses by Faculty (2018-24)

S. No.	Name of Faculty	Title	Conducted by	Date
1.	B.Anuradha	Classical Electro magnetism - II	IIT, Kanpur	15-8-2022 to 25-12-2022
		The Story of Photo Electric Effect	IIT, Kanpur	15-7-2021 to 17-7-2021
		Classical Mechanics - I	IIT, Kanpur	26-1-2021 to 25-4-2021
		Effective Writing	NPTEL	Jan - Feb 2021
		Appreciating Carnatic music	NPTEL	Sep - Nov 2020
		Learning Physics through simple experiments	IIT, Kanpur	2-4-2020 to 10-6-2020
		Basics of Special theory of Relativity	IIT, Kanpur	18-12-2018 to 8-4-2019

2.	Dr. E.Rukmini	Classical Electro magnetism -II	IIT, Kanpur	15-8-2022 to 25-12-2022
		The Story of Photo Electric Effect	IIT, Kanpur	15-7-2021- to 17-7-2021
		Classical Mechanics –I	IIT, Kanpur	26-1-2021 to 25-4-2021
		Basics of Special theory of Relativity	IIT, Kanpur	18-12-2018 to 8-4-2019
3.	K.Vijaya	Microprocessors & Interfacing	NPTEL, IIT , Gowahati	Jan –April -2021

### Field Visits (2018-24)

S. No.	Date	Place of Visit	No. of Student Participants
1.	18-04-2019	ARCI	30
2	25-02-2022	NIN, Hyd.	22
3	29-11-2022	NRSC	21

### Outreach Program (2018-24)

S. No.	Date	Place of Visit	No. of Students Benefited
1	12-10-2022	Govt. Boys High School, Amberpet, Hyd.	90
		Govt. High School, Nallakunta, Hyd.	60

### Add On Course (2022-24)

S. No.	Date	Course title	No. of Students Registered	No. of Students Qualified
1	16-11-2022 to 20-12-2022	Know your Electrical Appliances-Selection Protection & Safety	15	14

### Guest Lectures

S. No.	Date	Title of lecture	Resource person & Designation	No. of participants
1	11-10-2023	Fundamentals of Nuclear Physics	Dr. M. Sreenath Reddy Assoc. Prof., Dept. of Physics, OU	04
2	14-07-2023	Temperature & Flow Measurements	Ms. C.Aruna Head. Dept. of Physics & Electronics, Aurora's Degree & PG College	20
3	08-12-2022	Research Trends in Spectroscopy & Applications	Dr.E.Rukmini Associate Prof. In Physics, SNVMV	90
4	07-11-2022	Significance of Raman Effect	Prof. D.Karuna Sagar Head Dept. of Physics, OU	80
5	26-02-2022	Applications of Spectroscopy	Dr. Usha Praveena Asst. Professor, St. Francis College for Women	100
6	27-11-2021	Role of Technology in shaping our Future	Dr. Gopala Krishna Behara Lead enterprise Architect , WIPRO	400
7	28-02-2021	Laboratory Plasmas & Applications (Online)	Mr.G.Mohan Rao Professor Emeritus Dept. of Instrumentation and applied Physics, Indian Institute of Science ,Bangalore	798
8	07-11-2020	Semiconductor Physics & Fabrications (Online)	Dr. V.Swarnalatha Postdoctoral fellow IIT,Hyd.	290
9	21-02-2019	Evolution of Electronics	Prof. K. Venugopal Reddy, Dept. of Physics, OU	65
10	21-02-2019	Importance of materials	Dr. Ravi Chandra, Scientist- F, ARCI, Hyd.	65
11	22-02-2019	Raman Effect and its importance	Prof. Prasad, Head Dept. of Physics, OU	65



**List of Students completed the training “Business Development Executive” Organised by National Institute for Micro, Small and Medium Enterprises**

S. No	Name	H.T. No	Class
1	Ms.Burgula Tharuni	1175-21-509-004	M.Sc. Physics IV Sem
2	Ms. Thaili shailaja	1175-21-509-018	M.Sc. Physics IV Sem
3	MS. Gandamalla Renusri	1175-21-509-009	M.Sc. Physics IV Sem
4	Ms. Palleti Shivaleela	1175-21-509-022	M.Sc. Physics IV Sem
5.	Ms. Chinthaguntla shailaja	1175-21-509-021	M.Sc. Physics IV Sem

**DEPARTMENT BUDGET (2018-24)**

**Library Budget (2018-23)**

Year	Amount Sanctioned INR		No. of Titles	No. of Books	No. of Journals	Amount Spent INR		Total Amount INR
	Books	Journals				Books	Journals	
2018-19	20,000	5,000	13	20	4	10,291	4,420	<b>14,711</b>
2019-20	25,000	8,000	10	18	-	9,871	-	<b>9,871</b>
2020-21	-	-	-	-	-	-	-	-
2021-22	-	-	-	-	-	-	-	-
2022-23	15,000	10,000	8	19	3	12,791	9,000	<b>21,791</b>
Total			31	57	7	32,953	13,420	<b>46,373</b>

**Total Amount Sanctioned for Books & Journals = INR 83,000**

**Total Amount Spent for Books & Journals = INR 46,373**

### Recurring Amount Spent for Labs (2018-24)

Year	Amount INR
2018-19	33,261
2019-20	38,789
2020-21	NIL
2021-22	22,294
2022-23	20,917
2023-24	13,136

**Total Amount Spent : INR 1, 28,397**

### Amount Spent on New Equipment (2018-24)

S. No.	Year	Amount INR
1	2018-19	-
2	2019-20	3,27,840
3	2020-21	-
4	2021-22	-
5	2022-23	3481
6	2023-24	-

### List of Journals in PG Seminar (2018-24)

S. No	Year	Name of the Journals
1	2018-19	Pramana, Journal of Physics
2		Resonance
3		Linux for you
4		Electronics for you
5	2022-23	Indian Journal of Material Science & Technology
6		Indian Journal of Mechanics & Thermodynamics
7		International Journal of Material Physics

