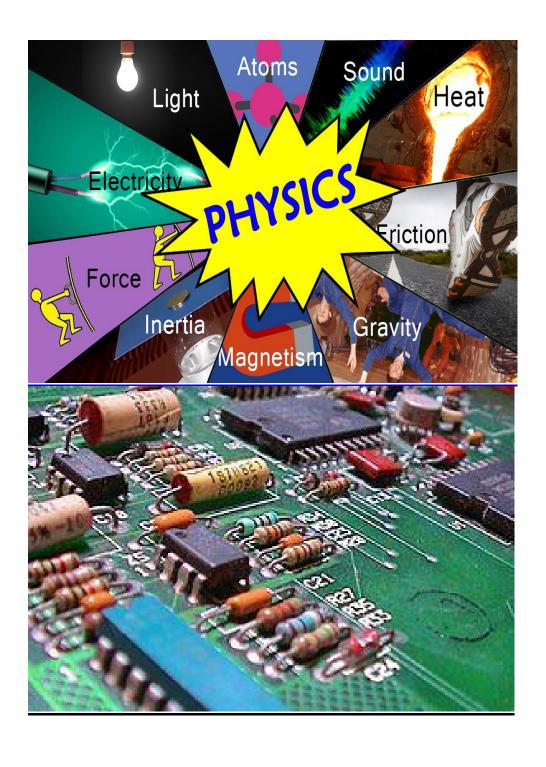
## Sarojini Naidu Vanita Maha Vidyalaya Exhibition Grounds, Hyderabad

### **Department of Physics & Electronics**

Department Profile - UG (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 souring 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	07	07	06	06	05	05
No. of Support staff	05	05	04	04	04	04

# FACULTY PROFILE - (2023-24)

### **FACULTY**

S. No	Name	Designation	Qualification	Experience in Years
1.	K.Subba Rao	Assoc. Prof. & Vice Principal (Sciences)	M.Sc.Ed., M.Tech, M.Phil.	33
2.	V.Anuradha	Assoc. Prof. & HOD	M.Sc, DISM	29
3	Dr. E.Rukmini	Assoc. Prof.	M.Sc., B.Ed, Ph.D	24
4	K.Vijaya	Assoc. Prof.	M.Sc.	17
5.	S.Prashanthi	Asst. Prof.	M.Sc.	09

### **SUPPORT STAFF**

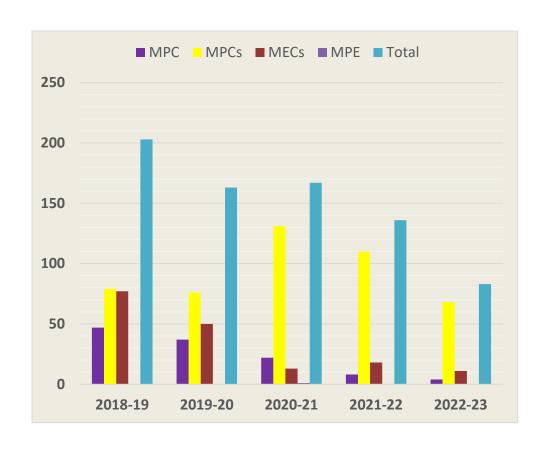
S. No	Name	Designation	Qualification	Experience in Years
1.	S.Navaneetha	Lab Asst.	B.Sc.	03
2.	M.Sreedevi	Attender	B.A.	21
3.	G. Anuradha	Aaya	7 <sup>th</sup> class	23
4.	G.Aditya	Store keeper	10 <sup>th</sup> class	01

### STUDENT STRENGTH (MPCS, MPC, MPE & MECS)

Academic Year	1986-87	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Admitted Student	75	203	163	167	136	83	62
Strength							

### GROUP WISE STUDENT STRENGTH

Academic Year	MPC	MPCS	MECS	MPE	Total
2018-19	47	79	77	0	203
2019-20	37	76	50	0	163
2020-21	22	131	13	1	167
2021-22	8	110	18	0	136
2022-23	4	68	11	0	83
2023-24	0	56	06	0	62



## Work Load per Week - (2023-24)

### Physics (MPC, MPCS & MPE)

Semester: I, III & V

SEM	COURSE	THEORY	PRACTICALS	TOTAL
I	PHYSICS	4	12	16
III	III PHYSICS		15	19
V	V PHYSICS		21	29
TOTAL		16	48	64

## **Electronics (MECS & MPE)**

Semester: I, III & V

SEM	COURSE	THEORY	PRACTICALS	TOTAL
I	ELECTRONICS	4	3	7
III	ELECTRONICS	4	3	7
V	ELECTRONICS	4	3	7
ТО	TAL	12	9	21

Total work Load: 64 + 21 = 85 Periods /week

## Physics (MPC, MPCS & MPE)

Semester: II, IV &VI

SEM	COURSE	THEORY	PRACTICALS	TOTAL
II	II PHYSICS 4		12	16
IV	IV PHYSICS		15	19
VI	PHYSICS	8	21	29
TOTAL		16	48	64

## **Electronics (MECS & MPE)**

Semester: II, IV & VI

SEM	COURSE	THEORY	PRACTICALS	TOTAL
II	ELECTRONICS	4	3	7
IV	ELECTRONICS	4	3	7
VI	ELECTRONICS	4	3	7
ТО	TAL	12	9	21

Total work Load: 64 + 21 = 85 Periods/week

# **Department Time Table- (2023-24)**

# SEM- I, III & V

DAY	SEM	10:00-11:00AM	11:00-12:00PM	12:00-1:00PM		1:30-2:30PM	2:30-3:30PM	3:30-4:30PM
		I	II	III		IV	V	VI
	I	MPC-I, MECS -I						
MO N	III		MPCs-III, MECS-III			←MPCs(:	PHY)(AB), MECs	(Elec)(III)
	v			MPCs-V- (A1)(A2), MECs-V				
	I	MPCs-I, MECs -I						
TUE	III					MPCs, MECs - III		
	v			MPCs-V- (A1)(A2), MECs-V		←MPCs	s(PHY)(AB), MEO	Cs (Elec)(V)
	I		MPCs-I, MECs - I					
WE D	III					<b>←</b>	MPCs(PHY)(CDI	ζ)
	v	←MPCs(l	PHY)(CD)	→	LUNCH	MPCs(A1)		
	I		MPCs-I, MECs -I		TO			
THU	III							
	v	MPCs-V-(A1)(A2), MECs-V				<b>←</b>	MPCs(PHY)(KI	.M)
	I					←	-MPCs(PHY)( CE	))
FRI	III	MPCs-III, MECs - III						
	v			MPCs-V- (A1)(A2), MECs-V				
SAT	I	←MPCs(I	PHY)( CD ), MECs	(Elec) (I)				
	III	MPCs, MECs -III						
	V							

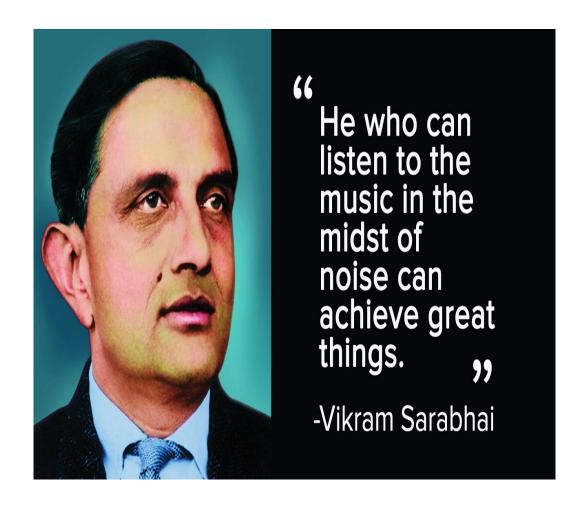
### SEM- II, IV & VI

DAY	SEM	10:00-11:00AM	11:00-12:00PM	12:00-1:00PM		1:30-2:30PM	2:30-3:30P	M 3:30-4:30PM
		I	п	ш		IV	v	VI
	II	Phy- (Th), Ele –(Th)						
MON	IV		Phy- (Th), Ele – (Th)		_	←MPCs(Pl	HY)(AB), ME	Cs(Ele)
	VI			Phy- (A1,A2)(Th), Ele –(Th)				
	II	Phy- (Th), Ele –(Th)						
TUE	IV					Phy- (Th),		
	VI			Phy- (A1,A2)(Th) Ele –(Th)		←MPCs(:	PHY)(AB), M	ECs (Ele)
	II		Phy- (Th), Ele –(Th)					
WED	IV				_	←N	 IPCs(PHY)(Cl	OK)
	VI	<i>←</i>	MPCs(PHY)(CD)	<u> </u>				
	П		Phy- (Th), Ele –(Th)		LUNCH			
THU	IV							
	VI	Phy- (A1) (Th)	Phy- (A2) (Th),Ele(Th)			<b>←</b>	MPCs(PHY)(I	XLM)
FRI	II					<b>←</b> }	MPCs(PHY)(	CD)
	IV	Phy- (Th), Ele –(Th)						
	VI			Phy- (A1,A2)(Th) Ele –(Th)				
	II	←MPCs	(PHY)( CD ), MECs (E					
SAT	IV					Phy- (Th), Ele –(Th)	Ele – (Th)	Ele-(Th)
	VI							

#### 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
- "Open Day" is organized to school students to visit laboratories and witness the experiments demonstrated to understand the basic concepts
- 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



### **BEST PRACTICES**

Best practice -1: Book Bank - Department maintains Book Bank which is repository of books generously donated/contributed by former students, staff and specimen copies of text books given by publishers . Students can barrow the essential books and materials required for their courses . This practice ensures that all students have access to the resources they need to succeed academically, regardless of financial constraints. This initiative promotes equity and inclusivity fostering a supportive learning environment where every student has the opportunity to excel.



**Book Bank-**

No. of books - 237

Best practice -2: Optimal Utilization of Equipment - The department prioritize the design of Experiment Cycles to maintain a better student - to - equipment ratio. This practice ensures that each student has ample access to apparatus /equipment, facilitating hands-on learning experience.

# **B.Sc (PHYSICS) PRACTICALS, SEM-IV**

CYCLE-I Date: 21-1-2024

GROUP	Roll No.	Strength	Experiment No.
	1175-22-468- <b>001</b> TO - <b>009</b>	8	1
MPCs	1175-22-468- <b>010</b> TO - <b>018</b>	8	2
	1175-22-468- <b>019</b> TO - <b>026</b>	8	3
	1175-22-468- <b>027</b> TO - <b>035</b>	9	. 4
	1175-22-468- <b>036</b> TO - <b>044</b>	8	1
	1175-22-468- <b>045</b> TO - <b>053</b>	8	2
	1175-22-468- <b>054</b> TO - <b>061</b>	8	3
MPCs	1175-22-468- <b>062</b> TO - <b>068</b>		
&MPC	&	9	4
	1175-22-441- <b>001</b> TO - <b>004</b>		

Experiment No.	Name of the Experiment
1	Wedge method
2	Dispersive power of a Prism
3	Pulfrich refractometer
4	Sonometer

Juvacha 21/1/2024

### **TEACHING METHODS AND AIDS**

- Conventional Lectures
- Demonstration method
- Question answer method
- Class room Seminars
- Use of Smart Board and LCD Projector
- Use of charts, models and graphs
- Problem Solving methods
- Quizzes
- Simulation Labs
- Assignments
- Online Classes
- Field Visits
- Seminars
- Guest Lectures
- Workshops
- YouTube Channels
- Using mobile apps

### 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	No. of
		(including 2 internals)	Assignments
1	Ι	3	05
2	II	3	05
3	III	3	05
4	IV	3	05
5	V	3	05
6	VI	3	05

### **B.Sc-PHYSICAL SCIENCES**

### **Program Outcomes (POs)**

**PO1:** Apply fundamental knowledge in concepts of Physical Sciences and its applications used in analysis, preparation of new materials and models in industry and daily life.

