SRI VENKATESHWARA GOVERNMENT ARTS AND SCIENCE COLLEGE, PALEM

DEPARTMENT PROFILE

"THE STUDY OF PHYSICS IS ALSO AN ADVENTURE. YOU WILL FIND IT CHALLENGING, SOMETIMES FRUSTRATING, OCCASIONALLY PAINFUL, AND OFTEN RICHLY REWARDING."

- Hugh D. Young.

BY

MRS. S. VIDYA RANI

M.Sc., B.Ed., SET, (Ph.D.)

ASSISTANT PROFESSOR

DEPARTMENT OF PHYSICS

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PRINCIPAL'S MESSAGE

Department of Physics is striving hard to provide a healthy academic environment necessary for character construction, creative self-expression and personality development for boy and girl students.

Majority of the students of this college are first generation learners coming from middle class families and also from under privileged / marginalized sections of the society.

Through the regular conduction of various academic extension activities to the students such as Quiz programs, Student seminars, Field and Industrial visits, Guest lectures, students are enriched with the deep understating of Physics principles.

Department of Physics excelled with the commitment of faculty members work in pandemic time with the online zoom classes, Google classroom facilities and video lectures. The initiations and academic plans empowered students to fill the gaps created during pandemic time.

I appreciate the students and faculty of the department for their active participation in curricular and extracurricular activities of the college. I hope this department will succeed in shaping the student's career with their Mission & Vision.

FACULTY PROFILE

MRS. S. VIDYA RANI M.Sc., B.Ed., SET., (Ph.D.)
Assistant Professor of Physics

I AM....

A Physics teacher with 14 years of experience in teaching Physics with strong problem-solving and demonstration skills with expertise in teaching undergraduate students.

WORK HISTORY AND CURRICULUM TAUGHT

1. **Govt. Boys Junior College, Wanaparthy (2008-2011)**
   Curriculum designed by Board of Intermediate Education

2. **Govt. Girls Junior College, Jadcherla (2011-13)**
   Curriculum designed by Board of Intermediate Education

3. **M.V.S. Govt. Arts & Science College, Mahabubnahgar (2013-18)**
   CBCS curriculum designed as per UGC guidelines by affiliating University

4. **Presently working at Sri Venkateshwara Govt. Arts & Science College, Palem (since 2018) and now as Principal(FAC).**
   CBCS curriculum designed as per UGC guidelines by affiliating University

EDUCATIONAL & PROFESSIONAL QUALIFICATIONS

1. **Post graduation in Applied Eletronics** **(June 2004)**
   Passed with distinction from Department of Physics, University College of Science, Osmania University, Hyd., IN

2. **B.Ed.** **(June 2005)**
   Passed with distinction in Physical Sciences from IASE, Masab Tank, Osmania University, Hyd., IN

3. **State Lecturer Eligibility AP-SET** **(June 2012)**
   Through APSET in the subject area of Physical Sciences from Osmania University, Hyd., IN., which is one of the eligibility criteria to teach the students of under graduate level in Telangana State.

RESEARCH

Pursuing Ph.D. from Department of Physics, University College of Science, Osmania University under the supervision of Prof. D. Karunasagar, Head, Dept. of Physics.
Area of research is **"Studies on the performance of aberrated optical imaging systems with variable apodisation."**

CAREER OBJECTIVES

- **Curriculum planning and implementation.**
- **Assessing student academic performance.**
- **Professionalism and ability to work with team and independent.**
- **Monitoring and supervision of student study projects.**
- **Career guidance to the students and students' counselling.**

SOFT AND PROFESSIONAL SKILLS

expertise in handling the situation spontaneously

personlaized use of computer applications, online teaching & ICT tools

excellent time management skills for ensuring planned tasks are completed efficiently

creation of video lessons in youtube, puzzles and quizzes using goolge forms, edpuzzle, kahoot, edmodo

PROFESSIONAL DEVELOPMENT

Attended many Workshops, Orientation Courses, Refresher Courses, Faculty Development Programs, Webinars, Seminars from various Central and State Universities like IIT Bombay, University of Delhi, University of Mumbai, IIRS-ISRO , MCHRDIT, PMMMNMTT etc. in both online and offline mode, Worked as BOS Member Expert, BOS Chairman.

LIST OF PROGRAMS ORGANIZED, PARTICIPATED

1. "DEGREE: PHYSICS CONCEPTS" You Tube channel By Mrs. S. Vidya Rani (link: https://www.youtube.com/channel/UCU7cPT08IsKTcGXIAWq9tlQ)
2. ICT based Teaching
3. HOD of Physics
4. WEC Member
5. Completed 1 OC & 3 RC and many FIP's.
6. Participated in various online courses organized by DRDC-ISRO, PMMMNM-MHRD, NATIONAL INSTITUTES OF SCIENCES, IIT BOMBAY , UGC-HRDC, RUSA etc.
7. Participated in various National and International webinars and presented paper.
8. Worked as NSS Program Officer.
9. Worked as In-charge of Mathematics Dept.
10. Worked as MANA TV In-charge and our student selected for "STUDENT ASA TEACHER" recorded and telecasted in MANA TV.
11. Worked as Audio-visual In-charge.
12. NAAC & IQAC Coordinator.
13. Participated, identified challenges & suggested solutions in the area of "RESEARCH INTENSIVE TEACHING IN HIGHER EDUCATION" as a part of implementation of NATIONAL EDUCATIONAL POLICY-2020 organized by PALAMURU UNIVERSITY in collaboration with BHARATIYA SHIKSHAN MANDAL & NITI AYOG.
14. Member of National Institute of Sciences.
15. As BOS, Chairman to the Dept. of Physics, MVS Govt. Degree College (A), Mahabubanagar in the year 2020-21.

16. As BOS, Member Expert nominated by the Vice-Chancellor to the Dept. of Physics, MVS Govt. Degree College (A), Mahabubanagar in the year 2021-22.

17. PRESENTLY WORKING AS PRINCIPAL (FAC) OF SRI VENKATESHWARA GOVERNMENT ARTS & SCIENCE COLLEGE, PALEM

18. Organized & participated in various programs like

- DIGITAL INDIA.
- ORIENTATION ON CASHLESS TRANSACTIONS.
- AWARENESS ON TRAFFIC RULES.
- MEGA SKILL DEVELOPMENT CAMP.
- COUSELLING TO STUDENTS.
- TOOK FREE COACHING CLASSES FOR THE POOR STUDENTS FOR VARIOUS JOBS.
- TWO DAYS WORKSHOP ON UG CBCS CURRICULUM.
- INVITED AS JUDGE FOR STUDENT STUDY PROJECTLIFE SCIENCES)& MY STUDENTS BAGGED 3 PRIZES IN PHYSICAL SCIENCES.
- ADOPTED GOVT. SCHOOLS.
- BLOOD DONATION CAMP.
- AWARENESS PROGRAM ON "NATIONAL VOTERS' DAY".
- HARITHAHAARAM.
- AWARENESS ON PULSE POLIO VACCINATION PROGRAM.
- RALLY ON AIDS DAY.
- CONDUCTED NSS WINTER CAMP AND PERFORMED VARIOUS PROGRAMS ON SOCIAL ISSUES LIKE DOWRY DEATHS, CHILD MARRIAGES, DRINKING HABITS, GIRL FOETICIDE IN NEARBY VILLAGES.
- CERTIFICATE COURSE ON "ELETRICAL HOUSE WIRING & CEILING FAN REPAIR".
- CONDUCTED PRACTICAL CLASSES TO VARIOUS SCHOOLS.

- **INVITED AS JUDGE FOR MANY SCIENCE EXHIBITIONS IN DISTRICT& REGIONAL LEVEL.**
- **INVITED AS GUEST OF HONOUR TO ADDRESS THE STUDENTS OFHIGH SCHOOL TO ENLIGHTEN THEM IN PHYSICS CONCEPTS ON NATIONAL SCIENCE DAY.**
- **ORGANIZED VARIOUS PROGRAMS ON "NATIONAL MATHEMATICSDAY", INTERNATIONAL WOMEN'S DAY, CONSTITUTION DAY, BATHUKAMMA CELEBRATIONS.**
- **CONDUCTED VARIOUS PROGRAMS LIKE POSTER MAKING (WOMENIN PHYSICS), ELOCUTION, ESSAY WRITING, QUIZ TO DEVELOP INTEREST IN PHYSICS.**
- **ORGANIZED AWARENESS PROGRAMS ON RAGGING AND SEXUAL HARRASSMENT ISSUES BY "SHE TEAMS".**
- **GIFTED CLOTHES TO POOR OUTSOURCING NON-TEACHING STAFF.**
- **AWARENESS TO STUDENTS ON "DISHA INCIDENT" THAT SHOOK THE NATION.**
- **PARTICIPATED & WON IN MANY COMPETETIONS ORGANIZED FOR WOMEN FACULTY.**

TRAININGS & FDP COURSES PARTICIPATED

S. NO.	PROGRAMME NAME	COLLEGE/ UNIVESITY NAME	DATES OF FDP	SUPPORTED BY
1	ORIENTATION COURSE	UNIVERSITY OF HYDERABAD	9 JAN -5 FEB'14	A+
2	REFRESHER COURSE: DISASTER MANAGEMENT	MAULANA AZAD NATIONAL URDU UNIVERSITY, HYDERABAD	5-25 FEB'19	A
3	SCILAB	S.K. SOMAIYA COLLEGE OF ARTS, SCIENCE & COMMERCE, BOMBAY	21-25 APRIL'20	IIT BOMBAY
4	ICT TOOLS FOE EFFECTIVE TEACHING LEARNING	SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED	11-16 MAY'20	A+
5	EFFECTIVE & EFFICIENT ONLINE TEACHING IN THE AGE OF CORONA-WORKSHOP	NMEICT/PMMMNM ON TEACHERS & TEACHING, MHRD, GOVT. OF INDIA	11-16 MAY'20	IIT BOMBAY
6	PHP-MY SQL FDP	JNTUH COLLEGE OF ENGINEERING, JAGTIAL	18-23 MAY'20	IIT BOMBAY
7	THE USE OF VIRTUAL PHYSICS LAB- CREATING NEXT GENERATION TEACHERS	GEETHANJALI COLLEGE OF ENGINEERING AND TECHNOLOGY, NEW DELHI	20-24 MAY'20	
8	EVOLUTION FROM OFFLINE TO ONLINE TEACHING	SATISH PRADHAN DNYANASADHANA COLLEGE, THANE	30-3 JUNE'20	UNIV. OF MUMBAI
9	MTERM, STRIDE COMPONENT-1	VINAYAKRAO PATIL MAHAVIDYALAYA, VAIJAPUR	02-07 JUNE'20	
10	NATIONAL ONLINE WORKSHOP: RESEARCH METHODS AND TECHNIQUES	RAMANAND ARYA DAV COLLEGE, MUMBAI	06-12 JUNE'20	UNIV. OF MUMBAI
11	FDP ON BEST PRACTICES	DPM'S SHREE MALLIKARJUN COLLEGE, CANACONA, GOA	8-14 JUNE'20	
12	FDP ON LATEX/XFIG	CALCUTTA INSTITUTE OF TECHNOLOGY, WEST BENGAL	15-19 JUNE'20	IIT BOMBAY
13	FDP ON E-CONTENT DEVELOPMENT	ST. JOSEPH'S INSTITUTE OF TECHNOLOGY	16 JUNE'20	