### Equipment purchased (2018-24)

S. No.	Year	Equipment	Units
1	2019-20	Active Filters Trainer kits	10
2		Strain gauge kits	05
3		Stepper Motor with 8086 interface chord	02
4		Power Supply for Stepper Motor	02
5		Frequency Modulation kits	04
6		Cathode ray Oscilloscopes	03
7		Function generators	05
8		LVDT Trainer kits	05
9		Digital Multi meters	06
10		Power supply	03
11	2022-23	Quartz Crystal	01

### Infrastructure

- **Department Library** - good collection of prescribed & reference textbooks and practical manuals (118 Books)
- **Internet facility** in the department is extended to students and faculty
- Department has a classroom with **ICT facility**
- Well-equipped laboratories with more advanced and precision instruments
- 16 Computer systems with necessary software
- GM Counters with Radioactive sources - Thallium 204 ( $\beta$  source),

Cesium 137( $\gamma$  source)

## Laboratory Facilities

**No. of Laboratories : 06**

- Heat and Acoustic Lab
- Electronics Lab
- Instrumentation Lab
- General Physics Lab
- Optics Lab
- Computer /Simulation Lab

### EQUIPMENT LIST (Lab -Wise)

#### Heat & Acoustic Lab

S. No	Name of the Item/ Equipment	Quantity
1.	Experimental setup to calculate 'y' and 'η' of spiral springs	2
2.	Experimental setup to calculate Stefan's constant	2
3.	Estimation of Errors using simple pendulum set up	2
4.	Experimental setup to calculate coefficient of Viscosity of Liquid	2
5.	Ultrasonic Spectrometer Set up	1

#### Electronics Lab

S. No	Name of the Item/ Equipment	Quantity
1.	Power supplies	8
2.	Signal Generators	9
3.	Linear IC training kits	2
4.	CRO	11
5.	Regulated Power Supply kit using 723	2
6.	Semiconductor device trainer kits	3
7.	8085 Microprocessor kits	2

## Instrumentation Lab

S. No.	Name of the Item/ Equipment	Quantity
1.	Power control by SCR using UJT kit	2
2.	PLL (IC 565) as FM- kit	6
3.	Active filters trainer kit	12
4.	PLL (IC 565) as frequency synthesizer -kit	2
5.	Strain Gauge kit	7
6.	LVDT trainer kit	7
7.	PLL (IC 565 ) AM Detector -kit	2
8.	Digital trainer kits	13
9.	Stepper motor with 8051 interface chord	1
10.	Multi meters	13
11.	8086 Trainer kit	3
12.	ADC with 8086 Interface chord	2
13.	DAC with 8086 Interface chord	2
14.	Stepper motor with 8086 interface chord	1
15.	8051 Micro Controller kit	3
16.	ADC with 8051 Interface chord	1
17.	DAC with 8051 Interface chord	1

## General Physics Lab

S. No	Name of the Item/ Equipment	Quantity
1.	Colorimeter and 6 tests tubes with Holder	1
2.	Hall Probe	1
3.	Gauss Meters	2
4.	Electromagnets	2
5.	Power supply for Electromagnets	2
6.	Power supply for Crystal	1
7.	GM Counters	3
8.	Aluminium Absorbers sets	3
9.	Copper and Lead Absorbers sets	1
10.	Beta sources	3
11.	Gamma sources	3
12.	Magnetic susceptibility -U tube	1
13.	Travelling Microscope	1
14.	Four Probe method Set up	1
15.	Solar cell kit	1
16.	Thermo emf kit	1

## Optics Lab

S. No	Name of the Item/ Equipment	Quantity
1.	Spectrometers	4
2.	Newton's rings setup	2
3.	Michelson interferometer	1
4.	Bi-prism setup	2
5.	Malus law verification set	1
6.	Babinet compensator set	1
7.	Quartz Prism	2
8.	Crown Prism	2
9.	Sodium vapour lamps	3
10.	Mercury vapour lamps	4
11.	Travelling Microscope	1
12.	Single Slit	1
13.	Double Slit	1

## Computer/ Simulation Lab

No. Of Systems = 22

Softwares: Keil Software and Turbo C Software

## **LIST OF CHARTS**

- Light -Polarization
- Light -Diffraction
- Light - Interference
- Nuclear Radiation Detectors I
- Nuclear Radiation Detectors II
- Cathode Ray Oscilloscope
- Semiconductor Fundamentals- I
- Semiconductor Fundamentals- II
- 8085 – Functional Block diagram- II
- Electronics Symbols