**PO2:** Acquired knowledge with facts related to Mathematics, Physics, Electronics, Chemistry & Computer Sciences and understand the basic concepts, fundamental principles, scientific theories related to various scientific phenomena and their relevance in day to day life.

**PO3:** Acquire hands-on practical skills will promote confidence and develop critical thinking skills to identify, analyze and solve the problems in their core areas using modern tools.

**PO4:** All the skills illustrated provide equal opportunity across the genders in handling scientific instruments, lab techniques, writing programs & analyze data to meet industry needs.

**PO5:** Gain knowledge and skills required for pursuing research and higher education in India and abroad.

**PO6:** Promote rational thinking, using the scientific knowledge for the benefit of mankind and sustainable development in research with in the frame work of respecting environmental issues, professional ethics and value system

### **Program Specific Outcomes (PSOs)**

### PSO<sub>1</sub>

Develop proficiency to apply basic concepts in problems solving and provide foundation to understand the advanced topics of Physics.

### PSO<sub>2</sub>

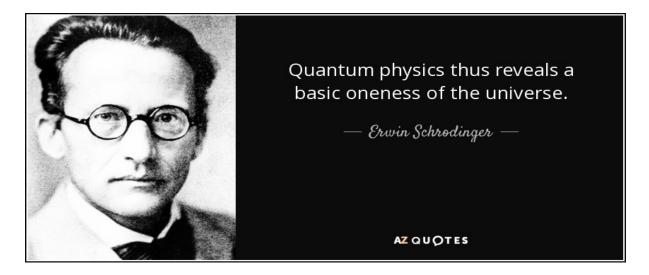
The students acquire sound knowledge in the fields of Mechanics & Oscillations, Thermal Physics, Wave Optics, Modern Physics, Electromagnetic theory and Electronics for pursuing higher education and Research.

### PSO<sub>3</sub>

Students attain comprehensive knowledge in Electronics that helps to construct, analyze and verify, digital & discrete component circuits using appropriate tools & Techniques.

### PSO<sub>4</sub>

Design, Develop Electronic system for practical applications.



### **Course Outcomes (COs) – Physics**

#### SEMESTER - I

#### Mechanics & Oscillations

CO1: Apply the basics of vectors in understanding and analyzing concepts of Physics and related theorems.

CO2: Understand translational and rotational dynamics and their applications.

**CO3:** Gain knowledge on central forces and special theory of relativity.

CO4: Understand SHM and Lissajou's figures to find out frequencies of waves.

#### SEMESTER - II

### **Thermal Physics**

CO1: Gain knowledge in Kinetic theory of gases.

**CO2:** Evaluate entropy changes in a wide range of process.

CO3: Understand the significance of laws of thermal radiation.

CO4: Analyze in depth about statistical distribution and basic ideas about Boltzmann Fermi-Dirac and Bose-Einstein statistics.

#### **SEMESTER – III**

#### **Electromagnetic theory**

**CO1:** Gain knowledge on basic laws and concepts in Electrostatics and Magneto statics.

CO2: Analyze Biot–Savart's law and apply to closed loop, solenoid and long Straight conductor.

**CO3:** Understand the concepts of Electromagnetic induction and applications.

**CO4:** Understand the concepts of Network Transformations & Network theorems.

#### SEMESTER – IV

### **Waves and Optics**

- **CO1:** Understand the significance of longitudinal and transverse waves in strings and bars.
- CO2: To solve wave equation and derive boundary condition of longitudinal waves in bars.
- CO3: Understand the concept of interference and analyze the methods of reflection, refraction & scattering.
- **CO4:** Study the concept of diffraction and differentiate between Fresnel's and Fraunhouser's diffraction.

#### SEMESTER - V

#### **Modern Physics**

- CO1: Understand the atomic and molecular spectroscopies.
- CO2: Understand the dual nature of matter and derive Schrodinger time dependent and independent wave equations.
- CO3: Get an insight to basic nuclear structure and models.
- CO4: Gain knowledge on crystallography, X-ray diffraction and super conduction.

#### SEMESTER - VI

#### Electronics-VI A

- CO1: Study the basics of semiconductor devices & their applications.
- CO2: Understand the operation of diodes & transistors and utilize their concepts to design Rectifiers, Amplifiers and Oscillators.
- CO3: Gain knowledge on different number systems, their conversions from one system to another and solve the binary arithmetic problems.
- CO4: Get an insight to analyse and design various logic gates & combinational gates.

### **Course Outcomes (COs) – Electronics**

#### SEMESTER - I

### Circuit Analysis

**CO1:** Analyse the electric circuit using kirchoff's laws and Network theorems.

CO2: Evaluate transient and steady state responses of RC & RL Circuit.

CO3: Analyse the frequency response of RC & RL Circuits.

**CO4:** Understand the working and applications of CRO.

#### SEMESTER - II

#### **Electronic Devices**

CO1: Study & analyse the behaviour of semiconductor materials.

CO2: Understand the behaviour of BJT in CC, CB & CE configuration.

CO3: Use Diodes, BJT, FET, UJT, SCR in simple applications.

CO4: Understand the behaviour & characteristics of Photo electric devices

#### **SEMESTER – III**

#### **Analog Circuits**

CO1: Construct and Design rectifiers and filters.

CO2: Construct and Design a better and regulated power supply.

**CO3:** Understand the working of amplifiers, frequency response and observe the effect of feedback.

CO4: Explain and compare the working of Oscillators and Multivibrators.

### SEMESTER - IV

### Linear Integrated circuits and basics of communication.

**CO1:** Gain Knowledge of Operational Amplifiers and understands the basic Operational Amplifier circuits.

CO2: Understand the applications of Operational Amplifiers.

**CO3:** Study of Amplitude Modulation and Demodulation.

CO4: Study of Frequency Modulation and its advantages.

#### SEMESTER - V

### **Digital Electronics**

- CO1: Familiarize with the digital signal, positive and negative logic, Boolean algebra, Logic gates, logical variables, truth tables, number systems, codes and their conversions.
- CO2: Learn the minimization techniques to simplify the hardware requirements of digital circuits and implement it in real time digital system design.
- CO3: Understand and analyze the working mechanism and design guidelines of different combinational, sequential circuits and their role in the digital system design.
- CO4: Identify basic requirements for a design application and propose a cost effective solution

#### SEMESTER - VI

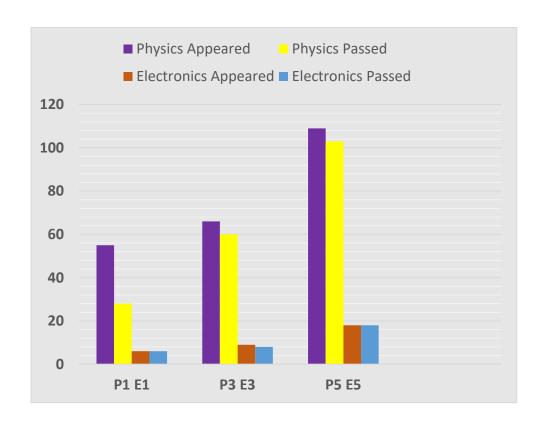
### 8051 Microcontroller and Applications -VIB

- **CO1:** Understand the architecture, memory organization of 8085 microprocessor and 16 bit microcontrollers.
- CO2: Understand programming using assembly language in and real microprocessors and microcontrollers for simple arithmetic, logical, string time applications.
- **CO3:** Analyze and apply the interfacing concept of different programmable interfacing modules with microprocessors and controllers for real time applications.
- **CO4:** Develop and generate a code for applications using microprocessors and microcontrollers to meet the societal/ user requirements.

# **STUDENT PERFORMANCE (2023-24)**

## Semester- (I, III & V)

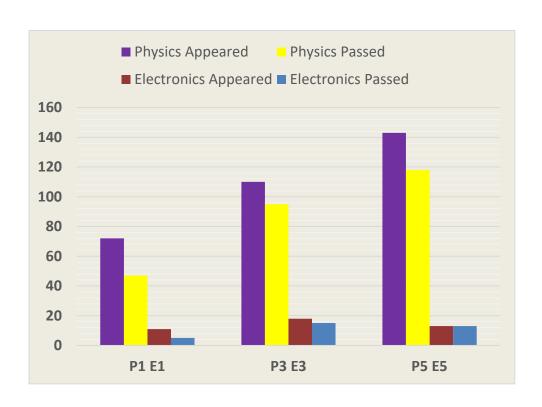
Courses	Physics Appeared	Physics Passed	Electronics Appeared	Electronics Passed	Physics Pass %	Electronics Pass%
P1, E1	55	28	6	6	49	100
P3, E3	66	60	9	8	91	89
P5, E5	109	103	18	18	97	100



# **STUDENT PERFORMANCE (2022-23)**

# Semester- (I, III & V)

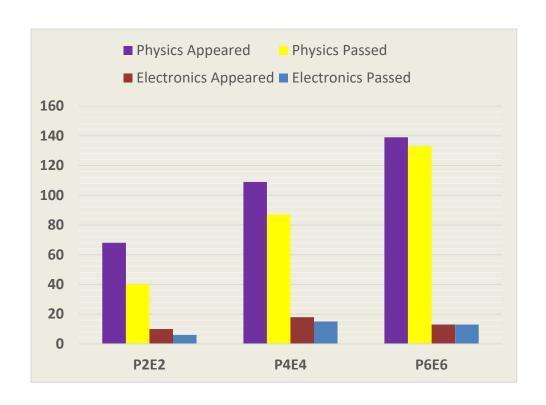
Courses	Physics Appeared	Physics Passed	Electronics Appeared	Electronics Passed	Physics Pass %	Electronics Pass%
P1, E1	72	47	11	5	65	45
P3, E3	110	95	18	15	86	83
P5, E5	143	118	13	13	83	100