S. NO.	PROGRAMME NAME	COLLEGE/ UNIVESITY NAME	DATES OF FDP	SUPPORTED BY
14	THE BODHITREE & SAFE TOOLS FOR EFFECTIVE ONLINE TEACHING-WORKSHOP	NMEICT/PMMMNM ON TEACHERS & TEACHING, MHRD, GOVT. OF INDIA	20-21 JUNE'20	IIT BOMBAY
15	INTERNATIONAL FDP ON GATEWAY TO INNOVATION	ICS COLLEGE OF ARTS, COMMERCE & SCIENCE, KHED	22-26 JUNE'20	
16	SCIENCE LEADERSHIP WORKSHOP	ALL NATIONAL INSTITUTES OF SCIENCES	22-28 JUNE'20	
17	WORKSHOP ON SATELLITE PHOTOGRAMMETRY	INDIAN INSTITUTE OF REMOTE SENSING, ISRO	29 JUNE -3 JULY'20	ISRO
18	PEDAGOGICAL TRAINING FOR TEACHERS ON TOOLS FOR ONLINE TEACHING, EVALUATION	SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED	1-6 JULY'20	A+
19	ICT TOOLS IN HIGHER EDUCATION	UGC, HRDC & RUSA, OSMANIA UNIVERITY, HYDERABAD	27-2 SEPT'20	
20	3- DAY VIRTUAL TRAINING PROGRAMME ON ORIENTATION ON SDG-4: QUALITY EDUCATION	DR. MCHRDIT, TELANGANA	5-7 MAY'21	
21	ONLINE 2 WEEK REFRESHER COURSE IN PHYSICS	TLC, RAMANUJAN COLLEGE, UNIVERSITY OF DELHI & PMMMNMTT	10-24 APRIL'22	A+
22	INTER DISCIPLINARY 2 WEEK REFRESHER COURSE MANAGING ONLINE CLASSES & CO-CREATING MOOCS 14.0	TLC, RAMANUJAN COLLEGE, UNIVERSITY OF DELHI & PMMMNMTT	7-21 MAY'22	A+
23	3- DAY TRAINING PROGRAMME ON ORIENTATION ON SDG-4: QUALITY EDUCATION	DR. MCRHRDIT, TELANGANA	21-23 JULY'22	

WEBINARS & PAPER PRESENTATIONS

S. NO.	PROGRAMME NAME	COLLEGE/ UNIVESITY NAME	DATES OF FDP	SUPPORTED BY
1	INTERNATIONAL LEVEL TALK	GOVERNMENT DEGREE COLLEGE, IBRAHIMPATNAM	20 MAY'2020	
2	NATIONAL WEBINAR ON ROLE OF IQAC IN HIGHER EDUCATIONAL INSTITUTIONS	BADRUKA COLLEGE OF COMMERCE AND ARTS, HYDERABAD	21 MAY'20	
3	NATIONAL WEBINAR HOW HUGE IS NANO??	BHASKARACHARYA COLLEGE OF APPLIED SCIENCES	29 MAY'20	UNIV. OF DELHI
4	INTERNATIONAL WEBINAR ON PARADIGM SHIFT(WRITTEN & PRESENTED PAPER)	GOVT. RAZA PG COLLEGE, RAMPUR, UP	31 MAY'20	
5	WEBINAR ON IMPACT OF COVID-19 ON HIGHER EDUCATION	SWAMI PREMANAND MAHAVIDYALAYA, MUKERIAN, PUNJAB	03 JUNE'20	
6	NATIONAL WEBINAR ON COVID-19 PANDEMIC: IMPACT & STRATEGIES	GITANJALI TEACHER'S TRAINING COLLEGE, MURSHIDABAD	03 JUNE'20	
7	NATIONAL WEBINAR: EFFECTIVE TEAM BULIDING & PBL	KOLHAPUR INSTITUTE OF TECHNOLOGY	13 JUNE'20	
8	WEBINAR ON RESEARCH AND CAREER IN PHOTONICS-2020	MANIPAL UNIVERSITY, JAIPUR	15 JUNE'20	
9	WEBINAR: FOSTERING INTERDISCIPLINARY RESEARCH IN APPLIED SCIENCES	PERIYAR GOVT. ARTS COLLEGE, CUDDALORE	19-20 JUNE'20	
10	DISCOVER THE SKILL TO MAKE E-CERTIFICATE	SCROLLWELL	25-27 JUNE'20	

ABOUT THE DEPARTMENT.....

- In 1963, Department of physics was established with a science course B.Sc. with combination of Physics, Mathematics and Chemistry in Telugu medium. In 2018, English medium course B.Sc. Physical course under Credit Based Choice System (CBCS) were introduced with the combination of
  1] Mathematics, Physics and Chemistry
  2] Mathematics, Physics and Computer Science.
- Laboratory equipment was purchased with RUSA 2.0 funds; now Physics laboratory is equipped with all necessary material.
- Department consisting of one staff room and two laboratories, one dark room, store room and three common lecture halls.
- Digital room facilities are arranged with projector & screen.
- All common lecture halls are fitted with green boards and white marker board is fitted in the laboratory.
- The department has one sanctioned post. At present one regular lecturer is working.
- Student admissions has sharply increased with the efforts of staff and principal from 2018, now 103 students are pursuing under graduation with physics as one of the major optional subject in academic year 2021-22.

VISION AND MISSION

VISION

This department has a vision to instill fundamentals of physics laws, applications and to make them able to learn advanced physics through theoretical and experimental study. We are committed to shape student's learning and understanding capacities with different teaching methodologies, curricular plans and e-facilities.

MISSION

- To provide a broad understanding of the fundamental concepts of physics.
- To provide experimental and analytical skills to pupils.
- Students' problem-solving abilities in physics should be improved.
    - Study projects will be used to introduce research orientation.

SWOC ANALYSIS

STRENGTHS:

- Faculty members are regular in appointment, well qualified and have significant experience not only in teaching, but they are well versed with multi discipline skills.
- Faculty have rich knowledge and skills in online, ICT enabled teaching and digital tools operation.
- Students learning evaluation through online facilities.
- Well equipped laboratories with latest experimental materials and necessary electrification and digital tools.
- Well ventilated lecture halls and ambient college atmosphere.
- Department faculty active participation in extension academic activities and faculty development programs, seminars, webinars cater students learning with updated content.

WEAKNESSES:

- There is lack of research laboratories.
- Most of the students are economically and socially poor and unable to afford to attain digital technology facilities.
- Single faculty in the department limited the students learning and faculty activities.
- Lack of research facilities and funding is a constraint.

OPPORTUNITIES:

- This Department provides to the students to pursue their higher education with PG coaching and guest lectures.
- Research orientation and deep understanding of physics principles through study projects and field trips.
- Exchange of knowledge through guest lectures and MoUs.
- The Choice Based Credit System (CBCS) enables students to learn subjects as per their choice.
- The increase of student enrolment giving opportunity to get more faculties in the department.
- Newly augmented computer lab facility in the campus increases student accessibility of e-learning resources, technology based skills.

CHALLENGES:

- Stopping students from daily journey.
- Promoting to higher education because of getting marriages during or immediately after B.Sc.
- Student's transportation from far villages is constraint them to reach the college in time.
- In spite of educating them the superstition and blind belief in the tribal and communities forcing girl students to get early marriages. It leads to significant increase in drop puts number.
- Collaboration with reputed organisations and companies to provide immediate employability to the students.
- Difficulty in updating laboratory material with frequently updated syllabus.

STAFF PARTICULARS WITH SUCCESSION LIST

FROM ACADEMIC YEAR 2009-10 TO 2021-22

S. No.	Name of Faculty	Qualification	Nature of appointment	Date of Joining	Date of Leaving
1	Shyam Sundar	M.Sc.	Contract	01.09.2000	05.07.2018
2	Prathap Reddy	M.Sc.	Full time lecturer	05.07.2018	30.06.2019
3	D. Krishna Teja	M.Sc.	Full time lecturer	30.06.2019	14.09.2020
4	S. Vidya Rani	M.Sc., B.Ed., SET, (Ph.D.)	Regular	15.09.2020	Till today

DETAILS OF TEACHING STAFF

Name	Designation	Qualification	Experience in present cadre(Years)	Total Teaching Experience (Years)	Period
S. Vidya Rani	Assistant Professor of Physics	M.Sc., B.Ed., SET, (Ph.D.)	9 years	14 years	Since 15.09.2020

CRITERION-I

CURRICULAR ASPECTS

COURSES OFFERED:

List of courses offered across all programs during last six years

Program code	Program Name	Course Code	Course Name	Year of introduction
ACADEMIC YEAR 2016-17				
43003 MPC TM	BSC (MPC- TM)	43003 MPC TM	B.Sc.: Mathematics, Physics, Chemistry (Telugu Medium)	2016-17
ACADEMIC YEAR 2017-18				
43003 MPC TM	BSC (MPC- TM)	43003 MPC TM	B.Sc.: Mathematics, Physics, Chemistry (Telugu Medium)	2017-18
ACADEMIC YEAR 2018-19				
43003 MPC TM	BSC (MPC- TM)	43003 MPC TM	B.Sc.: Mathematics, Physics, Chemistry (Telugu Medium)	2018-19
43003 MPC EM	BSC (MPC- EM)	43003 MPC EM	B.Sc.: Mathematics, Physics, Chemistry	2018-19
43003 MPCS EM	BSC (MPCS - EM)	43003 MPCS EM	B.Sc.: Mathematics, Physics, Computer Science	2018-19
ACADEMIC YEAR 2019-20				
43003 MPC EM	BSC (MPC- EM)	43003 MPC EM	B.Sc.: Mathematics, Physics, Chemistry	2019 - 20
43003 MPCS EM	BSC (MPCS - EM)	43003 MPCS EM	B.Sc.: Mathematics, Physics, Computer Science	2019-20

ACADEMIC YEAR 2020-21				
43003 MPC EM	BSC (MPC- EM)	43003 MPC EM	B.Sc.: Mathematics, Physics, Chemistry	2020-21
43003 MPCS EM	BSC (MPCS - EM)	43003 MPCS EM	B.Sc.: Mathematics, Physics, Computer Science	2020-21
ACADEMIC YEAR 2021-22				
43003 MPC EM	BSC (MPC- EM)	43003 MPC EM	B.Sc.: Mathematics, Physics, Chemistry	2021-22
43003 MPCS EM	BSC (MPCS - EM)	43003 MPCS EM	B.Sc.: Mathematics, Physics, Computer Science	2021-22

CURRICULUM

Sri Venkateshwara Government Arts & Science College, Palem is affiliated to Palamuru University, Mahabubnagar. Department of Physics is following the almanac and syllabus of the university. Choice Based Credit System (CBCS) curriculum was introduced in academic year 2016-17. Consequently Syllabus was changed according to the needs of global requirements in the academic year 2019-20 & 2020-21. Accordingly, we are now offering the following courses in the department.

CHOICE BASED CREDIT SYSTEM (CBCS)

The Choice Based Credit System is offered only to the students admitted in Constituent Colleges and Affiliated Colleges of Palamuru University from the Academic Year 2016-2017.

Performance of the student is assessed and results have been declaring by Palamuru University.

"Semester Grade Point Average (SGPA)" refers to the performance of the student in a given semester. SGPA is based on the total credit points earned by the student

in all the courses and the total number of credits assigned to the courses/papers in a Semester.

"Cumulative Grade Point Average (CGPA)" is refers to the Cumulative Grade Point Average weighted across all the semesters (6 semesters).

In the CBCS system continuous evaluation of the students in all the semesters is done through Internal Assessment Examinations, assignments, etc.

Each paper/course is assigned a specific number of credits and the marks secured by a student are converted into grade points and credit points.

There shall be six semesters in each UG course. The duration of an Academic year consists of two semesters, each of 15 weeks of teaching. The Academic session in each semester will provide 90 teaching days. The period of the odd semesters shall be from July to November and the even semesters shall be from December to April.

There shall be five categories of courses/papers in the UG programmes

1. AECC - Ability Enhancement Compulsory Course (AECC)
2. CEC - Skill Enhancement Course (SEC)
3. DSC - Discipline Specific Compulsory (DSC)
4. DSE - Discipline Specific Elective (DSE)
5. SEC - Skill Enhancement Course
6. GE – General Elective

The detailed UG course structure for each Department will be designed by the UG Board of Studies of the Department and finalized by the Faculty and approved by the Standing Committee of the Academic Senate of the University from time to time.