## **LIST OF PORTRAITS**

- Max Plancks
- Vikram Sarabhai
- Homi Jehangir Bhabha
- Satyendranath Bose

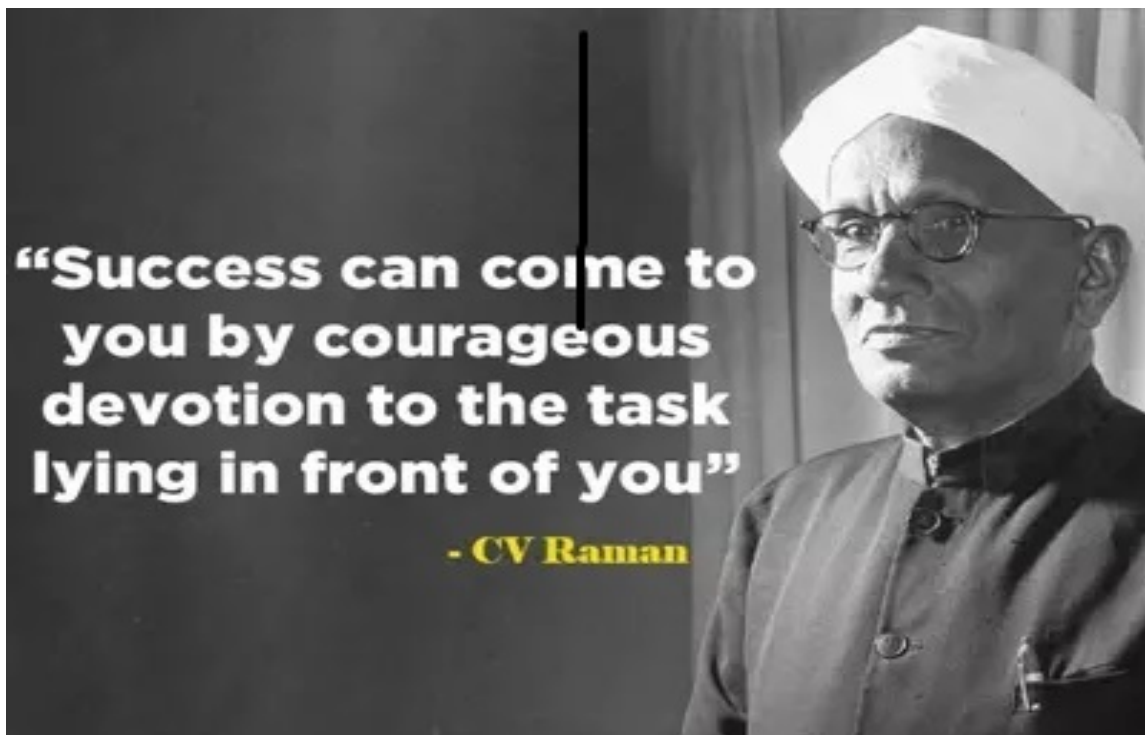


## Department Library – Books

S. No.	Book No.	Author Name	Book Name
1	31560	Pati S.H.	Elements of Modern Physics
2	25790	Metha G.K.	Instruction of Modern Physics
3	21640	Williams	Instruction of Modern Physics
4	27595	David Halliday	Physics
5	23371	Feynman	Lecturer on Physics
6	23372	Feynman	Lecturer on Physics
7	23373	Feynman	Lecturer on Physics
8	23386	Hans &Puri	Mechanics
9	27418	Loney S.L.	Dynamics
10	27457	Edward	Electromagnetic Waves
11	27462	Millman	Digital & Switching
12	27303	Basavaraju	Mechanics
13	27684	Richards	Physics of the Atoms
14	33037	Scham's	Microprocessor
15	46489	Halliday	Fundamental of Physics
16	40429	Verma	Concept of Physics
17	23391	R.Resuick	Special Relativity
18	23544	French	Vibration & Waves
19	27564	Lands bug	Ele. T.B. of Physics
20	43389	Theraja	Basic Electronics
21	30048	Umesh Singh	Net Works Analysis
22	27569	Rajput	Mathematical Physics
23	46596	Grah	Basic Electronics
24	46597	Grah	Basic Electronics
25	27568/A	K.N.Mukhin	Nuclear Physics
26	27565	K.N.Mukhin	Nuclear Physics
27	43421	Jacob Millimail	Electronics Devices & Circuits
28	44833	Maheswari	Electronic Dept. Experiment
29	28220	Dekker .A.V.	Solid State Physics
30	40437	Agarwal D.C.	Optics
31	27519	Sriram.K	Nuclear Physics
32	43404	Chattopadhyay	Mechanics
33	27331	Leonard Schiff	Mechanics
34	27012	Gram. R.K.	Engineering Physics
35	27425	Ray.M	Dynamics
36	27544	Sirohi.R.S.	Laser
37	27409	Malvino	Electronics
38	40432	John.L	Mechanics
39	40440	John.L	Encyclopedia & Electronic terms
40	27466	MillmanGeorge	Micro Electronics
41	37102	Geroge	Electronics Communications
42	21634	Nelkon	Advance level Physics
43	28039	S.Chand	Mechanics
44	30290	Anwar Kamal	Mechanics

45	43401	D.S Matur	Mechanics
46	27402	Zemonsky	Thermo Dynamics
47	26051	Jackson	Electro Dynamics
48	21615	A.A. Kamal	Solution to Resnick & Holiday Physics-I
49	22923	A.A Kamal	Solution to Resnick & Holiday Physics-II
50	28070	Rajput	Mathematical Physics
51	28219	S.M.Sze	Physics. Of Semiconductor Devices
52	43400	Theraja	Electrical Technology Vol-III
53	27308	Edward	Electricity Magnetism
54	45769	Maharajan	Electricity Magnetism
55	43403	Mathur D.M.	Electronics, of Properties of Matter
56	25515	G. Kumar	Spectroscopy
57	44544	Gurdeep.R	Spectroscopy
58	45739	William H.Hayt	Engineering circuit analysis
59	45771	William H.Hayt	Engineering circuit analysis
60	33102	David Bell	Fund. Of Elec. Devices
61	26050	Loud .B.B.	Electro Magnetism
62	28224	Neil W.A. Sachriot	Solid State Physics
63	34845	Dekkar A.J.	Solid State Physics
64	27411	George	Physics
65	19327	Millmam	Electronic Devices
66	30047	Mathur	Electronics Devices& Cts
67	44834	John Paul	Electronics Devices & Cts
68	33025	Herbaut Taub	Digital Integrated
69	33033	Douglas V.Hall	Microprocessors
70	45727	R.Gaonkar	Microprocessors
71	45742	Molvino	Digital Principle
72	29843	Paul Bzbar	Basic Electronic Expt.
73	45764	Rajam J.B.	Atomic Physics
74	40438	J.Wilson	Opto Electronics
75	21653	Brinjal	Num prob in Physics
76	22951	Kittel .c	Introduction to solid State Physics
77	40441	Murthy D.V.S	Transduces & Instrumentations
78	40447	A.Joshc	Electronics Components & Materials
79	31620	Theraja B.L.	Elec. Technology Vol-III
80	31703	Murugeshan	Modern Physics
81	37104	A.Joy Ghatak	Optics
82	43409	S.Chand	Optics Fibers
83	44523	Srivastav C.M	Science of ENGL. materials
84	44524	Rangan C.Sharma	Instrumentation Devices & System
85	45732	A.Sudhakar	Network theory
86	44500	Albert .D	Electronics Instrument
87	31598	Dekker A.J	Electronics Instruments
88	23370	Strelkov	Mechanics
89	27573	B.D Gupta	Mathematical Physics
90	28062	Scham's	Vector Analysis
91	33034	Scham's	Electronics
92	40430	H.C.Verma	Concepts of Physics