## **STUDENT PERFORMANCE (2022-23)**

## Semester (II, IV& VI)

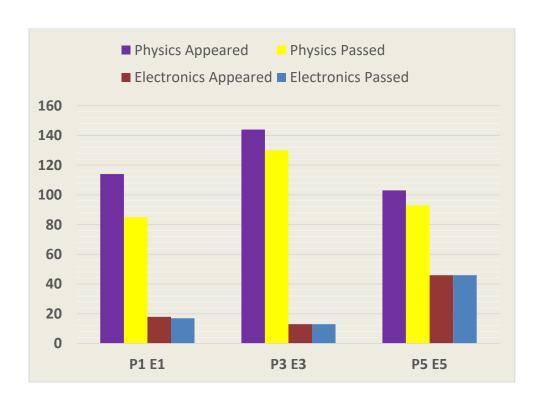
Courses	Physics Appeared	Physics Passed	Electronics Appeared	Electronics Passed	Physics Pass %	Electronics Pass%
P2, E2	68	40	10	06	59	60
P4, E4	109	87	18	15	80	83
P6, E6	139	133	13	13	96	100



## **STUDENT PERFORMANCE (2021-22)**

Semester (I, III & V)

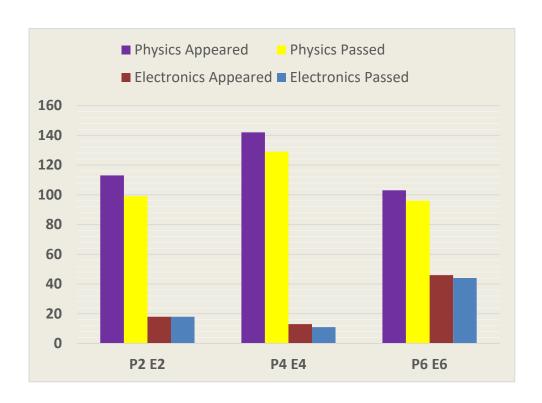
Courses	Physics Appeared	Physics Passed	Electronics Appeared	Electronics Passed	Physics Pass %	Electronics Pass%
P1, E1	114	85	18	17	75	94
P3, E3	144	130	13	13	90	100
P5, E5	103	93	46	46	90	100



## **STUDENT PERFORMANCE (2021-22)**

# Semester (II, IV& VI)

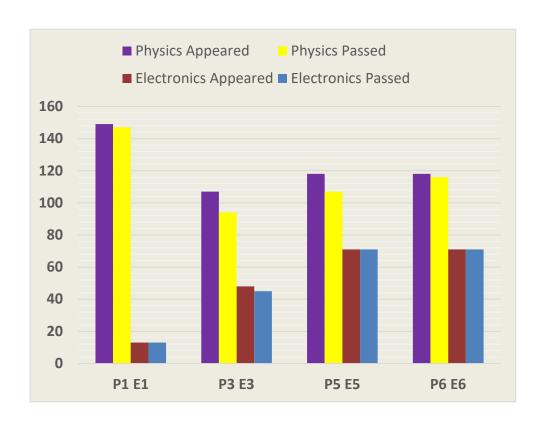
Courses	Physics Appeared	Physics Passed	Electronics Appeared	Electronics Passed	Physics Pass %	Electronics Pass%
P2, E2	113	99	18	18	87	100
P4, E4	142	129	13	11	91	85
P6, E6	103	96	46	44	93	96



## **STUDENT PERFORMANCE (2020-21)**

Semester (I, III & V)

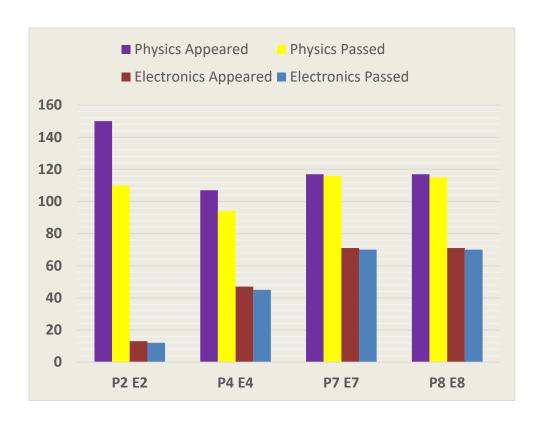
Courses	Physics Appeared	Physics Passed	Electronics Appeared	Electronics Passed	Physics Pass %	Electronics pass %
P1, E1	149	147	13	13	99	100
P3, E3	107	94	48	45	88	94
P5, E5	118	107	71	71	91	100
P6, E6	118	116	71	71	98	100



## **STUDENT PERFORMANCE (2020-21)**

# Semester (II, IV& VI)

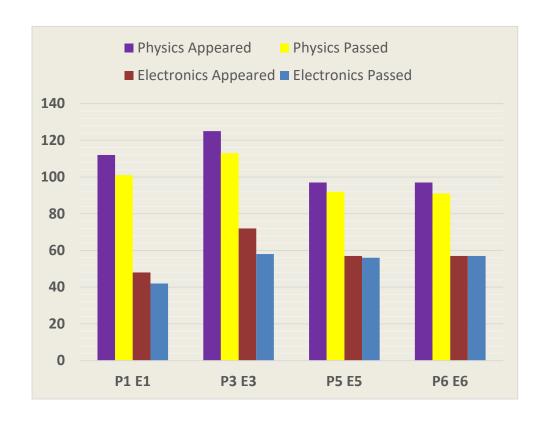
Courses	Physics Appeared	Physics Passed	Electronics Appeared	Electronics Passed	Physics Pass %	Electronics pass %
P2, E2	150	110	13	12	73	92
P4, E4	107	94	47	45	88	96
P7, E7	117	116	71	70	99	99
P8, E8	117	115	71	70	98	99



# **STUDENT PERFORMANCE (2019-20)**

Semester (I, III & V)

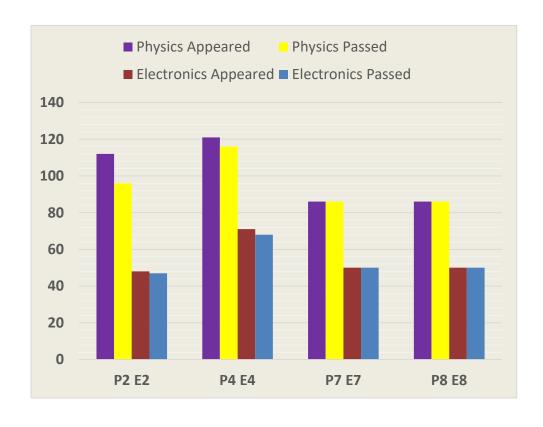
Courses	Physics Appeared	Physics Passed	Electronics Appeared	Electronics Passed	Physics Pass %	Electronics pass %
P1, E1	112	101	48	42	90	88
P3, E3	125	113	72	58	90	81
P5, E5	97	92	57	56	95	98
P6, E6	97	91	57	57	94	100



## **STUDENT PERFORMANCE (2019-20)**

# Semester (II, IV& VI)

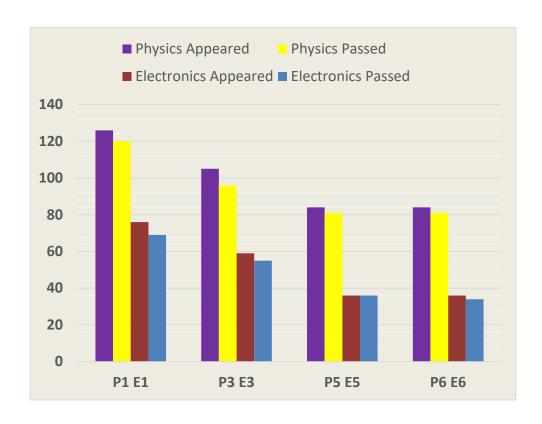
Courses	Physics Appeared	Physics Passed	Electronics Appeared	Electronics Passed	Physics Pass %	Electronics pass %
P2, E2	112	96	48	47	86	98
P4, E4	121	116	71	68	96	96
P7, E7	86	86	50	50	100	100
P8, E8	86	86	50	50	100	100



## **STUDENT PERFORMANCE (2018-19)**

Semester (I, III & V)

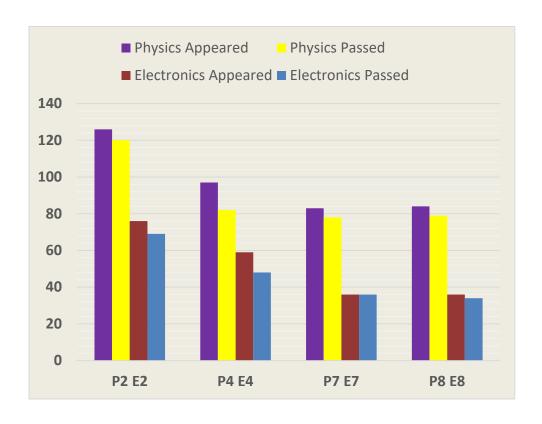
Courses	Physics Appeared	Physics Passed	Electronics Appeared	Electronics Passed	Physics Pass %	Electronics pass %
P1, E1	126	120	76	69	96	95
P3, E3	105	96	59	55	95	93
P5, E5	84	81	36	36	96	100
P6, E6	84	81	36	34	96	94



# **STUDENT PERFORMANCE (2018-19)**

## Semester (II, IV& VI)

Courses	Physics Appeared	Physics Passed	Electronics Appeared	Electronics Passed	Physics Pass %	Electronics pass %
P2, E2	126	120	76	69	95	91
P4, E4	97	82	59	48	85	81
P7, E7	83	78	36	36	94	100
P8, E8	84	79	36	34	94	94



## STUDENT STRENGTH IN INTERDISCIPLINARY COURSES

(2018-24)

### (MPC, MPCS, MECS & MPE)

S.NO	Year	Semester	Paper	Title of Paper	Course Offered by	NO. Students
1.	2018-19	V	Generic Elective	Fundamentals of Food and Nutrition	Dept. Of Applied Nutrition	120
2.	2018-19	VI	Generic Elective	Nutrition in Health and Disease	Dept. Of Biochemistry	128
3.	2019-20	V	Generic Elective	Fundamentals of Food and Nutrition	Dept. of Applied Nutrition	150
4.	2019-20	VI	Generic Elective	Nutrition in Health and Disease	Dept. Of Biochemistry	138
5.	2020-21	V	Generic Elective	Fundamentals of Food and Nutrition	Dept. of Applied Nutrition	187
6.	2020-21	VI	Generic Elective	Nutrition in Health and Disease	Dept. Of Biochemistry	188
7.	2021-22	V	Generic Elective	Fundamentals of Food and Nutrition	Dept. of Applied Nutrition	151
8.	2022-23	V	Generic Elective	Fundamentals of Food and Nutrition	Dept. of Applied Nutrition	158
9	2023-24	V	Generic Elective	Fundamentals of Food and Nutrition	Dept. of Applied Nutrition	134