SYLLABUS (With effect from AY 2020-21)

Semester	Name of the course	Nature of Course	Hours (Th+Pr) /Week	Credits	Maximum Marks			
					Internal	End Exam	Practical	Total Marks
I	Mechanics	DSC	Theory =4 Practical =3	(4+1)= 5	20	80	25	125
II	Thermal physics	DSC	Theory =4 Practical =3	(4+1)= 5	20	80	25	125
	Fundamentals of Nano technology	SEC	Theory =2	2	10	40		50
III	Electromagnetic theory	DSC	Theory =4 Practical =3	(4+1)= 5	20	80	25	125
IV	Waves and optics	DSC	Theory =4 Practical =3	(4+1)= 5	20	80	25	125
V	A: Modern physics	DSE	Theory =4 Practical =3	(4+1) 5	20	80	25	125
	B: Computational physics	DSE	Theory =4 Practical =3	(4+1) =5	20	80	25	125
VI	A: Electronics	DSE	Theory =4 Practical =3	(4+1) =5	20	80	25	125
	B: Applied Optics	DSE	Theory =4 Practical=3	(4+1) =5	20	80	25	125

Seven hours have been allotted to each course in a week, out of those four hours for theory and three hours for Practical. Five credits are earmarked for each course. Candidate has to get 40% marks in University Exam cum Internal Assessment in order to pass a course.

Students are offered one (1) Discipline Specific Compulsory (DSC) paper in

each semester i.e., Six(6) DSC papers related to Physics and AECC, SEC, GE and Project papers to gain the extensive and career based knowledge in three years/ six semester curriculum.

Two Ability Enhancement Compulsory Course (AECC) papers are offered to the students in First year. i.e., one (1) paper in semester I and one (1) paper in semester II.

1] 'Environmental Science' in semester I and

2] 'Basic Computer Skills' taught by faculty of Computer Science in II Semester. .

These papers have 2 credits weightage and 2 teaching hours per week.

Four Skill Enhancement Course (SEC) papers are offered to the students in second year. i.e., two(2) papers in semester III and two(2) papers in semester IV.

1] 'Experimental methods & errors analysis' and

2] 'Electrical circuits & networking' taught by faculty of Physics in Semester III. These papers have 2 credits weightage and 2 teaching hours per week.

3] 'Basic Instrumentation' and

4] 'Digital electronics' in semester IV. These papers have 2 credits weightage and 2 teaching hours per week.

In semester V, Students are offered with one (1) General Elective (GE) paper "Renewable energy resources". It has 4 credits weightage and 4 teaching hours per week. This paper has to teach by faculty of any Science Department.

In semester IV, University designed syllabus to the students to participate in a project or optional paper "Nano Science". It has 4 credits weightage and 4 teaching hours per week. This paper has to teach b faculty of Zoology or Botany or Biotechnology or Micro Biology.

Department lays down course outcomes for each course according to the Learning Outcome Based curriculum set by UGC. Department is striving to attain course outcomes with curricular and co-curricular activities. Course Outcomes for the academic year 2021-22 are given below.

PROGRAMME OUTCOMES

After successful completion of three year degree program in Physics a student should be able to

PO 1: Demonstrate, solve and an understanding of major concepts in all disciplines of Physics.

PO 2: Solve the problem and also think methodically, independently and draw a logical conclusion.

PO 3: Employ critical thinking and the scientific knowledge to design, carry out, record and analyze the results of Physics experiments.

PO 4: Create an awareness of the impact of Physics on the society, and development outside the scientific community.

PO 5: To inculcate the scientific temperament in the students and outside the scientific programme.

PROGRAMME SPECIFIC OUTCOMES

PSO 1: Gain the knowledge of Physics through theory and practical.

PSO 2: Understand good laboratory practices and safety.

PSO 3: Develop research oriented skills.

PSO 4: Make aware and handle the sophisticated instruments/equipment in scientific community.

AWARD OF GRADES:

Table shows the awarding of grade letter and Grade point to the student in each course or paper in every semester by University.

Details of Award of Grades under Choice Based Credit System w.e.f. academic year 2016- 17

Range of Marks	Grade Letter	Grade Point
≥ 85 to 100	O	10
≥ 70 to < 85	A	9
≥ 60 to < 70	B	8
≥ 55 to < 60	C	7
≥ 50 to < 55	D	6
≥ 40 to < 50	E	5
< 40	F	0
Absent	AB	–

Details of Award of Grades Under Choice Based Credit System w.e.f. academic year 2019-20.

Award of Grades			Award of Division		
Range of % of Marks	Grade Letter	Grade Point	CGPA Grade	Range of marks (%)	Division
>85 to 100	0	8.5 - 10	7.00 -10.00	70 -100	First with Distinction
>70 to <85	A	7.0 - 8.49	6.00 -6.99	60 - 69	FIRST
>60 to <70	B	6.0 - 6.99	5.00 -5.99	50 - 59	SECOND
>55 to <60	C	5.5 – 5.99	4.00 -4.99	40 - 49	PASS
>50 to < 55	D	5.0 – 5.49			
>40 to < 50	E	4.0 – 4.99			
< 40	F	0			
Absent	AB	....			

SEMESTER GRADE POINT AVERAGE (SGPA)

Credit Points = Credits assigned to the paper x Grade Point secured

SGPA indicates the performance of a student in a given Semester. SGPA is based on the total credit points earned by the student in all the courses and the total number of credits assigned to the courses/papers in a Semester.

Note: SGPA is computed only if the candidate passes in all the papers (gets a minimum 'E' grade in all the Papers)

CUMULATIVE GRADE POINT AVERAGE (CGPA)

CGPA refers to the Cumulative Grade Point Average weighted across all the semesters (6 Semesters).

Note: CGPA is calculated only when the candidate passes in all the paper of all the semesters.

ATTENDANCE:

Every student must attain 75% of attendance is compulsory.

However, there is a provision for condonation of attendance for the students who have attendance between ≥ 65% and < 75% on Medical Grounds on payment of a fee and production of medical certificate.

If a student represents his/her institution, University, State or Nation in Sports, NCC, NSS or Cultural or any other officially sponsored activities, he/she shall be eligible to claim the attendance for the actual number of days participated subject to a maximum of 20 days in a Semester based on the specific recommendations of the Head of the Department and Principal of the College concerned.

A student who does not satisfy the requirements of attendance shall not be permitted to take internal assessment as well as the Semester end examinations.

FEEDBACK SYSTEM

- This department is committed to follow certain core institutional values framed by the management, university and commissioner of collegiate education. In the process of teaching, it is the prime responsibility to assess the quality of education is providing to the students.

- In order to get accurate and real assessment a feedback from students is collected with complete transparent and fair feedback system.

- This department is following the system framed by the college to collect feedback from the students with a standard questionnaire.

- Every student feedback form is framed with 10 questions with coverage of all possible aspects of curricular and extracurricular activities.

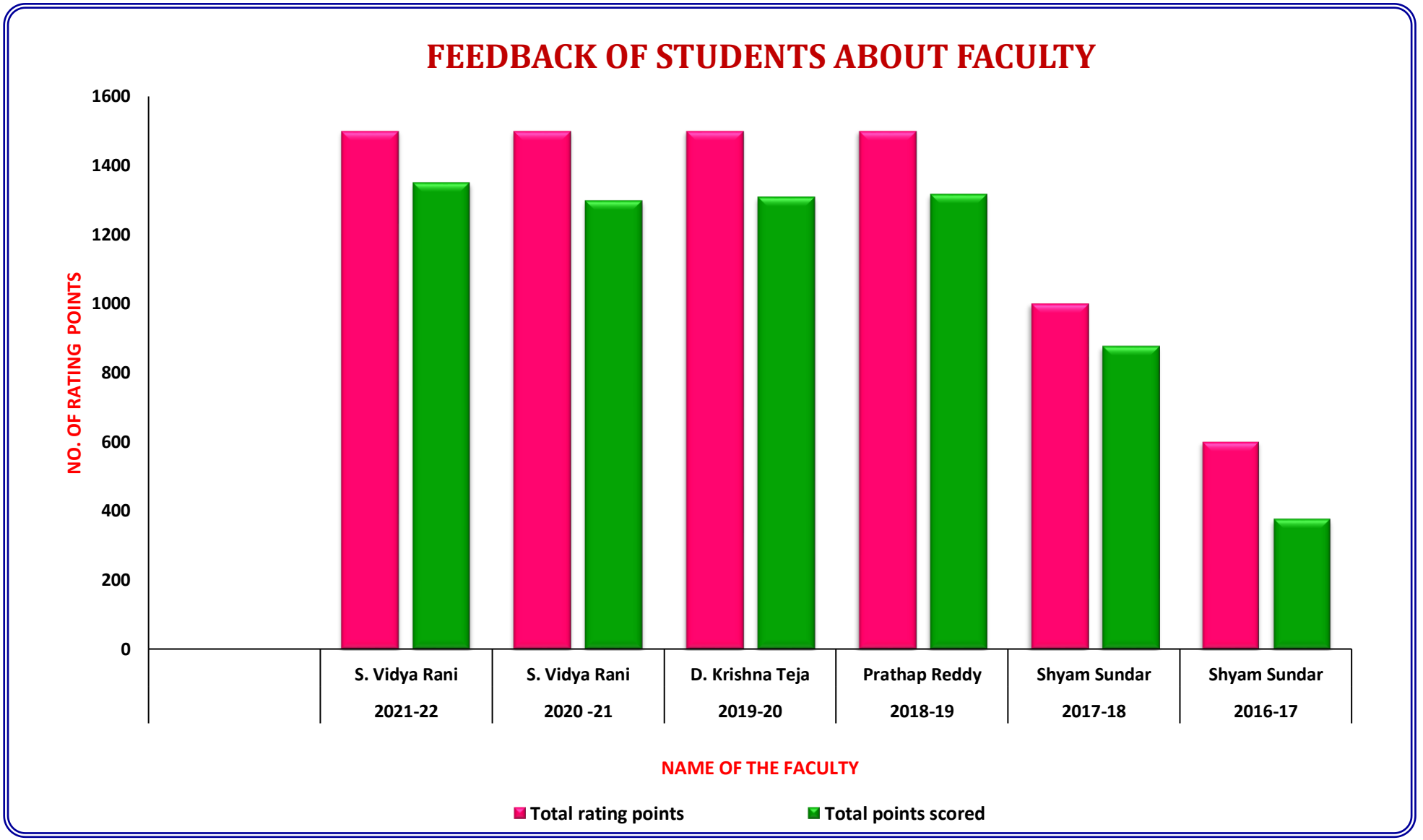
- Each question carrying maximum 5 rating to minimum 1 rating. Each feedback form carries maximum 50 rating points to minimum 10 rating points.

- The feedback analysis is put forward for discussion and necessary action in department meetings.

- For the academic years 2016-17, 2017-18, 2018-19, 2019-20, 2020-21 & 2021-22 feedback data of the students on the faculty of the department is tabulated as below.

STUDENT FEEDBACK PARTICULARS FOR THE LAST SIX YEARS

S. No.	Academic Year	Name of the Faculty whom Feedback is collected	Number of students participated	Total rating points	Total points scored	Performance in percentage
10	2021-22	S. Vidya Rani	15	1500	1350	90.00%
2	2020 -21	S. Vidya Rani	15	1500	1297	86.46%
3	2019-20	D. Krishna Teja	15	1500	1308	87.02%
4	2018-19	Prathap Reddy	15	1500	1316	87.73%
5	2017-18	Shyam Sundar	20	1000	876	87.6%
6	2016-17	Shyam Sundar	15	600	375	62.5%


FEEDBACK OF STUDENTS ABOUT FACULTY
NO. OF RATING POINTS
1600
1400
1200
1000
800
600
400
200
0
S. Vidya Rani
2021-22
S. Vidya Rani
2020 -21
D. Krishna Teja
2019-20
Prathap Reddy
2018-19
Shyam Sundar
2017-18
Shyam Sundar
2016-17
NAME OF THE FACULTY
Total rating points
Total points scored

MODEL QUESTIONNAIRE TO COLLECT FEEDBACK FROM STUDENTS

Sri Venkateshwara Government Arts and Science College

Affiliated to Palamuru University, Accredited with NAAC "B" Grade

Recognised by UGC under sections 2 (f) and 12 (b) of UGC act 1956

Palem-509215, Nagarkurnool District. Email id: palem.gdc@gmail.com

The feedback collected from alumni is based on 11 questions analysed on a five point scale where max points is 5 which is excellent and least is 1 which is non-satisfactory. As per the feedback received from alumni, 80% says that the overall development of the students is excellent and 10% opinion is non – satisfactory. More than 60% are of opinion that the college is excellent in terms of Teaching and learning, courses offered, placements, Infrastructure, Library and overall development of students.