93	44502	Raghavan.V	Material science & Engineer
94	46499	Rajput R.K.	Engineering Mechanics
95	46498	Rajput R.K.	Engineering Mechanics
96	43387	R.Murugeswer	Electricity & Magnetism
97	31696	R.Murugeswer	Electricity Magnetism
98	43402	Bringlal	Optics
99	27412	George Gamon	Physics
100	46494	Gupta .S.L.	Unified Physics Vol-I
101	33787	A.K.Roy	Electronics Science Experiments
102	33792	HOB	Hoby Elec. Projects Special
103	33783	M.C.Sharma	41 projects using 741.I.C.
104	33803	Anthony J.carisit	Electronics Telephone Projects
105	33790	BPB Publication	Build your own Inter communications
106	33786	P.K.Soop	Elec. Musical Projects
107	33797	A.M.Hoebeek	Digital I.C Equivalents
108	33794	Tom Duncon	Electronics for today & tomorrow
109	33782	M.C.Sharma	Disco projects
110	33791	B.P.B.publications	Coils and Transformers
111	33802	Amrit bir Tiwana	Versatile Elec. Circuits
112	33806	B.P.B.Publications	Antenna hand book
113	33785	M.C.Sharma	Easy to build Elec. Alarms
114	33807	Electron Publications	Integrated circuits Applications
115	33795	Rudoli F.Grof	Electronics circuits
116	33798	B.P.B.Publications	World Transistor Equivalents & data
117	33800	B.P.B.Publications	CMOS data book
118	33799	B.P.B.Publications	World transistor Equivalents & data



## Lab wise Furniture

S. No.	Types of Furniture	PG L-1	PG L-2	PG L-3	PG L-4	PG L-5	PG L-6	Total
1.	Work Benches	-	8	8	9	5	5	35
2.	Student Tables	-	-	-	-	4	-	04
3.	Iron Stools	-	14	12	16	10	3	55
4.	Wooden Chairs	-	-	-	-	2	-	02
5.	Computer tables	10	-	-	-	-	-	10
6.	Computer chairs	04	-	-	-	-	-	04
7.	Steel Almirah	-	1	2	2	1	-	06
8.	Steel Organizer	-	1	-	-	-	-	01
9.	Wooden chair with wire	-	-	-	-	-	-	
10.	Iron Chair with wire	-	1	1	1	-	-	03
11.	Plastic chairs	28	-	-	-	-	-	28

**PG L-1 –Computer Lab**

**PG L-2 –Electronics Lab**

**PG L-3 –Instrumentation Lab**

**PG L-4 –General Lab**

**PG L-5 -Heat & Acoustic Lab**

**PG L-6 –Optics Lab**

## FORMER COLLEAGUES

1	Sri Kabir Mohinuddin, I.A.S Retd.,
2	Mr. K. Mahendar Reddy, Left Vanita and Joined N.R.S.A
3	Mrs. M. Jyothi, presently working in U.S.A
4	Mr. G. Someshwar Reddy, P.G.T, K.V, Ghatkesar.
5	Mr. Pattabi Rami Reddy, Lecturer in Govt. Polytechnic College.
6	Mr. Chenna Reddy, after leaving Vanita College started a School which is running successfully.
7	Ms. Ch. Jyothi, Lecturer Social Welfare Residential Junior College, Khammam Dist.
8	Ms. G.Usha Rani, Tourism Department, Vijayawada A.P.
9	Ms. Lalitha, Asso. Prof in Physics, Telangana University.
10	Mr. Srinivasa Raju, Faculty,IIST, Thiruvananthapura
11	Ms. Swarna Latha, SRF, IIT, Hyderabad
12	Ms. Meera bee, Asst.manager in Canara bank.
13	Ms. Sowjanya, Principal, TREIRB.
14	Ms. Sravya, Guezitted Officer, ONGC.
15	Ms. Shivarani, Incharge Principal, TREIRB.
16	Ms. Madhuri, Lecturer in Radiological Physics and MEDICAL PHYSICIST
17	Ms. Deepti, PGT IN TMRS,
18	Ms. Pravalika, SBI
19	Ms. S. Swetha, Guest Faculty, JNTU, Hyd.

## RETIRED COLLEAGUES

1	Smt. K.Shantha Ramachander, Head of the Department
2	Smt. S.Shantha, Lab Assistant.
3	Sri. P.Yadaiah, Record Assistant
4	Dr. A. K. Priyadarshini, HOD, Physics and Electronics
5	Sri. Bassappa, Record Asst.
6	D. Anji Reddy, Vice-Principal
7	S. Upender Reddy, Vice Principal (Sciences)

## EMINENT ALUMNAE

<b>1</b>	Ms. Pallavi, Principal DevOps Engineer Broadcom
<b>2</b>	Dr. Manjula, Assoc. Prof. in Physics, Kakatiya University
<b>3</b>	Ms. Shilaja, Research Scholar, Osmania University
<b>4</b>	Ms. Veda, Guest Faculty, JNTUH
<b>5</b>	Ms. Radhika SRF, DRDO, Hyderabad
<b>6</b>	Ms. J. Deepa , Medical Physicist, AOI, Hyd.
<b>7</b>	Ms. Bhagyasri, Software Engineer
<b>8</b>	Ms. Swarna Latha, SRF, IIT, Hyderabad
<b>9</b>	Ms.Meera bee, Asst.manager in Canara bank
<b>10</b>	Ms. Sowjanya, Principal, TREIRB.
<b>11</b>	Ms. Shivarani, Incharge Principal, TREIRB.
<b>12</b>	Ms. Madhuri, Lecturer & Medical Physicist, MNJIO & RCC, Red Hills
<b>13</b>	Ms. Deepti, PGT in TMRS,
<b>14</b>	Ms. Aruna Kumari, Contract Lecturer, BJR Govt. Degree College, Hyd