### Workshops Organized (2018-24)

S. No	Date	Title	No. of
			<b>Participants</b>
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.	Name	Title	Conducted by	Date
No.				
1.	C II 1 D . 11.	Hydroponics	SNVMV	07-09-2021 to 08-09-2021
	S. Upender Reddy	E-Waste management	CMET & C.DAC	09-02-2021
2.	K.Subba Rao	Revised NAAC Norms and procedures	St. Joseph's College	07-01-2021 to 15-01-2021
3.		NEP.2020	OU	10-01-2023 to 02 -01-2023
	V.Anuradha	NPTEL	St. Ann's College	15-12-2022
		Innovative E-Labs	R.B.V.R.R	23-03-2021 to 25-03-2021
		Innovative E-Labs	R.B.V.R.R	23-03-2021 to 25-03-2021
4	V.Sravanthi	Blended Teaching & Learning	SNVMV	14-04-2020 to15-04-2020
		Essential Computer Skills to work Online	R.B.V.R.R	29-05-2020 to 31-05-2020
	K.Sunitha	Innovative E-Labs	R.B.V.R.R	23-03-2021 to 25-03-2021
5.	K.Summa	Blended Teaching & Learning	SNVMV	14-04-2020 to 15-04-2020
		Electro. Spinning	University of	23-04-2021 to 24-04-
6.	CH.Supriya		Madras	2021
0.		Innovative E-Labs	R.B.V.R.R	23-03-2021 to 25-03-2021

		Teaching Physics	Gitam University	08-07-2023
7.	S.Prashanthi	Effectively Online and		
		Women in STEM		

# Seminars/ Webinars (2018-24)

S.	Name	Title	Conducted by	Date
No		Hot time malty Electron mediated	IIT, Hyd.	21-10-2022 to
		method of High efficiency splitting	,, <b>_</b>	02-02-2022
		Connecting to Connect Physics	Bhavan's	20-11-2021
		faculty Meet	Vivekananda College	
		E. Resources	Yeshwanth Rao	12-08-2021
			Chavan college	
1.	S. Upender	Importance of Maxwell equations	SR & BGNR Govt.	21-07-2021
	Reddy	Radio waves	College	
		E. Content development tools &	RBVRR College	08-01-2021
		Techniques		12.22.22.1
		How to Prepare for NET & GATE	RBVRR College	19-03-2021
		Institutional Best practices & Distinctiveness	RBVRR College	14-12-2020
		Restructuring Physics Curriculum	Dept. of Physics,	16-04-2024
		at UG Level- One Day State	OU, Hyd	
		level Teachers Colloquium		
		Educational leadership conference	Gitam University	13-12-2023
2.	K. Subba	Brain storming on Assessment and	Padma Sri Institute	12-03-21 to 13-
	Rao	Accreditation frame work of	of Management and	03-2021
		NAAC	Sciences	
		Restructuring Physics Curriculum	Dept. of Physics,	16-04-2024
		at UG Level- One Day State	OU, Hyd	
		level Teachers Colloquium		
		Economic implications of	Exhibition Society,	24-11-2023
	** 11	implementing renewable and	Hyd.	
3.	V.Anuradha	alternative energy resources		
		Women's Health	Badruka College	20-05-2021
		Nano structured Materials	Sri YN College	05-06-2020
		Sensors and their Applications	Bhavan's	09-09-2021
		Duilding the consistent of	Vivekananda	12.06.2021
		Building the competencies of	Kasturba College	12-06-2021
		teacher's for blended learning Environment		
		Covid . 19 and Environment	MNR Degree	05-06-2021
		Covid. 17 and Environment	college	05 00 2021
		Carbon Nano tube based Electro	Vignan Institute	21-09-2020
		chemical sensors for the		
		Determination bioactive Molecules		
		Introduction to Nano Scale	St. Ann's College	19-09-2020

		Materials		
		Quality enhancement Technique	AV College	12-09-2020
		Digital shift Prioritizing Digital	Avanti College	26-08-2020
	V. Sravanthi	Commerce in a global pandemic	231166	
4.		Dielectric Materials and their	Vignan's Institute of	14-08-2020
		Characterization studies in the	Management Management	11 00 2020
		Microwave frequency Region	Withingoment	
		Green Chemistry based synthesis	Vignan's Institute of	12-08-2020
		of some bioactive components	Management Management	12 00 2020
		Stress Management working during	Aurora's Degree &	03-07-2020
		Covid .19	PG College	03-07-2020
		Awareness and adoption of	SNVMV	16-06-2020
		MOOC course on Swayam &	SINVIVIV	10-00-2020
		NPTEL		
		Advanced materials for energy	Aurora's Degree &	12-06-2020
		applications	PG College	12-00-2020
		Applications of atomic an	Aurora's Degree &	10-06-2020
		molecules Spectroscopy in research	PG College	10-00-2020
		and daily life	1 G College	
		Molecular communication for	Aurora's Degree &	08-06-2020
		wireless body area net works	PG College	00 00 2020
		Digital Parenting	NVR College	01-06-2020
		Resent trend in Online teaching	Loyola College	29-05-2020
		Role of electronics in missiles	Little Flower College	28-05-2020
			8	
		Modern Physics and material	Govt. HOLKAR	26-05-2020 to
		Science	Science College	30-05-2020
		Current trends in Nano Technology	Aurora's Degree	23-05-2020
		Electronic Warfare	Little Flower College	16-05-2020
		Virtual labs	Bhavan's	14-05-2020
		D'1 ' M' ' 1 11'	Vivekananda	12.00.2020
		Dielectric Materials and their	Vignan's Institute of	12-08-2020
		Characterization studies in the	Management	
		Microwave frequency Region	01 11 D 1 C 11	11 00 2020
		Resent advance in Physics	Shanthi Devi College	11-08-2020
		1 1 2 0 000	(Punjab)	16.06.2020
		Awareness and adoption of MOOC	SNVMV	16-06-2020
		course on Sway am & NPTEL	1.'41 E1 C 11	20.05.2020
		Role of electronics in missiles	Little Flower College	28-05-2020
		Modern Physics and material	Govt. Holkar Science	26-05-2020 to
		Science	College	30-05-2020
5.	C.Swathi	Applications and carrier in Robotic	RBVRR College	25-05-2020
]	2.5 wann	Current trends in Nano Technology	Aurora's Degree	23-05-2020
		Electronic Warfare	Little Flower College	16-05-2020
		Virtual labs	Bhavan's	14-05-2020
			Vivekananda	
		Awareness and adoption of	SNVMV	16-06-2020
		MOOC course on Sway am &		
		NPTEL		
L		1.1.1111	I	

		Modern Physics and material	Govt. Holkar Science	26-05-2020 to
6.	K.Sunitha	Science	College	30-05-2020
		Role of electronics in missiles	Little Flower College	16-05-2020
		Applications and carrier in Robotic	RBVRR College	25-05-2020
		Current trends in Nano Technology	Aurora's Degree &	23-05-2020
			PG College	
		El . W. C	L'41 F1 C 11	16.05.2020
		Electronic Warfare	Little Flower College	16-05-2020
		Building the competencies of	Kasturba College	12-06-2021
7.	Ch.Supriya	teacher's for blended learning		
		Environment		
		Covid - 19 and Environment	MNR Degree	05-06-2021
			College	
		Economic implications of	Exhibition	24-11-2023
8	S. Prashanthi	implementing renewable and	Society, Hyd.	
		alternative energy resources		

# Conferences (2018-24)

S. No.	Name	Title	Conducted by	Date
1.	S. Upender Reddy	Advances in smart Nano	Govt. City College	24-03-2022 to
		Materials		25-03-2022
2.	K. Subba Rao			
		Relevance of Mother Language Telugu and a New Education Policy	RBVRR College	05-05-2021 to 06-05-2021
3.	V.Anuradha	Advances in smart Nano Materials	Govt. City College	24-03-2022 to 25-03-2022

### **FDPs (2018-24)**

S. No.	Name	Title	Conducted by	Date
110.		Outcome based education	SNVMV	5-12-2022 to 9-12-2022
		Mathematical Modelling	SNVMV	06-04-2022 to 11-04-2022
		Methods of material synthesis	Bhavan's Vivekananda	15-01-2022 to 22-01-2022
1.	S. Upender Reddy	Investor Education and avionics	RBVVR	13-11-2021
		Advanced Online Assessments Tools for teaching and Learning	Kasturba college	25-06-2021
		Material characterisation Technique	Bhavan's Vivekananda	02-04-2021 to 06-04-2021
		National innovation and start- up policy	RBVVR	20-01-2021
		Art of Teaching	SNVMV	23-09-2019 to 27-09-2019
		Outcome based education	SNVMV	05-12-2022 to 09-12-2022
	K. Subba Rao	Data visualization	Smart bridge Educational service Pvt. Ltd	07-07-2021
		Fore grounding the spectrum of Character building in modern human life	Balaji institute of technology	25-06-2021 to 23-07-2021
		Material characterisation Technique	Bhavan's Vivekananda	02-04-2021 to 06-04-2021
2.		Revised NAAC Norms & Procedures	SNVMV	07-01-2021 to 15-01-2021
		Data Science	EXCELR solutions	01-07-2020 to 24-07-2020
		Art of Teaching	SNVMV	23-09-2019 to 27-09-2019
		Outcome based education	SNVMV	05-12-2022 to 09-12-2022
		Financial Planning & Mutual Funds	SNVMV	06-12-2021 to 10-12-2021
3.	X7 A 11	Research trends in Physics and Electronics	Little Flower College	27-01-2021 to 01-02-2021
J.	V.Anuradha	Material characterisation Technique	Bhavan's Vivekananda	02-04-2021 to 06-04-2021

		Tools for Online Teaching	Swami Ramanandh	
		learning and Evaluation	teerth University	01-07-2020 to
		Tourning and Evaluation		06-07-2020
		Art of Teaching	SNVMV	23-09-2019 to
		Art of Teaching	SINVIVIV	
			63 T D G I	27-09-2019
		Blended Teaching and	SNVMV	27-08-2018 to
	learning			31-08-2018
		Financial Planning & Mutual	SNVMV	06-12-2021
		Funds		to
				10-12-2021
		Digital Tools For Active	Sri GVG Vishalakshi	
		Teaching, Evaluation and	College	28-06-2021 to
		Research		30-06-2021
			TZ , 1 11	
		Advanced Online	Kasturba college	25-06-2021
		Assessments Tools for		
4.	V.Sravanthi	teaching and Learning		
"		Material characterisation	Bhavan's Vivekananda	02-04-2021 to
		Technique		06-04-2021
		Online course design	SNVMV	26-02-2021 to
		development deliver		27-02-2021
		Research trends in Physics	Little Flower College	27-01-2021
		and Electronics	8	to 01-02-2021
		Material Science and Nano	Aurora's Degree &	15-10-2020 to
		materials	PG College	16-10-2020
		ICT Tools in Education	RBVVR	5.5.2020
		Art of Teaching	SNVMV	23-09-2019 to
				27-09-2019
		Blended Teaching and	SNVMV	27-08-2018 to
		learning		31-08-2018
		Financial Planning & Mutual	SNVMV	06-12-2021
		Funds		to
				10-12-2021
		Research trends in Physics	Little Flower College	27-01-2021 to
		and Electronics	Little Hower College	01-02-2021
			Malla maddy in atituta	
	C.Swathi	Virtual Physics Labs	Malla reddy institute	04-06-2020 to
_	C.Swaim	YOM TO I ! TO I	DDI II ID	05-06-2020
5.		ICT Tools in Education	RBVVR	05-05-2020
		A CT 1:	CNIVACI	22 00 2010
		Art of Teaching	SNVMV	23-09-2019 to
				27-09-2019
		Blended Teaching and	SNVMV	27-08-2018 to
		learning		31-08-2018
				15-01-2022 to
1			Bhavan's Vivekananda	22-01-2022