MODEL FEEDBACK

ALUMNI FEEDBACK FORM –

S.No	AREA	EXCELLENT (5)	VERY GOOD (4)	GOOD (3)	SATISFACTORY (2)	NOT SATISFACTORY (1)
1.	Teaching & Learning Activities			✓		
2.	Courses Offered		✓			
3.	Interaction with Staff					
4.	Discipline			✓		
5.	Extracurricular Activities			✓		
6.	Infrastructure & Lab Facilities	✓				
7.	Curricular Design & Syllabus		✓			
8.	Student Counselling & Guidance				✓	
9.	Library		✓			
10	Placements				✓	
11	Overall Development of Students				✓	

FACULTY PROFILE

Academic Year -2019-20

KrishnaTeja Dasari
Lecturer in Physics

Reach me
Cell: +91 9666954743
Email: *d.krishna11@gmail.com*
Nagarkurnool, Telangana

I am a great knowledge of teaching using different educational methods to motivate methods. I have organized several university programs and outreach to promote learning and support for the community. I feel very committed to the students and their goals. A Physics Teacher with 3 year of experience in teaching physics with strong. I feel

Soft & Professional Skills

1. Expertise in handling the situation spontaneously
2. Personalized use of Computer applications, Online teaching tools ICT class facilities
3. Excellent time management skills for ensuring plans are completed efficiently.

Education & Professional Qualification

1. Post Graduation in Physics Post Graduate Palamuru University at Mahabubnagar

Career Objectives

1. Curriculum planning and implementation
2. Assessing student academic performance.
3. Professionalism and ability to work with team and independent
4. Monitoring and supervision of students study projects
5. Career Guidance to the Students counselling

Work History & Curriculums Taught

1. Sri Chaitanya Junior college Miyapur, HYD (2018-19)
2. SV Govt. Arts & Science College Palem, Ngkl (2019-2020)

CRITERION II

TEACHING, LEARNING AND EVALUATION

Faculty of the department prepares a teaching plan of the course. As per the Almanac of the University, there are 15 weeks or 90 working days in each semester. Teaching plans and semester plans will be in such a way that entire course shall be covered within available time. Faculty records in the teaching diaries whatever they taught and do some curricular activities. We are maintaining Digital Teaching Diary from 2020-21 onwards. Digital Teaching Diary is the part of CAIMS (College Administration Information Management System) which is provided by Commissionerate of Collegiate Education, Telangana.

Department reviews coverage of syllabus from time to time and gives instruction accordingly. Faculty members are encouraged to take up student centric activities viz., Quiz, Debating, Elocution, Assignments, Student Seminars, Group Discussions, Student Study projects and brainstorming sessions.

Every faculty member in the department is trained in ICT tools. ICT enabled teaching is being done in blended modes through different platforms as shown below

- Online classes
- YouTube channels
- Best quality animated PPTs
- TSAT-NIPUNA lectures.

Evaluation of students is done through two internal exams and one semester end exam that will be conducted by the University. 20% of weightage is given to Internal Assessment examination and 80% of weightage is given to semester end exam.

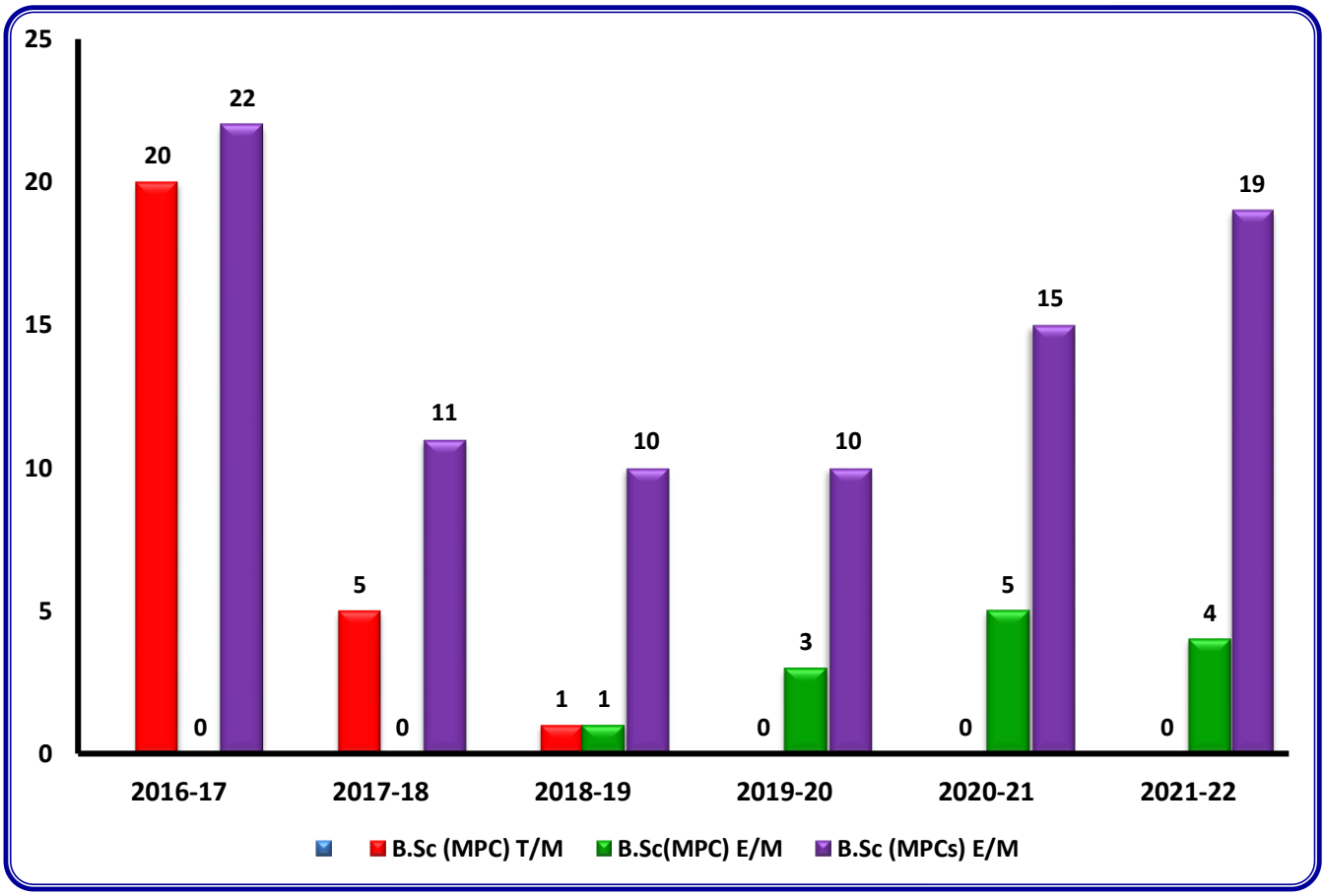
A student has to score 40% of total marks including internal and external to pass in a course. Average of two internal assessments will be considered for internal marks. Grades are given according the following table from academic year 2019-20 onwards.

STUDENTS ENROLLMENT:

The number of students enrolled in first year in each academic year for last six academic years are given below.

SRI VENKATESHWARA GOVERNMENT ARTS & SCIENCE COLLEGE, PALEM							
DEPARTMENT OF PHYSICS							
STUDENT ENROLLMENT							
Course	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	TOTAL
B.Sc. (MPC) T/M	20	5	1	0	0	0	26
B.Sc(MPC) E/M	0	0	1	3	5	4	13
B.Sc (MPCs) E/M	22	11	10	10	15	19	87
TOTAL	42	16	12	13	20	23	126

Below Bar chart represents student enrollment for last six academic years 2016-17 to 2021-22.



- Graph depicts that good percentage of enrollment in the year 2016-17.
- Admitted students used to go to engineering courses EAMCET counseling which would be conducted after the close of admission process of Degree courses.
- Another reason is that some students who get admission in residential degree colleges also go out from our college.

STUDENTS IN DIFFERENT SPECIFIC PROGRAMS IN 2021-22

I. Physics with Mathematics and Computer Science combination (EM).

B.Sc. Physical Sciences CBCS: MPCS		
S. No.	Year	Number of Students
1	I	14
2	II	8
3	III	5

II. Physics with Mathematics and Chemistry combination (EM).

B.Sc. Physical Sciences CBCS: MPC		
S. No.	Year	Number of Students
1	I	3
2	II	6
3	III	1

There are totally 37 students with Physics course.

DEPARTMENT FACULTY WORKLOAD PARTICULARS PER WEEK

Workload per week = 58/2 = 29 hours.

Workload for either even or odd semester = 29x15 = 435 Hours

Program B.Sc.	Paper	Theory	Hours	Practical Batches	Practical Hours	Total
1st Year	I	4	1	2	3	4+3=7
	II	4	1	2	3	4+3=7
2nd Year	III	4	1	2	3	4+3=7
	SEC I,II	2+2=4	1	-	-	4
	IV	4	1	2	3	4+3=7
	SEC III,IV	2+2=4	1	-	-	4
3rd Year	V	4	1	2	3	4+3=7
	GE	4	1	-	-	4
	VI	4	1	2	3	4+3=7
	PAPER IN LIEU OF P.W.	4	1	-	-	4

B. Sc. (MPC/MPCS) AY 2021-2022

TIME / DAY	SEM	10.00-10.55	10.55-11.50	11.50-12.45	12.45-1.15	1.15-2.10	2.10-3.05	3.05-4.00
MON	I/II			Theory	LUNCH			
	III/IV					Physics Practicals		
	V/VI	Theory						GE/ PAPER IN LIEU OF PROJECT
TUE	I/II					Physics Practicals		
	III/IV	Theory						
	V/VI			Theory				
WED	I/II			Theory				
	III/IV		Theory					
	V/VI							

TIME / DAY	SEM	10.00-10.55	10.55-11.50	11.50-12.45		1.15-2.10	2.10-3.05	3.05-4.00
THURS	I/II	Theory						
	III/IV							
	V/VI		GE/ PAPER IN LIEU OF PROJECT			Physics Practicals		
FRI	I/II						Theory	
	III/IV		Theory					
	V/VI	Theory						GE/ PAPER IN LIEU OF PROJECT
SAT	I/II							
	III/IV					Theory		
	V/VI	Theory					GE/ PAPER IN LIEU OF PROJECT	