## GALLERY



**Instrumentation Lab**



**Electronics Lab**



**Optics Lab**



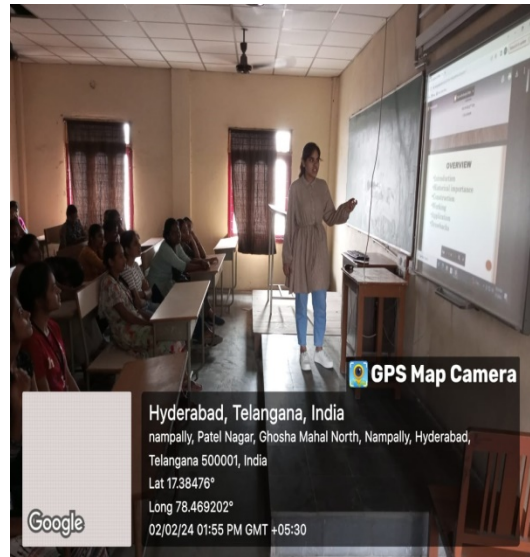
**Heat and Acoustics Lab**



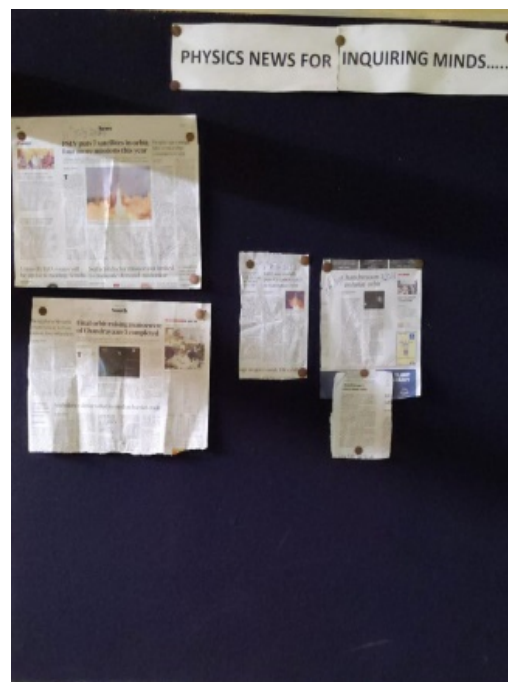
**General Physics Lab**



**Computers Lab**



**Class room with ICT Facility**



**Physics News Board**



# Department Events

2023-24



**SAROJINI NAIDU VANITA MAHA VIDYALAYA**  
 DEPARTMENT OF PHYSICS & ELECTRONICS  
**Power Consumption Awareness**

Room No: 1002

1. No. of LED lights 1 Total wattage 1200/20  
 2. No. of Fluorescent Tube lights 2 Total wattage 2750/20  
 3. No. of Fans 0 Total wattage 0/20

Total Wattage of all appliances used for one hour = 3950 Watts  
 Average power consumption of all appliances used for six hours  
 = 3950 Watts = 0.658 KWH/Units

Power Tariff per unit for H T connection = Rs.10/- (Subject to change)  
 Total Tariff of this room = Rs. 6.58/-

Note:

S. No.	Name of Appliance	Power consumed per hour
1	LED Tube lights	20 / 40 Watts
2	Fluorescent lights	40 Watts
3	Fans	75 Watts

Data collected by  
 Name of Student : K. Mounika

H. T. No: 175-23-44-04 Class: B.Sc (Sem-IV) Date: 29-03-24

Power Saved is Power Generated

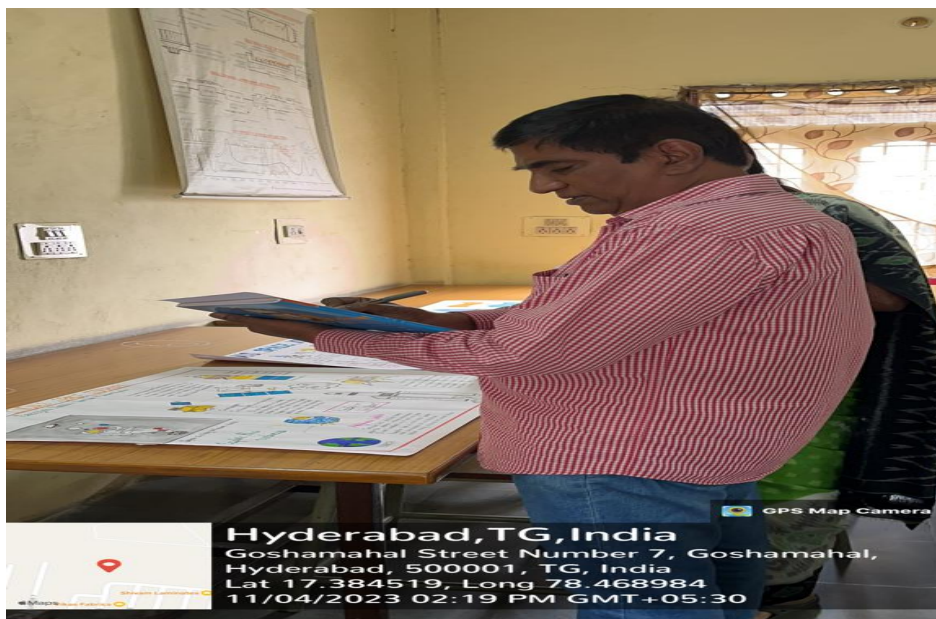
Switch off Lights & Fans before leaving the room