		Methods of material synthesis		
		Financial Planning & Mutual	SNVMV	06-12-2021
		Funds		to
				10-12-2021
		Material characterisation	Bhavan's Vivekananda	02-04-2021
		Technique		to 06-04-2021
		Online course design	SNVMV	26-02-2021 to
6.	K.Sunitha	development deliver		27-02-2021
		Research trends in Physics	Little Flower College	27-01-2021 to
		and Electronics		01-02-2021
		Virtual Physics Labs	Malla reddy institute	04-06-2020
		, and the second	·	to 05-06-2020
		Art of Teaching	SNVMV	23-09-2019 to
				27-09-2019
		Financial Planning & Mutual	SNVMV	06-12-2021
		Funds		to
				10-12-2021
7.	Ch.Supriya			
		Online course design	SNVMV	26-02-2021
		development deliver		to 27-02-2021
		Art of Teaching	SNVMV	23-09-2019 to
				27-09-2019
	a n 1 1 1	Outcome based education	SNVMV	05-12-2022 to
8.	S.Prashanthi			09-12-2022
L				J

# Workshops / Conference/ FDP Sponsored by Institution

S. No	Name	Program	Title	Conducted	Date	Amount
				by		INR
	S. Upender Reddy		Pure Earth	Pure Earth	27-11-2021	250
1		Conference	Environment	Foundation		
			conference			
			Pure Earth	Pure Earth	06-11-2019	250
		Conference	Environment	Foundation		
			conference			
		Workshop	NEP Orientation &	UGC-	12-10-2023	1000
2			Sensitization	MMTTC,OU	to 21-10-	
	K. Subba Rao		Program		2023	
		Paper	Emotional	Jaganath		2000
		Publication	Intelligence	International		
				Management		
				school		
		National	Transformation	Institute for		1000
		Workshop	through NAAC	Academic		
			Accreditation	Excellence		
		Conference	Multidisciplinary	Nizam		1000
			Education system-	college		
			transforming digital			
			Economy			
		FDP	Digital	HRD Degree	25-03-2019	300
			Communication	&PG College		
3.		Workshop	NEP Orientation &	UGC-	06-11-2023	1000
	V. Anuradha		Sensitization	MMTTC,OU	to 15-11-	
			Program		2023	
		Membership	Member (14077)	IAPT	Mar 2023 to	250
					Mar2024	
			Pure Earth	Pure Earth	27-11-2021	250
		Conference	Environment	Foundation		
			conference			
			Pure Earth	Pure Earth	06-11-2019	250
		Conference	Environment	Foundation		
			conference			
		Conference	Pure Earth	Pure Earth	27-11-2021	250
			Environment	Foundation		
			conference			
	V. Sravanthi		Pure Earth	Pure Earth	06-11-2019	250
4		Conference	Environment	Foundation		
			conference			
		FDP	Evolution	Aurora's	29-12-2018	300
			technologies in	Degree &PG		
			Telecommunication	College		

			_			
			Pure Earth	Pure Earth	27-11-2021	250
		Conference	Environment	Foundation		
			Conference			
5	C. Swathi		Pure Earth	Pure Earth	06-11-2019	250
		Conference	Environment	Foundation		
			Conference			
		FDP	Evolution	Aurora's	29-12-2018	300
			technologies in	Degree &PG		
			Telecommunication	College		
			Pure Earth	Pure Earth	27-11-2021	250
		Conference	Environment	Foundation		
6	Ch. Supriya		Conference			
			Pure Earth	Pure Earth	06-11-2019	250
		Conference	Environment	Foundation		
			Conference			
		Conference	Pure Earth	Pure Earth	26-112022	250
			Environment	Foundation		
			Conference			
7	K. Sunitha		Pure Earth	Pure Earth	27-11-2021	250
		Conference	Environment	Foundation		
			Conference			
			Pure Earth	Pure Earth	06-11-2019	250
		Conference	Environment	Foundation		
			Conference			
8		Workshop	NEP Orientation &	UGC-	12-10-2023	1000
	S. Prashanthi		Sensitization	MMTTC,OU	to 21-10-	
			Program		2023	
		Conference	Pure Earth	Pure Earth	26-11-2022	250
			Environment	Foundation		
			Conference			
I		•	•		L	

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

S. No.	Name	Title	Conducted	Date
			by	
1.	V. Anuradha	Classical Electro magnetism -II	IIT, Kanpur	15-08-2022 to 25-12-2022
		The Story of Photo Electric	IIT, Kanpur	15-07-2021 to 17-07-2021
		Effect		
		Classical Mechanics -I	IIT, Kanpur	26-01-2021 to 25-04-2021
		Learning Physics through simple		02-04-2020 to 10-06-2020
		experiments	_	
		Basics of Special theory of		18-01-2018 to 08-04-2019
		Relativity		
		Effective Writing	NPTEL	Jan - Feb 2021
		Appreciating Carnatic music	NPTEL	Sep - Nov 2020
2.	V.Sravanthi	Student Psychology	Swayam	Jan - March 2021
3.	C.Swathi	Student Psychology	Swayam	Jan - March 2021

# **Field Visits (2018-24)**

S. No.	Date	Place of Visit	No. of Student Participants
1.	18-04-2019	ARCI	18
2.	13-12-2021	BDL, Midhani, Hyd.	48
3.	29-11-2022	NRSC	26

## **Outreach Programs**

S. No.	Date	Place of Visit	No. of Students Benefited
1	27-10-2023	Govt. School, Vikarabad	50
2	28-10-2023	Govt. Model School,	60
		Jarasangam , sangareddy	
		district	
3	12-10-2022	Govt. Boys High School, Amber pet	90
		Govt. High School, Nallakunta	60
4	12-12-2022	Sloka School, Miryalaguda	60

### **Add-on courses**

S. No.	Date	Course title	No. of Students Registered	No. of Students Qualified
1.	02-08-2019	Know your Electrical		
	to	Appliances-Selection,	55	55
	27-09-2019	Protection & Safety		
2	04-01-2021			
	to	Multisim	31	31
	03-03-2021			
3	04-01-2021	Statistics & Data		
	to	Analysis	30	30
	03-03-2021	_		
4	01-11-2021	Know your Electrical		
	to	Appliances-Selection,	125	125
	21-12-2021	Protection & Safety		

5.	16-11-2022	Know your Electrical		
	to	Appliances-Selection,	57	50
	20-12-2022	Protection & Safety		

### **Guest Lectures**

S. No.	Date	Title of Lecture	Resource person & Designation	No. of participants
1	24-02-2024	Advances in Medical Physics	Ms. J. Deepa, Medical Phycist, AOI, Hyd.	63
2	11-10-2023	Fundamentals of Nuclear Physics	Dr. M. Sreenath Reddy Assoc. Prof., Dept. of Physics, OU	72
3	08-12-2022	Research Trends in Spectroscopy and Applications	Dr. E. Rukmini Assoc. Professor	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	
7	28-02-2021	Laboratory Plasmas & Applications -Online	Dr. 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		
11	22-02-2019	Raman Effect and its importance	Prof. Prasad, Head Dept. of Physics, OU	65

#### **MOU Activities**

- MOU with IPGDC for women, Hyderabad.
- Validity from **19-03-2019** to **18-03-2024** (5 Years)

S. No	Date	Activity	No. of Participants
1	05-10-2023	Workshop on <b>Experiments in</b>	
		Nuclear Physics	34
2	04-03-2022	Mentored Students Of – Jignasa Project Work (Withequipment	06

		Support)	
3	07-05-2022	Sem – VI Physics Experiments	08

### **DEPARTMENT BUDGET- (2018-24)**

# Library Budget

Year	Sanction Amount	No. of	Total no. of	Amount Spent INR
	INR	Titles	Books	
2018-19	40,000	7	90	15,573
2019-20	40,000	1	2	279
2020-21	-	-	•	1
2021-22	30,000	-	•	1
2022-23	30,000	22	137	29,721
2023-24	30,000	10	46	16,396

Total amount sanctioned : INR 1,70,000 Total amount spent : INR 61,969

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

Year	Amount, INR
2018-19	10,000
2019-20	12,000
2020-21	NIL
2021-22	45,000
2022-23	12,000
2023-24	10,000

Total Amount Spent : INR 89,000

### Amount spent on New Equipment

S. No.	Year	Amount, INR
1	2018-19	95,550
2	2019-20	11,900
3	2020-21	-
4	2021-22	-
5	2022-23	3,43,085

6	2023-24	-
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Total Amount Spent: INR 4,50,535

# **Equipment Purchased - (2018-24)**

(2022-23)

G N		**
S. No	Equipment	Units
1	Specific heat of graphite	02
2	Stop Clocks	14
3	Electrical Kettle boards	02
4	Digital Oscilloscope	01
5	Sodium Vapour Lamp	01
6	Mercury Bulb	02
7	Digital Multi meters	11
8	Thermometers	09
9	Thevenin & Norton theorem Boards	01
10	GM Counter	01
11	Mechanical Energy to heat	02
12	Pendulum Bob with hooks	10
13	Post office box	01
14	Plank Constant	02
15	Stop Watch Racer	05
16	Glass Prism	04
17	Velocity of Sound	03
18	Capillary Tube	10
19	Quill Tube	03
20	Bar Magnet	12
21	CRO Probe	01
22	Whish boards	01

#### (2019-20)

S. No	Equipment	Units
1	Amplitude modulation & Demodulation	03
2	Patch cards	40
3	Micro controller	05
4	B-H Curve Set up	02
5	Astable multi vibrator 555 IC Kit	01
6	Microprocessor	05

#### (2018-19)

S. No	Equipment	Units
1	Maximum power transfer theorem	02
2	Photo Voltaic cell	02
3	Junction & Zener diode boards	02
4	Super position theorem Boards	02
5	Thevenin & Norton theorem boards	02
6	Dimmer Stat	02
7	CarryFostor Bridge	02
8	Tunning forks	01

#### **Infrastructure**

- **Department Library** good collection of prescribed & reference textbooks and practical manuals (118 Books)
- **Book bank** -Repository of Books donated by senior students and specimen copies of books received from publishers. (237 Books)
- Internet facility in the department is extended to students and faculty
- Classroom with ICT facility and a laboratory with LCD projector
- Well-equipped laboratories with more advanced and precision instruments
- Six Computer systems with necessary software
- GM Counters with Radioactive sources Thalium 204 (β source),

  Cesium 137(Υ source)