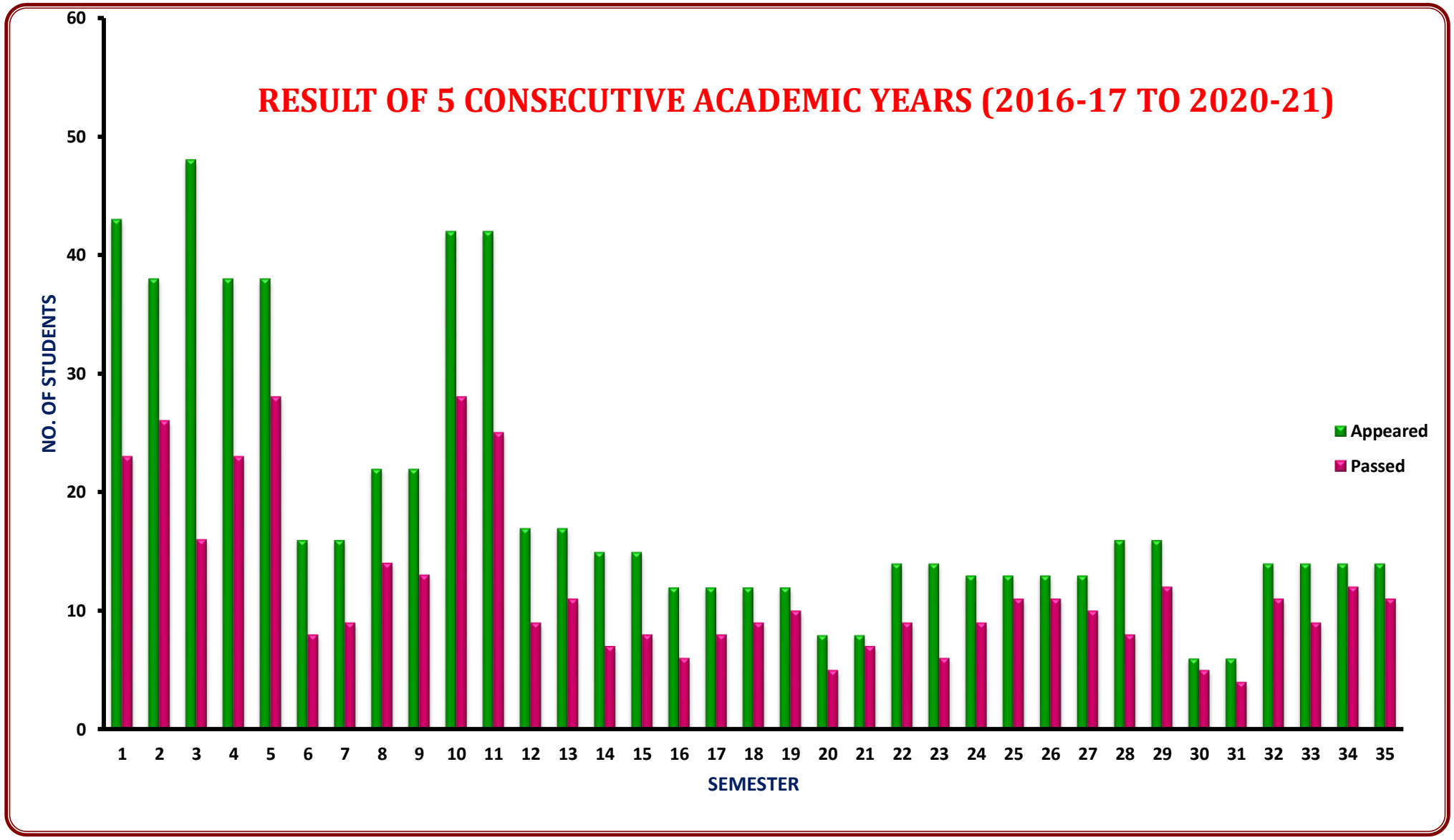
RESULT ANALYSIS

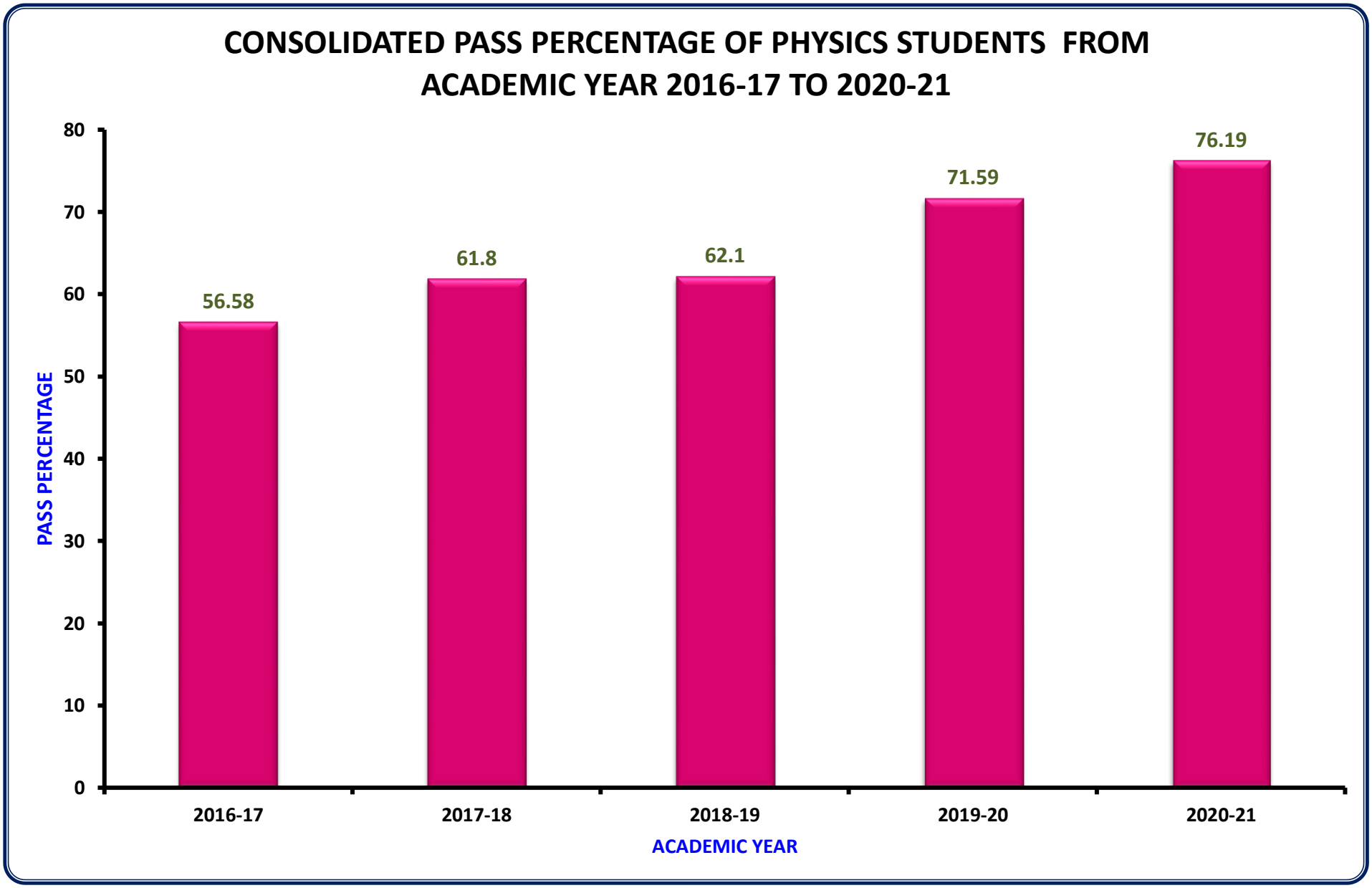
After publication of results by University, Department will prepare result analysis.

Year	SEMESTER	Appeared	Passed	Pass %	Academic Year %
2016-17	SEM I	43	23	53.48	56.58
	SEM II	38	26	68.42	
	2 Year	48	16	43.75	
	3 Year	38	23	60.52	
		38	28	73	
2017-18	SEM I	16	8	50	61.8
	SEM II	16	9	56.25	
	SEM III	22	14	63.63	
	SEM IV	22	13	59.09	
	3 Year	42	28	66.66	
		42	25	47.61	
2018-19	SEM I	17	9	41	62.10
	SEM II	17	11	64.7	
	SEM III	15	7	43.75	
	SEM IV	15	8	53.33	
	SEM-V	12	6	50	
		12	8	66.66	
	SEM-VI	12	9	75	
		12	10	83.33	
2019-20	SEM I	8	5	62.5	71.59
	SEM II	8	7	87.5	
	SEM III	14	9	64.28	
	SEM IV	14	6	42.85	

Year	SEMESTER	Appeared	Passed	Pass %	Academic Year %
	SEM-V	13	9	69.23	
		13	11	84.61	
	SEM - VI	13	11	84.61	
		13	10	76.92	
2020-21	SEM I	16	8	50	76.19
	SEM II	16	12	75	
	SEM III	6	5	83.33	
	SEM IV	6	4	66.66	
	SEM-V	14	11	78.57	
		14	9	64.28	
	SEM-VI	14	12	85.71	
		14	11	78.57	
2021-22	SEM I	17	14	82.35	waiting
	SEM II	17	waiting	_	
	SEM III	14	10	71.42	
	SEM IV	14	waiting	_	
	SEM V	6	5	83.33	
	SEM VI	6	waiting	_	

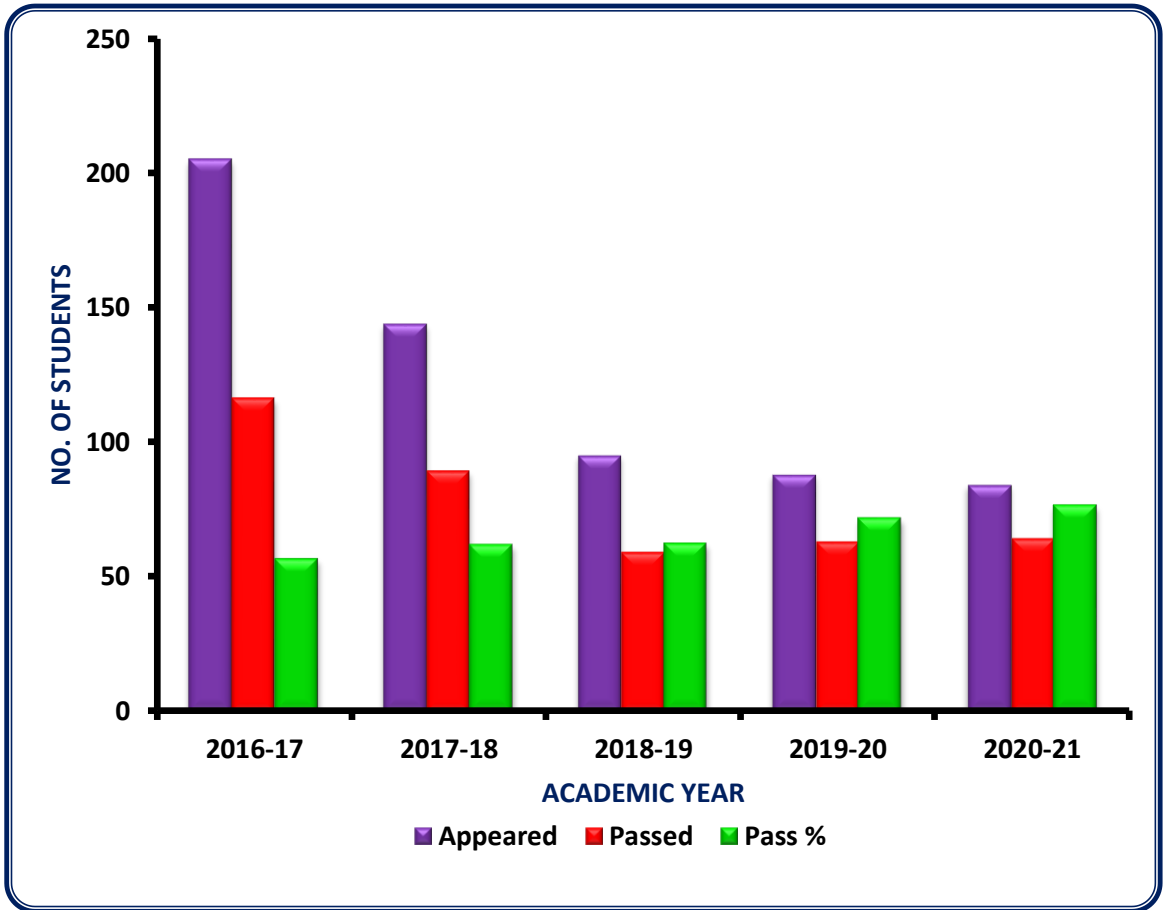
RESULT ANALYSIS OF 5 YEARS IN BAR GRAPH IS GIVEN BELOW




CONSOLIDATED PASS PERCENTAGE OF PHYSICS STUDENTS FROM ACADEMIC YEAR 2016-17 TO 2020-21
80
70
60
50
40
30
20
10
0
PASS PERCENTAGE
56.58
61.8
62.1
71.59
76.19
2016-17
2017-18
2018-19
2019-20
2020-21
ACADEMIC YEAR