## Power Consumption Awareness on 30- 03-2024



**Interclass Competitions on the occasion of NSD-2024**

**28-02-2024**



**Interclass Competitions on the occasion of Sir C.V.Raman Birth Anniversary celebrations -2023**



**Guest Lecture by Dr. Sreenath Reddy, Dept. Of Physics, OU  
11-10-2023**

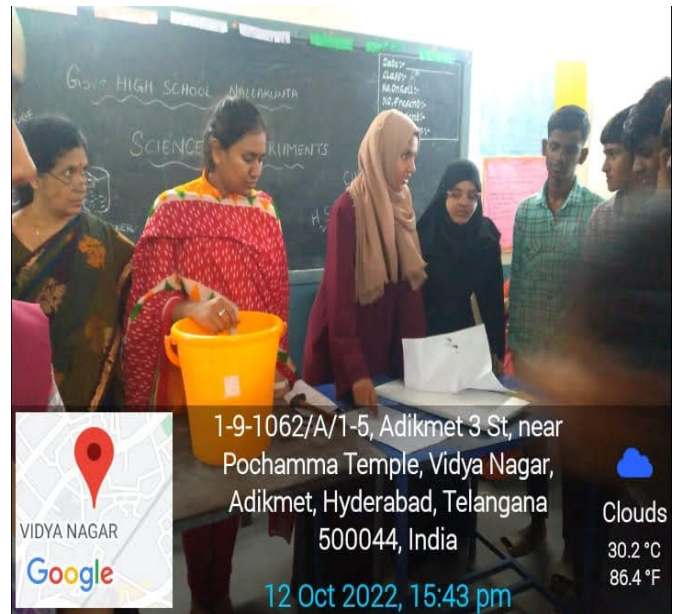


**Guest Lecture by Dr.C.Aruna, Head, Dept. of Physics & Electronics  
Aurora Degree & PG College on 14-07-2023**

2022-23



Release of Quarterly Newsletter Photon on 05-09-2022



Visit to Govt. Boys High School, Amberpet, Govt. High School, Nallakunta

on 12-10-2022



**Add-on course on “Know Your Electrical Appliances  
Selection, Protection & Safety”,  
From 16.11.2022 to 20.12.2022**

**Sarajini Naidu Vanita Maha Vidyalaya**  
(Sponsored & Managed jointly by Osmania Graduates' Association and Exhibition Society)  
 Exhibition Grounds, Nampally, Hyderabad, Ph-0402955076  
 SARAJINI ANURADHA (1962-2022)

Diamond Jubilee Year (1962-2022)

**Department of Physics & Electronics**

**Sir C.V Raman Birthday Celebrations - 2022**

invites  
all UG & PG Physics Students to participate in  
**Intercollegiate Competition**  
"Design of Low-Cost Experiments"  
to explain Physics Concepts for High School level  
on **07.11.2022 from 10:00 AM onwards**  
Register on or before **02-11-2022**  
<https://forms.gle/dZF14SoxURvzfWzFA>

**Guidelines**

- Participants have to bring working models with write-ups
- Maximum of 3 experiments by individual/team of 2 members
- Prizes for winners, Certificates for all participants & Mentors

For any queries  
contact  
Ms. Swathi,  
Faculty Coordinator,  
Mobile: 7799298604

No registration  
fee

Mrs. Anuradha B  
Head, Dept. of Physics & Electronics
Dr. D. Shobhana  
PRINCIPAL

**Sarajini Naidu Vanita Maha Vidyalaya**  
(Sponsored & Managed jointly by Osmania Graduates' Association and Exhibition Society)  
 Exhibition Grounds, Nampally, Hyderabad, Ph-0402955076  
 SARAJINI ANURADHA (1962-2022)

Diamond Jubilee Year (1962-2022)

**Department of  
Physics & Electronics**  
invites all

**Sir C.V Raman Birth Anniversary  
Celebrations - 2022**

**Chief Guest**  
**Prof. D. KARUNA SAGAR**  
Head, Department of Physics,  
Osmania University

on  
**Date: 07.11.2022, Time: 02:00 PM**  
at  
**Golden Jubilee Hall**

Ms. Anuradha B  
Head, Dept. of Physics & Electronics
Dr. D. Shobhana  
PRINCIPAL

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Visit the Exhibition of  
"Design of Low-Cost Experiments in Physics"  
in the Labs,  
Department of Physics & Electronics  
from 11:00 AM onwards



**Sir C.V Raman Birth Anniversary Celebrations on 07-11-2022**

**Intercollegiate Competitions on “Design of Low–Cost Experiments” for High School level.**



**Release of Photon Newsletter by Chief Guest Prof. K.Karuna Sagar ,  
Head, Dept. Of Physics, OU**



**Field Trip to National Remote Sensing Centre (NRSC) on 29-11-2022**





**SAROJINI NAIDU  
VANITA MAHA VIDYALAYA**  
(Sponsored and Managed Jointly by Osmania Graduates' Association & Exhibition Society)  
Exhibition Grounds, Mukarramjahi Road, Nampally  
Hyderabad, 500001, Telangana State  
Phone No.: 040-29555676

**National Science Day - 2023**  
**Departments of Science**  
**Invites**

**All UG and PG Science Students to participate in Inter-Collegiate competitions to be held on 24<sup>th</sup> February 2023.**  
**10.00am - 1.00pm**  
**Register on or before 23-02-2023**  
**Link: <https://forms.gle/Rx2FUN5SmmRBXND27>**

S.No.	Department	PPT Topic (Max. 3Min)	Poster Presentation Topic	MODEL MAKING / JUST A MINUTE (JAM)
1	Zoology	Remediation of Plastic (OR) Impact of Mobile phone usage on human health	Drug Formulations	working models of animal systems with low cost material- "Anatomical & Physiological Models"
2	Chemistry	Pesticides and its Harmful Effects on man kind (OR) Organic Farming		
3	Botany	Environment pollution control and sustainability of resources	An innovative approach in plant sciences for well being of society	
4	Biochemistry		laborer errors in metabolism (OR) Organ function tests (Mention the recent developments)	JUST A MINUTE (JAM) Biochemistry for Global Well Being
5	Nutrition (UG)		DAISH Diet	
6	Physics	Applications of Physics in Health Care	Advances in Physics for the Welfare of Society	
7	Microbiology		Aware and Beware of Microbes - Global well being	Working models on Aware and Beware of Microbes
8	Computer Science	Artificial Intelligence in Health Care		
9	Nutrition & Dietetics (PG)	Occupational Hazards - Prevention and Management	Life Style Disorders and Diseases Management for Global well being	
10	Mathematics	Understanding the world (Global well being) through Maths	Mathematics model for Covid 19 (creating inclusion class)	