#### Laboratories (6)

### • Physics (3)

- o Mechanics & Thermal-Physics Lab
- o Optics Lab
- o Modern Physics Lab

#### • Electronics (3)

- o Analog Lab
- o Digital Lab
- o Simulation Lab

#### EQUIPMENT LIST - (LAB WISE)

#### MECHANICS, WAVES & OSCILLATION LAB

NAME	NO. OF SETS
Apparatus to verify the perpendicular axis theorem	6( Metal)
Bifilar pendulum	4 (Wooden)
Apparatus to determine "g"	6
compound pendulum	O .
Apparatus to determine the rigidity modulus by	6
Torsional pendulum	O .
Apparatus to determine the moment of inertia of wheel.	6
Flywheel with counter.	O .
Apparatus to verify the laws of Transverse vibrations	4
and velocity of the wave in String – Sonometer.	•
Apparatus for determination of Y by spiral spring and	7
weights	,
Apparatus to study the laws of resonance phenomenon.	3
Volume resonator.	J
Tuning fork	5
Apparatus to determine Y by uniform bending method	4
Apparatus to determine the viscosity of water by liquid	3
drop method	3
Apparatus to measure errors by simple pendulum	4

Apparatus to determine the surface tension of water	4
Meldes Apparatus	6
Stop Clock	14

#### THERMODYNAMICS LAB

NAME	NO. OF SETS
Stefan's Constant	2
Lees Apparatus	6
Conversion of Mechanical to Heat energy	2
Efficiency of Electric Kettle	4
Specific Heat of Graphite	2
Thermometers	13

#### **ELECTRO MAGNETIC THEORY LAB**

Thevenin & Norton's theorem Boards	3
Super Position Theorem Boards	2
Maximum Power Transfer theorem Boards	2
LCR Boards	4
	•

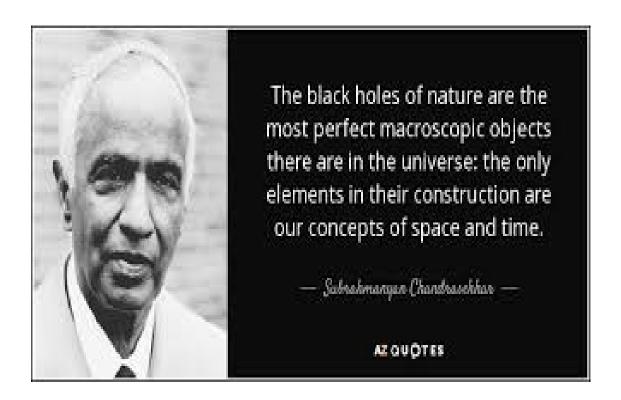
#### **OPTICS LAB**

Biprism Expt setup	3
Pulfrich Refractometer	5
Mercury vapour lamps with chokes	5

Sodium Vapour lamp	9
Transformers for sodium vapour lamp	6
Slit for resolving power of telescope	6
Spectrometer	8
Apparatus to determine the thermal conductivity of rubber	6
Travelling microscope	19
Magnifier with torch (Reading lamp)	10
Apparatus to determine optical activity -Polarimeter	3
Apparatus to determine the radius of wire by Wedge method	4
Newton's rings Apparatus	4
Determination of refractive index of Convex lens and Boy's method	4
Grating 15000 LPI	4
Laser – Grating 2500 LPI	2

#### MODERN PHYSICS LAB

NAME	NO.OF SETS
Geiger Muller counter with two sources and Aluminum absorbers	3
Apparatus to measure e/m of an electron by J.J. Thomson method with power supplies and solenoids.	4
Apparatus to study laws of the photoelectric effect and to determine the Planck's constant with filters.	4
Potentiometer (wire type,10m)	4
Hysteresis	3



#### **ELECTRONICS LAB**

NAME	NO OF SETS
Sine square 1MHz	8
Sine square Triangular 1MHz	16
Battery charger 12v	2
Charge-Discharge key	4
FET Static Characteristic board with power supplies and meters	4
Transistor Boards	6
Digital Trainer kit(Component development system)	8
Digital and Analog Trainer kit	6
D.C power supplies &D.C clock pulses of 0.1Hz &*1Hz,Oscillator,Status indicating LEDs, Potentiometers	4
A/D Converter boards	2
Boards for constructing DC power supply Experiment	8
Digital Multi meters, Analog millimeters (RS Symons)	25

De Morgan's Theorem verification boards	4
Logic gates boards (4 IC version discrete)	10
Emitter coupled difference amplifier boards with power supplies	3
Fixed condensers 1 microfarad	6
Frequency counter	3
Board to study resonance phenomenon in LCR circuit with meter	4
Multi meter construction boards	3
Microprocessor kit 8085	8
R –2R ladder network	3
8051 Microcontroller Trainer	15
Stepper Motor	2
Amplitude Modulation & De Modulation	3
Astable Multivibrator IC-555	1
Digital Oscilloscope	1
Dual DAC Interface modulo	2
Phase shift Oscillator	3
RC- Circuit Boards	3
Temperature Indicator	2
Wein Bridge Apparatus	3
Voltage Regulator	3
Diode Transistor boards	2

# Cathode ray oscilloscopes

NAME	No. of Units
Single Trace 20MHz	3
Dual trace 25MHz	3
Dual trace 20MHz	5
Power Supply for Valve experiments	3

Triode, Tetrode, Pentode valves	9

# **DC** power supplies

0 – 40V - 2A voltage and current regulated	2
0-20V - 2A Voltage and current regulated	1
0-30V - 1A Dual - Voltage and current regulated	2
0-30V - 1A Voltage and current regulated	2
20V - 4A fixed current and voltage regulated	4
0-30V- 1A voltage regulated	3
0-25V -0.5A unregulated	3

## **AC** power supplies

0-1V,0-10V,0-100V	3
Step down transformer 6V-0-6V	5

### **Inductors**

NAME	No. of Units
Inductors fixed (0.3 H,2.3 H,4.22H)	4
Dial inductance boxes	3
Rheostats 22 ohms –5A	10
Resistance boxes	34
Plug keys	6

Postoffice box	1

### **Ammeters (RS Symson make)**

RANGE	No. of Units
0-1A	2
0-2.5A	2
0-5A	2

### Micro Ammeters (RS Symson make)

RANGE	No. of Units
0-100 micro A	4
30 microA-0-30 micro A	4
Galvanomètre	4

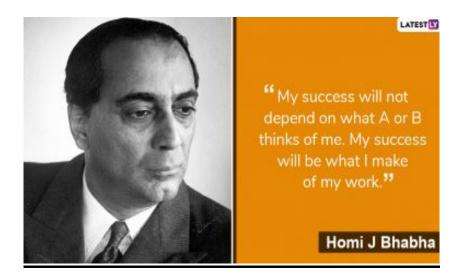
### Milli-Ammeters (RS Symson make)

RANGE	No. of Units
0-5mA	4
0-10mA	4
0-25mA	1
0-50mA	4
0-100mA	2

### Voltmeters (RS Symson make)

RANGE	No. of Units
0-5V	4
0-6V	1
0-10V	4

0-15V	5
0-25V	5
0-100V	1
0-150V	4
0-250V	4
AC Milli voltmeters (Aplab make)	3
LCR meters	1



#### LIST OF CHARTS

#### **PHYSICS**

- Sound Spectra.
- Light.
- Telescopes.
- Nuclear radiation detectors.
- Crystal structure types.
- Light Polarization.
- Light Reflection.
- Light Interference.

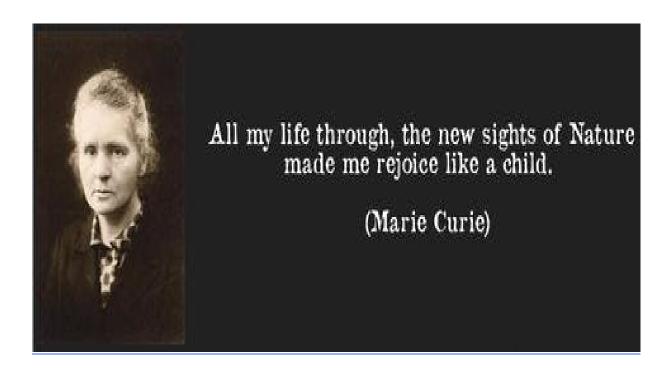
• Optical Activity

#### **ELECTRONICS**

- Cathode ray Oscilloscope.
- Semi-conductor fundamentals.
- Transistor characteristics.
- Interfacing peripherals II.
- Interfacing peripherals III.
- 8085 Instruction set.
- Electronic Symbols.
- Effects of Electric Current.
- Oscillators.

#### LIST OF PORTRAITS

- Sir C.V. Raman
- Madam Curie
- William Roentgen
- Max Planck
- Isaac Newton
- Albert Einstein
- Dr. S Radha Krishnan



#### **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							
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	24945	Dekkar A.J.	Solid State Physics						
	34845	DCKKal A.J.	Sond State Thysics						

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 ENGI. 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.Murugeshwer	Electricity &Magnetism					
97	31696	R.Murugeshwer	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					
112	22000	D.I.D.I dollodilollo	1 mome name oook					

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					

#### **Book Bank**

S. No.	Book No.	Book Name
1.	0001	Unified Electronics(Modern Physics) Vol-1
2.	0002	Unified Electronics(Modern Physics) Vol-1
3.	0004	Unified Electronics(Circuit Analysis)
4.	0005	Electronics(Circuit Analysis)
5.	0006	Passive components and circuit Analysis
6.	0007	Ana log Circuits
7.	0008	Waves and Oscillations
8.	0009	Unified Physics Electricity & electronics Vol-3
9.	0011	Unified Computer
10.	0012	Electronics Principals Applications & Devices
11.	0014	Unified Electronics Vol- II
12.	0017	Unified Electronics Vol- III
13.	0018	Unified Electronics Vol- III
14.	0019	Unified Electronics Vol- IV
15.	0020	Unified Electronics Vol- IV
16.	0022	Unified Physics-I