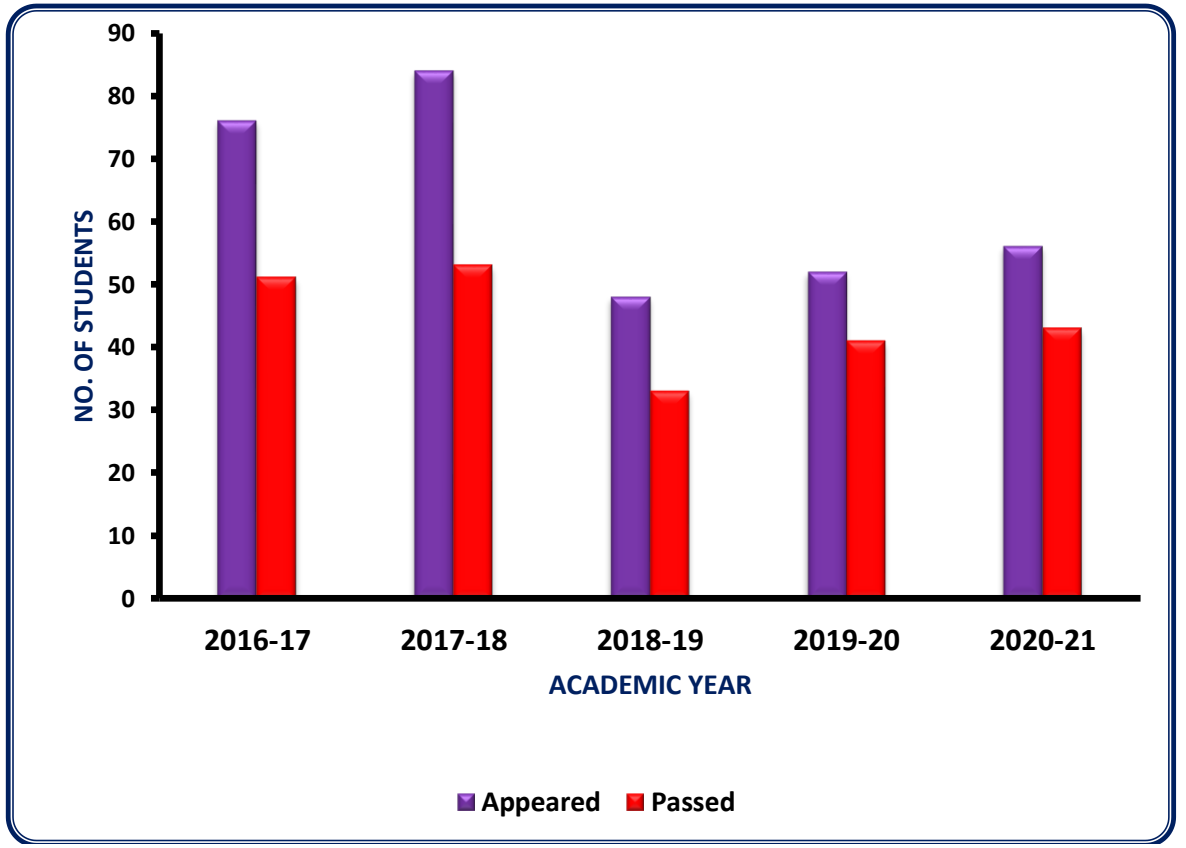
CONSOLIDATED RESULT ANALYSIS OF PHYSICS STUDENTS FROM AY 2016-17 TO 2020-21

Year	Appeared	Passed	Pass %
2016-17	205	116	56.58
2017-18	144	89	61.8
2018-19	95	59	62.1
2019-20	88	63	71.59
2020-21	84	64	76.19



RESULT ANALYSIS OF PHYSICS OUTGOING STUDENTS FROM AY 2016-17 TO 2020-21

Year	Appeared	Passed	Pass %
2016-17	76	51	67.1
2017-18	84	53	63.1
2018-19	48	33	68.8
2019-20	52	41	74.6
2020-21	56	43	76.8



COURSE OUTCOMES

SEMESTER I MECHANICS			
Course Code	Course Name & Category	Credits	COURSE OUTCOMES
BS105	Mechanics (DSC-2A)	4	• Students after completion of this course have deep understanding of Newton's Laws to solve the problems of simple configurations.
			• Understand the foundations of potential fields,central forces and Kepler's Laws.
			• Students will learn gradient of scalar field, divergence & curl of vector field, vector integrations and their conversions.
			• Students get good knowledge about laws of motion and variable mass system which mostly appears in physical world like motion of rocket.
			• Students study the rigid body dynamics and get comparative idea between linear & rotational motions. Students understand the working principle of Gyroscope which serves as 3D compass and get the idea of precision of equinoxes.
			• Students study the central forces which help to understand the motion of planets and satellites.
			• Understand the negative result of Michelson Morley experiment, Galilean and Lorentz transformation. Study relativistic effects such as length contraction and time dilation and understand twins paradox
SEMESTER II THERMAL PHYSICS			
BS205	Thermal Physics DSC-2B	4	• Learn the basic aspects of kinetic theory of gases, Maxwell-Boltzmann • Distribution law, equipartition of energies, mean free path of molecular collisions, viscosity, thermal conductivity and diffusion..
			• Students learn the laws of Thermodynamics & absolute scale of temperature and come to know entropy change in reversible & irreversible processes.
			• Student learn thermodynamic potentials, Maxwell's thermodynamic relations, real gas equations, Vander Waal equation of state, the Joule-Thomson effect.

			• Students learn the methods to produce low temperatures, principle of refrigeration, working principle of pressure cooker (Clausius-Clapeyron's equation).
			• Students know about black bodies and radiation laws of black body radiation. Students know why hot objects appear in different colours and about high temperature measuring devices & solar constant measuring devices.
			• Understand the concepts of micro state, macro state, ensemble, phase space, thermodynamic probability.
			• Understand and compare the three different distribution laws e.g. Maxwell-Boltzmann distribution, Bose-Einstein distribution and Fermi-Dirac distribution laws of particles and their derivation.
SEMESTER III **ELECTROMAGNETIC THEORY**			
BS306	Electromagnetic Theory (DSC-2C)	4	• Learn Coulomb's law, Gauss' law in electrostatics and apply it to systems of point charges as well as line, surface and volume distributions of charges.
			• Learn the concept of magnetic field B, magnetic flux, Biot-Savart's law, • Ampere laws and applications of these laws. Solve the problems of determination of B due to magnetic dipoles and electric currents.
			• Learn the concepts of Faraday's laws of induction, Lenz's law, self and mutual Induction, modification of Ampere's law, displacement current, Maxwell equations.
			• Learn Maxwell's equations in vacuum and dielectric medium, boundary conditions, plane wave equation & Poynting theorem.
			• Observe the voltage-current relations of passive components (like resistor, capacitor and inductor). Learn about electrical oscillatory circuits like LR, RC and LC circuits. Learn about resonant circuits(LCR series & parallel) and AC & DC motors.
			• Understand and verify The venin's, Norton's, Superposition and Maximum power transfer theorems by doing experiments. Determine a small resistance by Carey Foster's bridge. Determine the ratio of two capacitances by De Sauty's bridge. Determine self-inductance of a coil by Anderson's bridge using AC.
			• Know about Passive & Active Elements, Power sources and T to π Transformations. Understand and demonstrate Superposition theorem,
			• Thevenin's Theorem, Norton's theorem, Reciprocity Theorem and Maximum power transfer theorem.

SEMESTER IV **WAVES & OPTICS**			
BS406	WAVES & OPTICS DSC-2D	4	• Know the distinction between Fresnel and Fraunhoffer diffraction. Know the limit of resolution, resolving power of grating, dispersive of prism and measurement of λ of light using above devices.
			• Understand the concept of coherence, temporal & spatial coherence. Understand Interference by division of amplitude & division of wavefront.
			• Understand the measurement of wavelength of light using Biprism, Lloyd's mirror, Newton's rings, Wedge shaped film and Michelson Interferometer experiments. Know the reason for colors of thin films like soap bubbles.
			• Understand the measurement of diamete rof thin wires. • Students study the propagation of transverse waves in strings and energy transport.
			• Students study the longitudinal vibrations in bars in different vibrating modes and study the vibrations of tuning fork.
			• Determine the wavelength of light using diffraction grating and Newton's rings setup. Calculate the dispersive power of a prism and resolving power of grating & Telescope through experiments.
			• Determination of refractive index of liquid using Pulfrich refractometer and that of glass using Boys' method experiments. Determine the radius of curvature of a given convex lens by forming Newton's rings.
			• Determine the thickness of tiny wires using wedge method. • Understand different methods of Polarization, Optical rotation, Babinet's compensator,L aurent's half shade polarimeter. •
SEMESTER V **PAPER – V:: (A) MODERN PHYSICS (DSE-1: ELECTIVE)**			
BS505	Modern Physics DSE-2E	4	• Learn the basic properties of nucleus, nuclear models: Liquid Drop model , semi-empirical mass formula and binding energy, Nuclear Shell Model and magic numbers.
			• Know the Inadequacy of Bohr atomic model and modification of atomic models. Learn the spectroscopic terms and study doublet fine structure, Zeeman, Paschen-Back and Stark effects of spectral lines.
			• Know different types of spectra. Study the rotational, vibrational spectra of molecules and Raman effect.
			• Learn Schrodinger's Time dependent and independent wave equations. Learn about wave function and it's properties. Learn about operators, Eigen functions and Eigen values.

			• Understand the concepts of Photoelectric effect, Compton effect, de-Broglie matter waves and Heisenberg Uncertainty Principle.
			• Understand the difference between amorphous and crystalline materials. Understand the topics Unit Cell, miller Indices, types of lattices, reciprocal lattice, Brillouin Zones and diffraction of X-rays by Crystals. Know about types of bondings in crystals and lattice energy of ionic crystals.
			• Determine the Planck's constant using Photo Cell. Determine the Energy gap of semi-conductor through experiments. Verify Photo electric effect with experiment.
			• Understand the stability of the nucleus, Law of radioactive decay; Mean life and half-life of nucleus; Alpha decay; Beta decay and Particle detectors.
SEMESTER V **COMPUTATIONAL PHYSICS (DSE-1: Elective)**			
BS505	**Computational Physics** **DSE-2E**	**4**	Programming in C Students able to understand Flow charts, algorithms, Integer and floating-point arithmetic, precision, variable types, arithmetic statements, input and output statements, control statements, executable and non-executable statements, arrays, Repetitive and logical structures, Subroutines and functions, operation with files, operating systems, Creation of executable programs.
			Numerical methods of Analysis Students are able to solve Solution of algebraic and transcendental equation, Newton Ramphan method, Solution of simultaneous linear equations. Matrix inversion method, Interpolation, Newton and Lagrange formulas, Numerical differentiation. Numerical integration, Trapezoidal, Simpson and Gaussian quadrature methods, Least square curve fitting, Straight line and Polynomial fits.
			Numerical solution of ordinary differential equations Students are able to solve Euler's and Rungekutta methods, simulation. Generation of uniformly distributed random integers, statistical tests of randomness. Monte-Carlo evaluation of integrals and error analysis, Non-uniform probability distributions, Importance sampling, Rejection method.
			Computational methods Students are able to derive Metropolis algorithm, Molecular diffusion and Brownian motions, Random walk problems and their Monte Carlo simulation. Finite element and Finite difference methods. Boundary value and initial value problems, density functional methods.

SEMESTER VI PAPER – VI :: (A) ELECTRONICS (DSE-2: ELECTIVE)			
BS605	Electronics DSE-2F	4	• Students are able to understand the working principle of Bipolar Junction Transistor -CB,CE and CC configurations, R-C coupled amplifier circuit, Concepts of Oscillators and phase shift oscillator circuit.
			• Students are able to study about different special purpose electronic devices like photo diode, solar cell, opto couplers, Shockley diode, UJT, SCR and FET.
			• Students are able to describe and demonstrate the circuits of OR, AND, NOT, NOR, NAND and EX-OR gates. • Understand and verify De Morgan's Laws by doing experiments.
			• Students are able to understand Binary, Decimal and Hexadecimal number systems. Convert numbers from one system to another.
			• Students are able to draw the curves of V-I characteristics of p-n junction diode, Zener diode and transistor. Students determine the frequency of RC phase shift oscillator and study the frequency response of RC phase shift oscillator by doing experiments.
			• Students are able to understand band theory of solids, intrinsic semiconductors, extrinsic semi-conductors (p-type & n-type), p-n junction diode, rectifier circuit, Zener diode and voltage regulator circuit.
SEMESTER VI Paper – VI:: (B) APPLIED OPTICS (DSE-2: ELECTIVE)			
BS605	Applied Optics DSE-2F	4	• Students are able to learn Principles of LASER principles, working and types of LASER.
			• Students are able to Classify LASER Systems- Gas, Liquid and Solid Lasers such as He-Ne and Argon Lasers, their energy level schemes- Ruby Laser and YAG laser, GA-As Laser and their applications in various fields.
			• Students are able to understand basic principle of Holography- Recording of amplitude, phase, and concept of wave front and classification of holograms.
			• Students are able to understand Thin lens as phase transformation-thickness function-various types of lenses- Fourier transforming properties of lenses.
			• Students are able to understand Non-Linear Optics: harmonic generation- phase matching condition. Optical mixing- parametric generation of Light- Self focusing of light.
			• Students are able to optical Fibers, types and their structures. Step index and graded index fibers. Single mode and multi-mode fibers. Material dispersion, wave guide dispersion, inter modes distortion and pulse broadening.