**Note: Team size for all events: Max. of 2 & Number of teams per subject :Max. of 3**  
**No registration Fee**  
**Prizes for winners & certificates for all participants**  
For any queries contact:  
S. Uppinder Kourdy  
Vice-Principal (Sciences) ☎9441676201

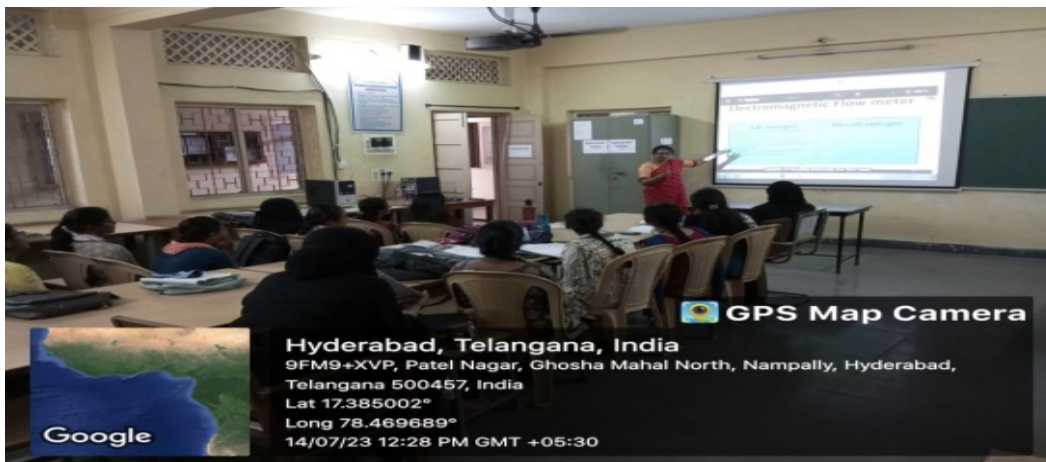
**Dr. D. Shobhana**  
Principal



**NSD-2023, Intercollegiate competitions in PPT & Poster Presentation**  
**on 24-02-2023**



**NSD-2023, Photon News Letter release & Felicitations to Retired Faculty (Physics) Dr. A.K. Priyadarshini, Mr. D.Anji Reddy on 28-02-2023**



**Guest Lecture By Dr.C.Aruna, Head Dept of Physics & Electronics Aurora Degree & PG College on 14-07-2023**

2021-22

Sarojini Naidu Vanita Maha Vidyalaya  
(Sponsored & Managed jointly by Osmania Graduates' Association and Exhibition Society)  
Exhibition Grounds, Nampally, Hyderabad. Ph-04022955626  
NAAC Accredited (5rd Cycle)


**Department of Physics & Electronics**  
organising a Lecture on  
**Role of Technology in Shaping our Future**



By  
**Dr. Gopala Krishna Behara**  
Lead Enterprise Architect &  
Distinguished Member of Technical Staff, WIPRO  
On 27th November, 2021 || 11:40 AM  
Shankarji Auditorium  
\*\*\*All are invited\*\*\*



Release of Quarterly News Letter “Photon” by Dr. Gopala Krishna Behara on 27-11-2021

 **Sarojini Naidu Vanita Maha Vidyalaya**  
(Sponsored and managed jointly by Osmania Graduates' Association and Exhibition Society)  
Exhibition Grounds, Nampally, Hyderabad  
Diamond Jubilee year.(1962-2022)

**Department of Physics & Electronics**

Invites  
All U.G and P.G Students  
to participate  
in  
Inter collegiate Essay Writing Competition  
in connection with

**NATIONAL SCIENCE DAY CELEBRATIONS-2022**

**Topic:**  
Role of  
PHYSICS in  
Healthcare  
Industry

**Instructions:**

1. U.G and P.G students from any college in India are eligible to participate.
2. The essay should not exceed 750 words.
3. Typed or legibly hand written essay's should be uploaded in the given google form in PDF format.
4. Student name, college name, location, email i'd, mobile number should be written on the first page of the essay.
5. Plagiarism check will be done.
6. The decision of the department is final.

Please send your essay through the following link:  
<https://forms.gle/zr5FXSrtfGRfyN6>


Last date of the entry 22<sup>nd</sup> February

Prizes for Winners

E-certificates will be issued to all the participants

**K. Subba Rao**  
Head, Dept. of Physics and Electronics

**Dr.D.Shobhana**  
Principal

 **Sarojini Naidu Vanita Maha Vidyalaya**  
(Sponsored and managed jointly by Osmania Graduates' Association and Exhibition Society)  
Exhibition Grounds, Nampally, Hyderabad  
Diamond Jubilee Year (1962-2022)


**National Science Day 2022**  
Department of Physics & Electronics  
Cordially invites to a Guest Lecture on  
**APPLICATIONS OF SPECTROSCOPY**

By  
**Dr. Usha Praveena**  
Assistant Professor, Department of Physics.  
St. Francis College for Women  
Begumpet, Hyderabad.