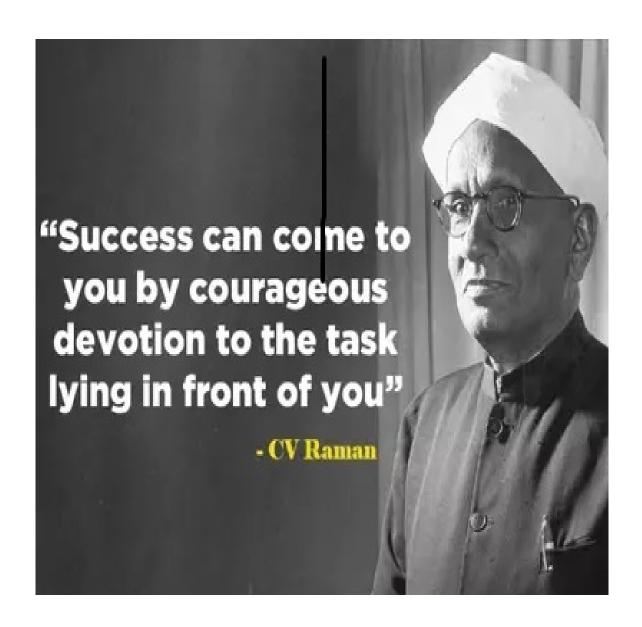
17. 0024 Unified Physics-I  18. 0025 Unified Physics-I  19. 0029 Digital Electronics V-SEM  20. 0030 Electronic Devices Paper-II  21. 0032 Elements of Nuclear Physics  22. 0034 Unified Electronics Vol- I  23. 0035 Thermal Physics	
19. 0029 Digital Electronics V-SEM  20. 0030 Electronic Devices Paper-II  21. 0032 Elements of Nuclear Physics  22. 0034 Unified Electronics Vol- I	
20. 0030 Electronic Devices Paper-II 21. 0032 Elements of Nuclear Physics 22. 0034 Unified Electronics Vol- I	
21. 0032 Elements of Nuclear Physics 22. 0034 Unified Electronics Vol- I	
22. 0034 Unified Electronics Vol- I	
23.   0033   Thermal Physics	
24. 0038 8085 Micro Processor and Application (P-VI)	
11 /	
25. 0040 Unified Physics (Waves And Applications)  26. 0042 Waves and Oscillations	
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31. 0052 Thermodynamics	
32. O053 Optics Paper-iv	
33. 0054 Unified Physics-I	
34. 0055 B.SC Physics (P-I)	
35. 0056 Ana log Circuits	
36. 0057 Physics (Mechanics)	
37. 0058 Physics (Mechanics)	
38. 0060 Thermal Physics & Statistical Mechanics	
39. 0061 B.SC Physics	
40. 0062 Thermodynamic Physics Paper-III	
41. 0063 Mechanics & Waves and Oscillations	
42. 0064 Electricity and Magnetism	
43. 0065 Thermal Physics	
44. 0066 Physics(Paper-3)	
45. 0067 Physics(Paper-3)	
46. 0070 Mechanics & Properties of matter I-Sem	
47. 0071 Physics(Paper-3)	
48. 0072 Physics(Paper-3)	
49. 0073 Optics & Atomic Physics	
50. 0074 Physics(Paper-4)y-3	
51. 0075 Physics(Paper-4)y-3	
52. 0077 Practical Physics (Vol-I)	
53. 0078 Modern Physics	
54. 0079 Modern Physics	
55. 0080 Mechanics and Waves & Oscillations	
56. 0081 Unified Physics Modern Physics (Vol-IV)	
57. 0082 Physics (Y-2)	
58. 0083 Classical Mechanics	
59. 0084 Classical Mechanics	
60. 0085 Mechanics	
0000 M-1 '	
61. 0086 Mechanics 62. 0087 Modern Physics (Vol-IV)	

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63.	0088	Oscillations and Waves
64.	0090	Unified Physics (P-IV)
65.	0091	Classical Mechanics
66.	0092	University Physics
67.	0093	Solid State Physics
68.	0094	Thermodynamics
69.	0099	Unified Physics
70.	0095	Optics and Atomic Physics
71.	0096	Physics Paper-3 (Y-3)
72.	0097	Unified Physics (Vol-IV)
73.	0100	Unified Physics (Vol-IV)
74.	0101	Thermodynamics and Optics
75.	0102	Statistical Mechanics
76.	0103	Electricity Magnetism
77.	0104	Electricity Magnetism Light and Atomic Physics
78.	0105	Unified Physics (Vol-III)
79.	0107	Unified Physics (Vol-III)
80.	0108	Physics practical Book (y-2)
81.	0109	Classical Mechanics
82.	0110	Mechanics and Waves & Oscillations
83.	0111	Physics (Mechanics)
84.	0112	Classical Mechanics
85.	0113	First Year Physics
86.	0114	Physics practical Book (y-2)
87.	0115	Quantum Mechanics
88.	0118	Unified Electronics Vol-II
89.	0119	Electronics (Ana log circuit & Communications)
90.	0120	Mechanics(Physics) (Paper –I)
91.	0121	Mechanics Mechanics
92.	0123	Mechanics and Properties of matter
93.	0123	Circuit Analysis and Electronic Devies
94.	0125	Electronics (Digital Electronics and Modern Physics)PaperIII
95.	0123	Thermal Physics
96.	0128	Waves & Oscillations
97.	0129	Ana log Circuit
	0130	Thermodynamics
98.	0131	Waves and Oscillations
99.	0132	
100.		Thermodynamics  Floatronics (Circuit Analysis)
101.	0135	Electronics (Circuit Analysis)
102.	0136	Circuit Analysis
103.	0137	Basic Circuit Theory and Circuit Analysis
104.	0138	Modern Physics (Paper-VII)
105.	0139	Basic Electronics(Paper-8A)
106.	0141	Optics
107.	0142	Electronics
108.	0144	Electronics (Y-III)

109.	0145	Electricity Magnetism & Electronics (Vol-3)
110.	0146	Waves and Oscillations
111.	0147	Waves and Oscillations
112.	0151	Electronics Circuits & Digital Electronics
113.	0152	Mechanics(Y-I)
114.	0153	Mechanics & Waves and Oscillations
115.	0155	Linear Components & circuit Analysis
116.	0156	Electronics
117.	0157	Electronics(Ana log Circuit Communications)P-II
118.	0158	Electronics(Digital Electronics)
119.	0162	Electronics(Digital electronics and Microprocessors (P-III)
120.	0163	Electronics (Embedded system and Applications )
121.	0165	Electronics (Ana log Circuits)
122.	0166	Physics (Y-3,Paper-IV)
123.	0167	Electronics (Ana log Circuits)
124.	0168	Waves Optics (Physics-III)
125.	0169	Thermodynamics & Radiation Physics
126.	0170	Thermal Physics(SEM-III)
127.	0172	Electricity and Magnetism
128.	0173	Physics
129.	0174	Thermodynamics
130.	0176	Modern Physics
131.	0177	Physics(Y-3,Paper-III)
132.	0179	Electricity & Electronics (Vol-III)
133.	0180	Numerical
134.	0183	Modern Physics
135.	0184	MAQS in Physics
136.	0185	Heat and Thermodynamics
137.	0186	Electronic Divices
138.	0188	Unified Electronics Vol-II
139.	0190	Physics (Vol-IV,Y-3)
140.	0191	Modern Physics (Paper-III)
141.	0194	Analog Circuits
142.	0195	Unified Electronics Vol-IV
143.	0196	Physics (Vol-IV)
144.	0197	Physics
145.	0198	Unified Electronics Circuit Analysis
146.	0199	Electronics (Vol-I) Microprocessors
147.	0200	Electronics Circuits & Digital Electronics
148.	0203	Mechanics
149.	0206	Solid State Physics
150.	0207	Heat & Thermo dynamics
151.	0208	Quantum Mechanics
152.	0226	Magnetism & Electricity
153.	0230	Optics & Spectroscopy

154.	0231	Hand book of Electronics
155.	0234	Solid State Physics
156.	0234	Unified Electronics
157.	0237	Physics -III
157.	0238	Physics -IV
159.	0242	Thermodynamics and Optics
160.	0242	Nuclear Physics
161.	0245	Physics -III
162.	0247	Physics -I
163.	0247	Physics -I
164.	0251	Quantum Mechanics
165.	0253	Physics -II
166.	0253	Physics -II
167.	0255	Electricity & Magnetism
167.	0257	Electronics -(Y-III)
+	0257	Solid State Electronics Devices
169. 170.	0258	Experimental Nuclear Physics-II
+	0239	Classical Mechanics- II Edition
171.	0261	
172.		Unified Electronics (Vol-III)
173.	0279 0281	Unified Electronics (Vol-IV)
174.		Principles of Electronics Unified Electronics (Vol-II)
175.	0282	Electricity & Magnetism
176.	0290	Electronics Paper-II  The 9051 Misses out to lless AND Embedded Systems (II
177.	0292	The 8051 Microcontroller AND Embedded Systems-(II – Edition)
178.	0293	New Edition Electronics (Test papers Questions Bank)
179.	0295	Unified Electronics (Vol-III)
180.	0296	Electronics Devices(Paper-II,I-year)
181.	0297	TSPSC Jay am Series-Paper-I
182.	0302	Unified Electronics- Vol-III
183.	0303	Unified Electronics- Vol-III
184.	0304	Unified Electronics- Vol-I
185.	0305	Linear Integrated Circuits Study Manual-IV
186.	0306	Unified Electronics-
187.	0307	Signals and System Analysis
188.	0308	Digital Communication Electronics Paper-VII
189.	0309	Digital Communications
190.	0311	Unified Electronics- Vol-I Circuit Analysis
191.	0312	Digital Storage Oscilloscope
192.	0313	8051 Microcontroller
193.	0314	Digital Communications VI SEM
194.	0315	8051 Micro controller & Applications V SEM
195.	0318	Digital Communications VI SEM
196.	0319	Unified Electronics-I
197.	0321	Fundamentals of Microprocessors & Micro computer
198.	0322	Unified Electronics- Vol-III
		I

199.	0323	Microprocessor Architecture Programming & Applications							
200.	0324	Mal vino Electronic Principals							
201.	0325	Microprocessor and Interfacing							
202.	0326	Microprocessor Architecture Programming & Applications							
203.	0327	Microprocessor and Interfacing							
204.	0328	Unified Electronics- Vol-III							
205.	0329	Unified Physics Vol-II							
206.	0330	Unified Electronics- Vol-III							
207.	0337	Electricity & Magnetism							
208.	0341	Unified Physics Vol-I							
209.	0342	Unified Physics Vol-III							
210.	0353	Physics P art-I							
211.	0354	Modern Physics							
212.	0355	Modern Physics							
213.	0356	Microprocessor							
214.	0357	A Text book of Quantum Mechanics							
215.	0358	Introduction of Nuclear Science							
216.	0359	Modern Physics							
217.	0360	Concepts of Physics							
218.	0361	Electricity & Magnetism							
219.	0363	Unified Physics Vol-I							
220.	0382	Digital Communication							
221.	0383	Unified Electronics Vol -II							
222.	0431	Digital Electronics Paper-VI							
223.	0433	Unified Electronics -I							
224.	0434	Unified Electronics -I							
225.	0436	S.I.A Publishers							
226.	0437	Unified Physics -I							
227.	0438	Unified Physics -I							
228.	0439	Unified Physics -III							
229.	0441	Unified Physics -I							
230.	0442	Unified Electronics							
231.	0445	Unified Electronics -III							
232.	0446	Electricity & Magnetism							
233.	0448	Magnetism & EMT							
234.	0449	Mechanics							
235.	0450	Mechanics & Oscillations							
236.	0451	OP-AMP & Linear Integrated Circuits							
237.	0453	Oscillations & Waves							



#### Lab wise Furniture

S. No.	Types of Furniture	PL 1	PL 2	PL 3	PL 4	PL 5	PL 6	PL 7	Store Room	Total
1.	Work Benches	-	12	12	12	7	9	-	-	52
2.	Student Tables	5	3	2	4	2	24	3	-	43
3.	Wooden Stools	1	26	-	ı	1	13	i	-	40
4.	Wooden Chairs	1	ı	20	1	2	27	1	3	53
5.	Wooden Cupboard	ı	2	3	ı	1	1	1	-	08
6.	Wooden Show case	1	1	-	ı	-	1	ı	-	02
7.	Steel Almirah	1	3	-	2	-	1	-	1	08