Skill Enhancement Course- I FUNDAMENTALS OF NANO TECHNOLOGY			
BS301	Applied Optics SEC-1	4	Study comparatively the length scales in physics, 1D, 2D, 3D nano structures and their consequences.
			know synthesis techniques of nano materials like chemical vapor deposition method, thermal decomposition, ball milling, e-beam evaporation, pulsed laser deposition, MBE growth of quantum dots.
			know characterization techniques like X-Ray Diffraction, Scanning electron microscopy, Travelling electron microscopy, Scanning tunneling microscopy, atomic force microscopy.
			know about coulombic interactions and dielectric constant of nano structures, quasi particles and excitons and get comparative idea about the optical properties of hetero structures
			get idea about carrier transport in nano structures, blockade effect, tunneling & hoping conductivity.
			know the applications of nano structures, CNT based transistor, quantum dots hetero structure lasers, optical switching and optical data storage, magneticdots-magnetic data storage, micro electromechanical systems(MEMS), nano electromechanics, all systems (NEMS).

CURRICULAR AND CO-CURRICULAR ACTIVITIES

Department of physics encourages students to participate in co-curricular activities viz., quiz, elocution, debating, essay writing, assignments, student seminars, group discussions, experimental learning, study projects, science days celebrations field trips, extension lectures besides curriculum.

I. QUIZ:

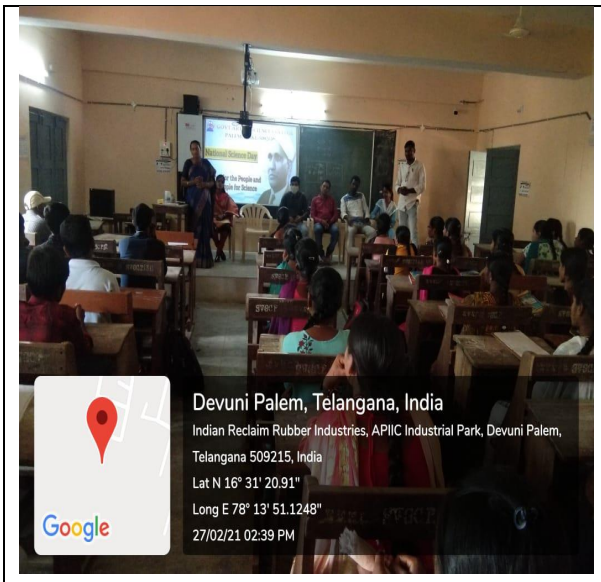
Department of Physics organizes online and offline quizzes for students.

OBJECTIVES:

- It increases thinking ability
- It increases response speed
- It increases listening skills
- It creates competitive attitude in students
- It increases knowledge


Welcome


DEPARTMENT OF PHYSICS
2020-21
Quiz Competition



II. STUDENT SEMINARS:

Department of Physics organizes student seminars. In these seminars students are allowed to deliver a topic chosen by them. They have to work on the topic thoroughly; this enables them to increase their content knowledgeon the topic through self paced learning. This platform helps the students to improve their communication and dais presentation skills. It also create new classroom environment for both the student listeners and teachers.

OBJECTIVES:

- Increases public speaking skills
- Decreases inferiority complex
- Builds up self-confidence in students.
- Deep understanding of the topic.
- Improves communication skills.

STUDENT SEMINARS


Nigeria
Google
Devuni Palem, Telangana, India
Indian Reclaim Rubber Industries, APIIC Industrial Park, Devuni Palem, Telangana 509215, India
Lat N 16° 31' 28.9452"
Long E 78° 13' 46.6896"
27/02/21 10:46 AM


Google
Devuni Palem, Telangana, India
College Street, Devuni Palem, Devuni Palem, Telangana 509215, India
Lat N 16° 31' 10.0092"
Long E 78° 13' 56.1468"
17/02/21 03:23 PM


Google
Devuni Palem, Telangana, India
College Street, Devuni Palem, Devuni Palem, Telangana 509215, India
Lat N 16° 31' 10.0092"
Long E 78° 13' 56.1468"
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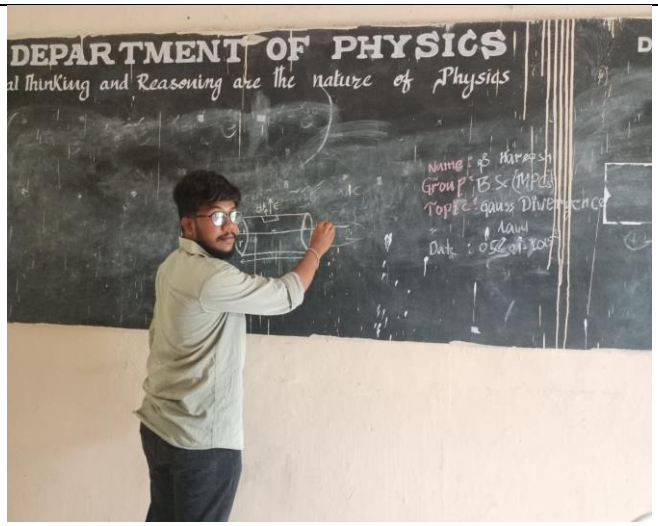
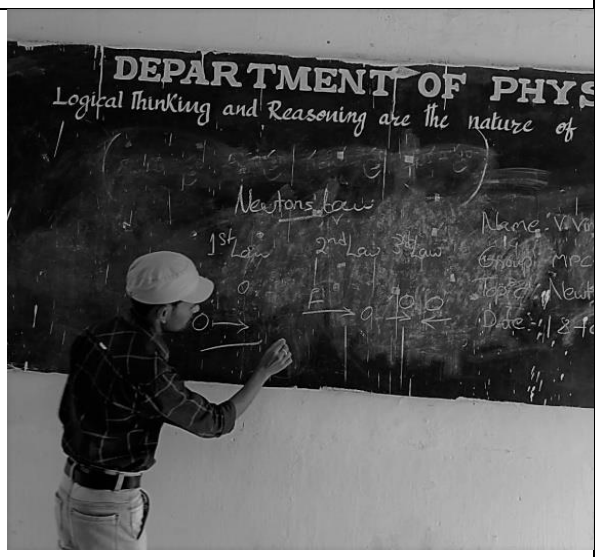
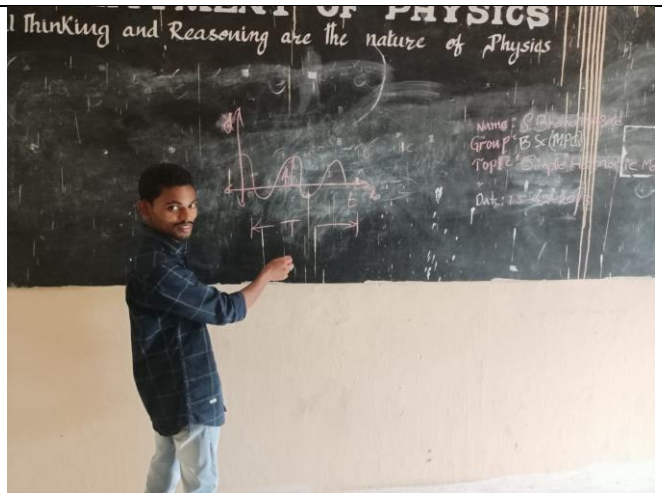

DEPARTMENT OF PHYSICS
Logical ThinKing and Reasoning are the nature of Physics


DEPARTMENT OF PHYS
Logical ThinKing and Reasoning are the nature of
Newtons laws
1st Law
2nd Law
3rd Law



III. PG ENTRANCE COACHING:

Department of Physics is guiding students to pursue post graduation in physics. Students from this college applied for various national and state level entrance examinations and common entrance set. This department is provided 30 hours online free coaching to the students appearing for post graduation entrance in physics. Faculty from other two colleges is also involved in the coaching.

OBJECTIVES OF THE PROGRAM:

Geographically this college is located in rural area and the students studying in this college are socially and economically weaker sections of the society. Most of the students studying B.Sc. Physical Sciences stream are interested to pursue post graduation in Physics. To guide and prepare the students about entrance examinations, Department of Physics & Career Guidance Cell organized a 30 hours (3 hours a day) free coaching to the student aspirants to join in Post Graduation course of Physics.

BRIEF DESCRIPTION & SCHEDULE OF THE PROGRAM:

Department of Physics & Career Guidance Cell organized a free coaching to the student aspirants to join in Post Graduation course of Physics. In view of the pandemic corona time, coaching to the students is given in online mode through zoom app. To give extensive and qualitative coaching to the students in

short time, other lecturers voluntarily participated in the program and given extensive coaching to the students.

IV. EXPERIMENTAL LEARNING:

This department has two well established laboratories and one dark room with latest equipment and we strive committed to engage the students in laboratory and equip them with practical knowledge. Every student is demonstrated practical once every week as per the time table. It is the regular activity that would be undergone by every student. It increases practical knowledge. Student understands the concepts easily. Students also learn equipment handling skills.

V. FIELD TRIPS:

Field trip is an essential part of experiential learning process. Students will show lot of enthusiasm in participating in field trip. By looking at the objects and listening to the experts directly they will learn the things quickly. This type of field trips will enhance their thinking skills in the subject. Hence department is encouraging students to participate in study tours.

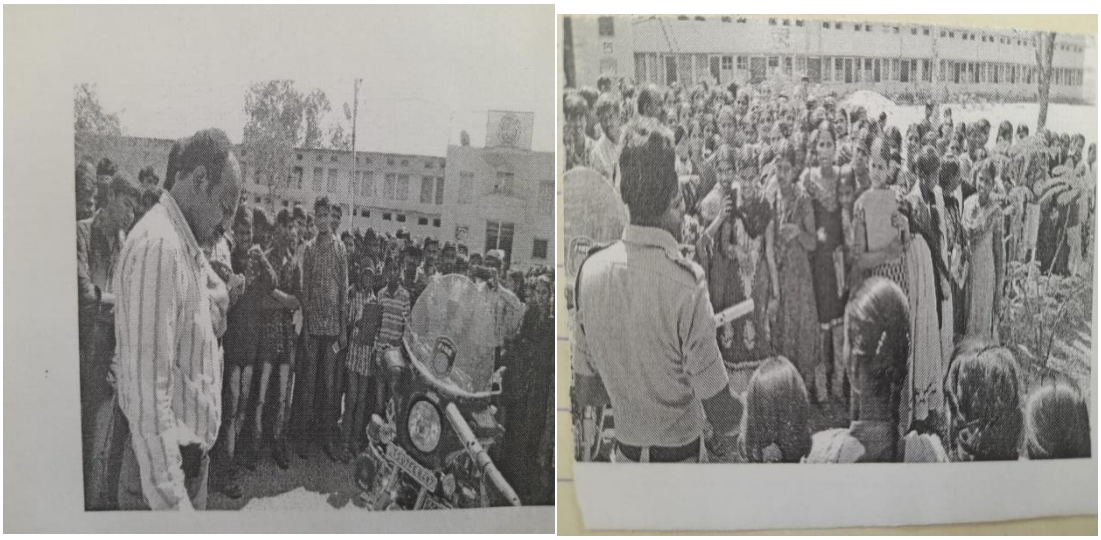
OBJECTIVES:

- Gives practical knowledge to the students.
- Critical understanding of industrial functioning.
- Easy understand of the physics principles involved.
- Provides new kind of learning to students.
- Increases the integrity of learning.
- Real time problem solving experience.