**Saturday, 26<sup>th</sup> February 2022**  
Venue: Golden Jubilee Hall. Time: 11:00 am

**K. SUBBA RAO**  
Head, Dept. of Physics & Electronics

**Dr.D.SHOBHANA**  
Principal



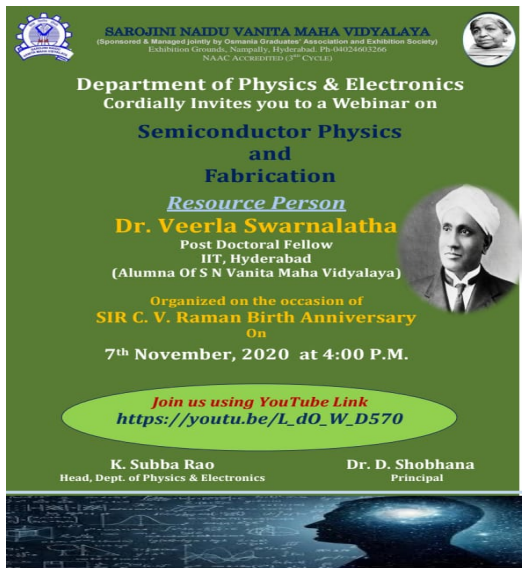
*"Science knows no country,  
because knowledge belongs to  
humanity, and is the torch which  
illuminates the world"*  
-Louis Pasteur

National Science Day Celebrations – 2022



**Field Visit to NIN on 25-02-2022**

2020-21



**SAROJINI NAIDU VANITA MAHA VIDYALAYA**  
(Sponsored & Managed jointly by Omnisia Graduate Association and Exhibition Society)  
Exhibition Grounds, Nampally, Hyderabad, Ph:0402955676  
NAAC ACCREDITED (3<sup>rd</sup> CYCLE)

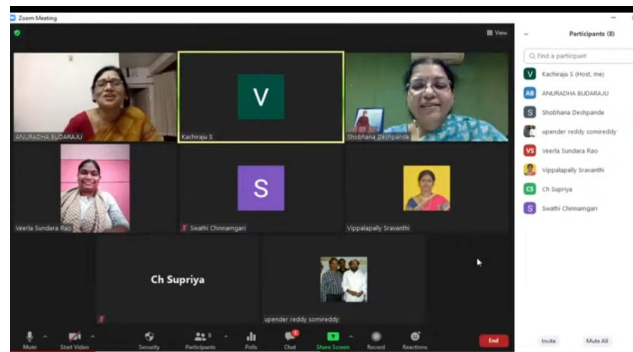
**Department of Physics & Electronics**  
Cordially Invites you to a Webinar on  
**Semiconductor Physics and Fabrication**  
*Resource Person*  
**Dr. Veerla Swarnalatha**  
Post Doctoral Fellow  
IIT, Hyderabad  
(Alumna Of S N Vanita Maha Vidyalaya)

Organized on the occasion of  
**SIR C. V. Raman Birth Anniversary**  
On  
**7<sup>th</sup> November, 2020 at 4:00 P.M.**

Join us using YouTube Link  
[https://youtu.be/L\\_dO\\_W\\_D570](https://youtu.be/L_dO_W_D570)

**K. Subba Rao**  
Head, Dept. of Physics & Electronics

**Dr. D. Shobhana**  
Principal



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**Department of Physics & Electronics**  
Cordially Invites you to a Webinar on Sem...

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## Sir C.V Raman Birth Anniversary Celebrations – 2020



**Sarojini Naidu Vanita Maha Vidyalaya**  
(Sponsored & Managed jointly by Omnisia Graduate Association and Exhibition Society)  
Exhibition Grounds, Nampally, Hyderabad, Ph:0402955676  
NAAC Accredited (3<sup>rd</sup> Cycle)

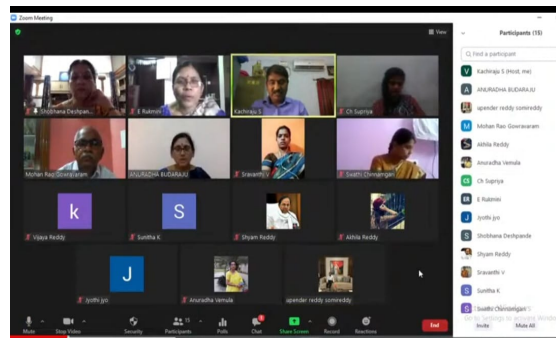
**Department of Physics & Electronics**  
is organising a Lecture on the occasion of  
**National Science Day**  
28th February, 2021 at 11:30 AM

**"Laboratory Plasmas & Applications"**  
by  
Distinguished Speaker  
**G.Mohan Rao**  
Professor Emeritus  
Dept. of Instrumentation & Applied Physics  
Indian Institute of Science, Bangalore

Please click on the link to join the session  
<https://youtube/GwtrZGuM+YY>

**K. Subba Rao**  
Head, Dept. of Physics & Electronics

**Dr. D. Shobhana**  
Principal



**Lecture on the occasion of National Science Day**

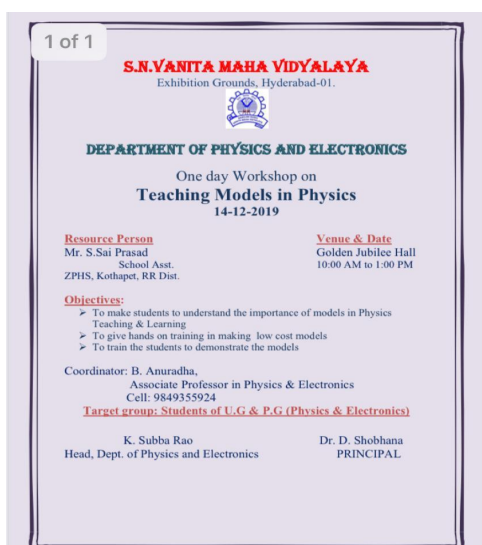
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Sarojini Naidu Vanita Maha Vid... 1.98K

## National Science Day Celebrations - 2021

2019-20



**Mr. Sai Prasad explaining the importance of Teaching Models on 14-12-2019.**



**Participants in the Workshop**



**Students Hands-on Experience in making Teaching Models.**

2018-19



**Inauguration of SPARK 2K19 – chief guest Prof. Ravi kumar Member Secretary TSCOST.**



**Chief Guest interacting with the participants in competitions.**



**News coverage of Inauguration of SPARK -2K19**



**Dr. Ravi Chandra Scientist –F, ARCI, delivering Lecture on 22-02-2019**



**Students interacting with Speaker on 22-02-2019**





**News coverage of Valedictory Function of SPARK -2K19  
on 22-02-2019.**



**Field Visit to ARCI on 18-04-2019.**