8.	Steel Organizer	2	-	-	-	1	1	-	-	04
9.	Wooden chair with wire	4	-	2	-	-	-	-	-	06
10.	Iron Chair with wire	6	1	ı	ı	ı	ı	ı	-	07
11.	Iron Stools	-	-	-	30	-	-	-	-	30
12.	Iron chair with Wire	2	1	ı	-	-	ı	-	-	02
13.	Plastic Chairs	10	-		-	-	-	-	-	10
14.	Plastic Tables	2	-		-	-	-		1	03
15.	CPU Tables	-		-	1	-	-	-	-	01
	Computer Tables	ı	ı	1	-	1	1	6	-	06
17.	Computer Chairs	3	-	-	-	-	-	-	-	03
18.	Long Bench	-	-	-	1	-	-	-	-	01
19.	Draw Table	11	1	-	1	-	-	-	-	13

PL 1 - Staff Room

PL 2 – Einstein Lab

PL 3 – Madam curie Lab

PL 4 - Sir C. V. Raman Lab

PL 5 - Optics Lab

PL 6 – Newton's Lab

PL 7 – Simulation 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, APTDC, VIJAYAWADA
9	Ms. Lalitha, Asso. Prof in Physics, Telangana University.
10	Mr. Srinivasa Raju, Faculty, IIST, Thiruvananthapura
11	Ms. Swarna Latha, Asst.Prof in Vidya Jyoti Institute Of Engineering and Technology.
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 & Electronics
5	Sri. Bassappa, Record Asst.
6	D. Anji Reddy, VicePrincipal (Sciences)
7	S.Upender Reddy, VicePrincipal (Sciences)

### EMINENT ALUMNAE

1	Smt. Prathiba Bharathi, Ex-speaker A.P. Assembly
2	Ms. Rajani Venugopal, National Cricket Player and former Captain of Indian national team.
3	Varsha Joshi Software Professional ORACLE Corporation Hi-tech City, Hyderabad
4	Dr.Varsha Soni Scientist, D.R.D.L, Hyderabad
5	Dr.Shobha Ph.D, Presently working in U.S.A
6	G.Yashaswini M.B.B.S (MRCP) senior house officer, U.K.

7	Dr.P.Saroja, Reader in Chemistry & former Principal S.N.V.M.V, Hyderabad.
8	Dr. Sandhya B.D.S Dental Surgeon, Hyderabad.
9	Mrs. Shyamala Statistical Investigator, Directorate of Animal Husbandry, Shanthi Nagar, Hyderabad.
10	Dr. P.V.S Lakshmi, HOD Department of Maths, former Principal SNVMV
11	Dr. B.Nirmala, Reader in Maths, S.N.V.M.V, Hyderabad
12	Mrs. B.Sumitra, Canara Bank, Rajahmundry
13	Mrs. B.Saritha, State Bank of India, Secunderabad
14	Dr. Sadhana Asso.Prof of physics Osmania University
15	Prof. Nagalaxmi, ISB, Hyderabad
16	Ms M. Sreenija, Software Developer, Wipro
17	Ms Nigasha Fatima, International Yoga Trainer
18	Ms. P. Satyasrinidhi, Pursuing M.Sc. Physics at IIT, Bhubaneswar
19	Ms. Lavanya, Software Developer, Wipro,

### FUTURE EXPANSION PLANS

Perfection is a journey and not a destination. In line with National Education Policy-2020, Physics Department is gearing up for a dynamic future.

 Department is planning to roll out a new 4 year U.G course featuring majors in Physics & Electronics, providing students with comprehensive knowledge and skills.

- To ensure top-notch education, investments will be made in upgrading the PG Labs, fostering an environment conducive to research.
- Undergraduate research will be actively encouraged, offering students invaluable hands on experience.
- The department will promote student group projects fostering collaboration and practical application of theoretical concepts.
- Equip ourselves with more number of advanced and precession instruments.
- New equipment will be added whenever required.

These initiatives will empower our students to excel in academia and beyond.

#### **GALLERY**

### **UG** Laboratories



**Mechanics Lab** 



Thermal-Physics Lab



**Optics Lab** 



**Modern Physics Lab** 



**Analog Lab** 



Digital Lab





Management Felicitates to Ms. Sai Supraja for securing 1<sup>st</sup> Rank in CPGET - 2020, M.Sc. (Electronics)



Management Felicitates to Ms. P. Sahithi for securing 2nd **Rank** in CPGET - 2021, M.Sc. (Electronics)



**Physics News Board** 



Release of Quarterly News letter - Photon



Book Bank



**Department Library** 

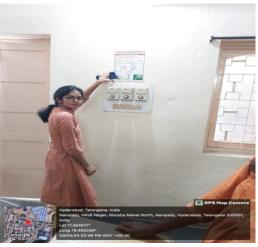
# **DEPARTMENT EVENTS**











**Power Consumption Awareness on 30-03-2024** 







Interclass Competitions on the occasion of NSD-2024 28-02-2024





Guest Lecture by Ms. J.Deepa, Medical Physicist, American Oncology Institute

24-02-2024





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



Hyderabad, Telangana, India

05/10/23 02:44 PM GMT +05:30

Lat 17.387351°

Long 78.47253°

12, Abids South, Nampally, Hyderabad, Telangana 500001, India



GPS Map Camera

Activities under MOU - Workshop on "Experiments in Nuclear Physics" 05-10-2023

Google



Release of Quarterly Newsletter Photon on 05-09-2022



Add-on course on "Know Your Electrical Appliances – Selection, Protection & Safety", from 16-11-2022 to 20-12-2022



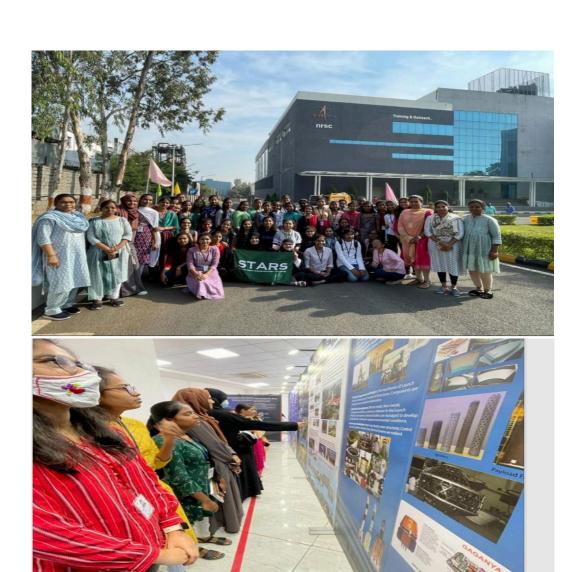


Intercollegiate Competitions on "**Design of Low–Cost Experiments**" For High School level.

04-11-2022



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

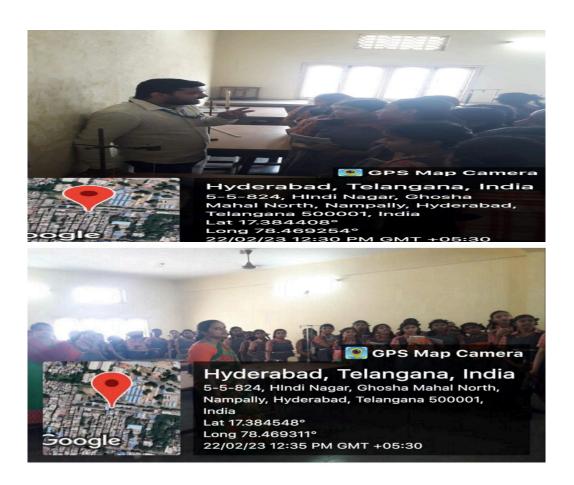




Field Visit to National Remote Sensing Centre (NRSC) on 29-11-2022:



Ms.Navya Teja & Ms.Sadhana (B.Sc, Sem-IV) at One Day Workshop On "SUN AND SPECTROSCOPY "at St.Francis College For Women on 30-01-2023.



Open Day for Shankarji Memorial School students, Hyderabad on 22-02-2023



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



Parent - Teacher Meet on -6-05-2023

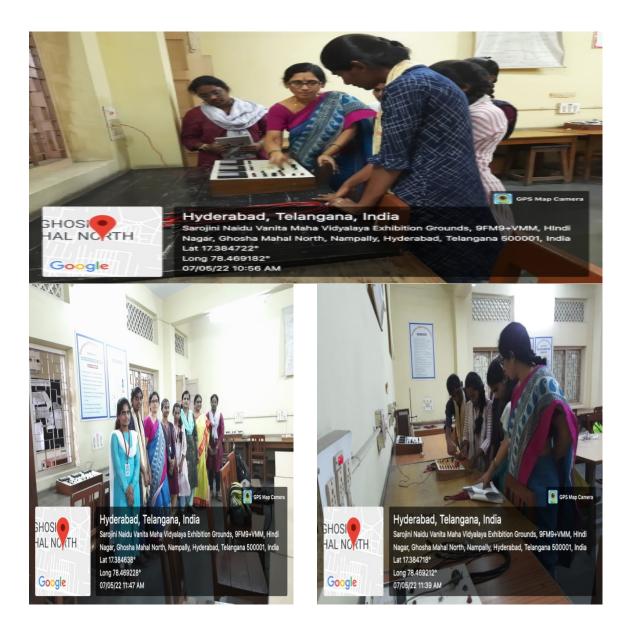


MOU with IPGDC on 19-03-2019





Activities under MOU with IPGDC on 04-03-2022



Activities under MOU with IPGDC on 07-05-2022



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

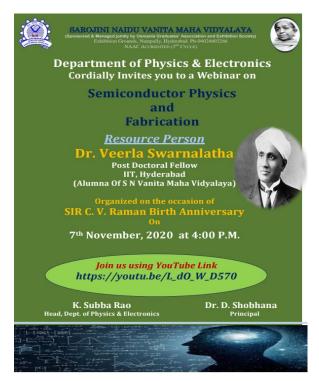


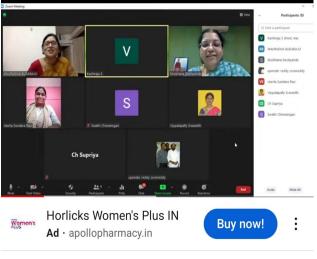


Field Visit to BDL and Midhani on 13-12-2021



**National Science Day Celebrations – 2022** 





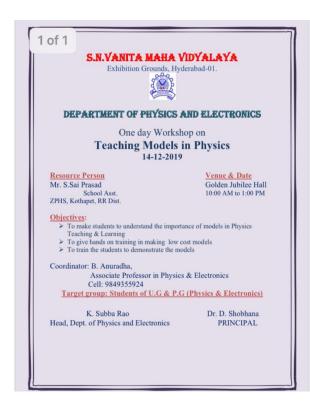
### Department of Physics & Electronics Cordially Invites you to a Webinar on Sem...

293 views 2 yr ago ⊖ ...more

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



## **National Science Day Celebrations - 2021**





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





Hands-on Experience in making Teaching Models to Students on 14-12-2019



Book Bank Inauguration by Principal Dr.D.Shobana on 23-01-2020

2018-19



Inauguration of SPARK 2K19 – chief guest Prof. Ravi kumar, Member Secretary, TSCOST on 21-02-2019



Chief Guest interacting with the participants in competitions On 21-02-2019



**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