This department has organized different field visits to the students in and around Palem town. Following are the details of the field visits

ACADEMIC YEAR 2016-17

Field trip to Fire Station at Nagarkurnool



Students from Department of Physics of the college visited Fire Station, Nagarkurnool on 15.02.2017 to understand the physics principles involved in the process of Fire Station. This trip is also useful to the students doing a study project on Impact of Fire Station. This field trip is organized by Department of Physics under the supervision of the Faculty Dr. Srinivasulu, Assistant Professor of Physics. 25 students participated in the program.

ACADEMIC YEAR 2017-18

Field visit to Solar power plant at Kalwakurthy

Students from Department of Physics of the college visited Solar power plant at Kalwakurthy on 17.09.2017 to understand the physics principles involved in the process of solar power extraction and the principles behind the operation of the machinery involved . Students are thoroughly observed various parts of the plant involved in the solar extraction. Students are aware about process of power extraction by utilizing sunrays. This field trip is organised by Department of Physics under the supervision of the Faculty Sri Shyam Sundar, Lecturer in Physics and 15 students participated in the program.

ACADEMIC YEAR 2019-20

Field trip to 33/11 kV Sub-Station, Nagarkurnool, on 03.03.2021

Students from Department of Physics of the college visited 33/11 kV sub-station at Nagrkurnool on 03.03.2020 to observe and know about functioning of the transformer. Students are aware about electromagnetism principle involved in the working of transformer. Students are actively involved in the trip and their doubts are cleared by interaction with the technician working at the sub-station. This field trip is organized by Department of Physics under the supervision of the Faculty Sri. D. Krishna Teja, Lecturer in Physics. 7 students participated in the program.

VI. EXTENSION ACTIVITIES:

Department invites resource persons from different areas. It creates awareness in emerging latest technologies. Students get familiarized with various career paths in the subject area.

This department has made Memorandum of Understanding (MoU) with nearby Government degree colleges for the development of academic cooperation and to provide quality of education. The MoU between two institutions stimulate and facilitate the development of collaborative work culture by inter exchange of facilities like infrastructure, faculty extension, combined activities, etc., and yields good academic outcome.

This department is also a part of MoUs, so far we have MoU with four Government Degree colleges in the Nagarkurnool, Jadcherla, Wanaparthy, Mahabubnagar . Details are tabulated as below.

S. No.	Name of the Organization made MoU & Year	Theme of MoU	Benefit to the students
1	Government Science Degree College, Nagarkurnool	For the development of academic cooperation in quality education	• Faculty Extension • Joint study projects • Infrastructure • Student exchange
2	Government Arts Degree College, Nagarkurnool	For the development of academic cooperation in quality education	• Faculty Extension • Joint study projects • Infrastructure • Student exchange
3	Government Women's Degree College, Wanaparthy	For the development of academic cooperation in quality education	• Faculty Extension • Joint study projects • Infrastructure • Student exchange
4	M.V.S. Government Arts & Science College, Mahabubnagar	For the development of academic cooperation in quality education	• Faculty Extension • Joint study projects • Infrastructure • Student exchange

5	Dr. B.R.R. Govt. Degree College, Jadcherla	For the development of academic cooperation in quality education	• Faculty Extension • Joint study projects • Infrastructure • Student exchange

EXTENSION LECTURES BY FACULTY FROM OTHER INSTITUTIONS

Table showing details of the faculty visited the department and taken Guest lectures to the students.

EXTENSION LECTURES BY FACULTY AT OTHER INSTITUTIONS

This department allows the faculty to give extension guest lectures at other colleges. Mrs. S. Vidya Rani, Assistant Professor of Physics delivered extension lecture at M.V.S. Govt. Degree College in 2018-19, 2019-20.

Pictures of the faculty visiting other colleges and taking lectures to the students.

VII. ASSIGNMENTS:

Faculty give assignments to students mostly on subject topics and sometimes on current issues related to science. These assignments are aimed at improving the skills of reading, writing and problem-solving. However, marks obtained in these assignments are added in assessment of internal examinations.

For every semester assignments are given on the topics of important questions, innovative ideas, current affair topics related to physics, important

days related to physics, scientists' contributions.

VIII. INTERNAL EXAMINATIONS:

In every semester student learning capabilities are tested periodically through internal examinations.

Every student need to attend two internal examinations and their performance is averaged and uploaded to Palamuru University website. Evaluated answer scripts are kept in the department.

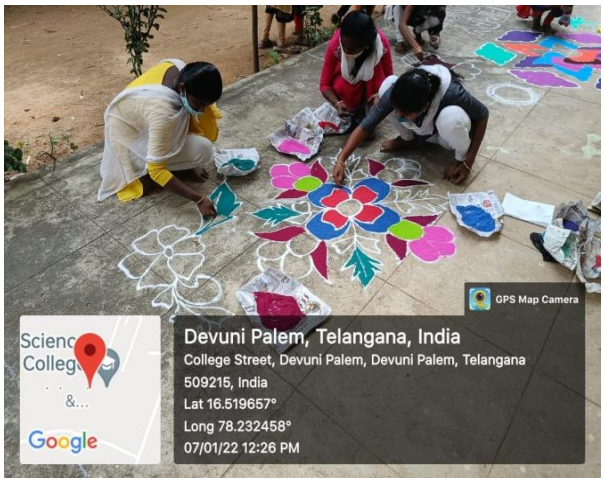
The performance of the student in internal Examination is added in the final result of each semester with 20% weightage.

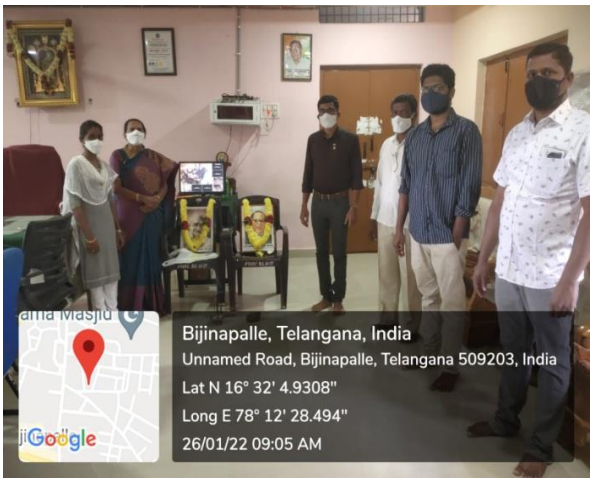
Attending internal examinations is mandatory and treated the subject result as fail if student not appeared Internal Examinations.

Question papers are prepared internally by the faculty with guidelines framed by the Palamuru University time to time.

IX. IMPORTANT EVENTS/ DAYS CELEBRATIONS:

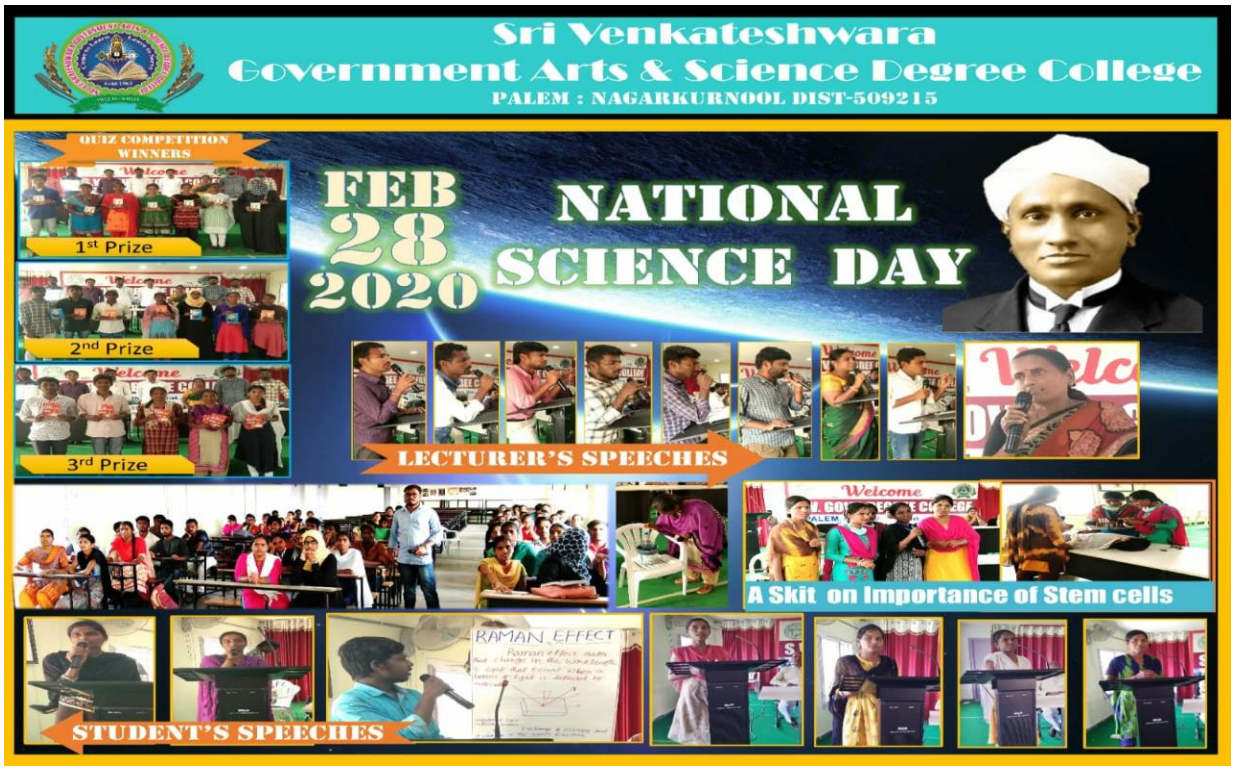
Department of Physics organizes and participates in important events and celebrations like National festivals, Commemoration Days, Days of important social causes etc. like Yoga Day, Innovation Day, AIDS Day, International Women's Day, Science Day, Mathematics Day etc.





Observing important events and Celebrations

SCIENCE DAY CELEBRATIONS



Department of Physics organized science day in the college for the years 2020, 2021 and 2022. The faculty from the department actively participated in the academic relevant activities such as Science Day, Birth anniversaries of famous scientists etc.

X. FACULTY LEARNING & DEVELOPMENT:

Faculty undergoes faculty development programs to upgrade their skills. Faculty updates their knowledge through online platforms (SWAYAM, NPTEL) as well as Teaching Learning Centres of different Universities.

Faculty from this department are participating in various career development and knowledge enriched programs, Orientation Courses (OC), Annual Refresher Courses (RC), Faculty Improvement Programs (FIP), Faculty Development Programs (FDP), seminars, webinars, workshops etc.

CERTIFICATES AWARDED


Teaching Learning Centre, Ramanujan College
University of Delhi
This is to certify that
MRS. S. VIDYA RANI, Assistant Professor of Physics
of
SRI VENKATESHWARA GOVERNMENT ARTS & SCIENCE COLLEGE, PALEM, NAGARKURNOOL DIST, TELANGANA
has successfully completed ONLINE TWO - WEEK REFRESHER COURSE IN
"PHYSICS"
from 10- 24 April, 2022
and obtained A+.


Teaching Learning Centre, Ramanujan College
University of Delhi
This is to certify that
MRS. S.VIDYA RANI, Assistant Professor of Physics
"Managing Online Classes & Co- creating MOOCS 14.0"
from 07 - 21 May, 2022 and obtained
Grade A+.


Sl.No. : 5046/2021
IAE
Transformation Through NAAC Accreditation Process
A National Level Workshop for Higher Educational Institutions
CERTIFICATE
OF PARTICIPATION
This is to certify that Prof./Dr./Mr./Ms. S VIDYA RANI, Assistant Professor, PHYSICS, S.V. Government Arts & Science College, Palem has participated in the two day online workshop "Transformation Through NAAC Accreditation Process, A National Level Workshop for Higher Educational Institutions" held on 21st & 22nd June 2021 conducted by "Institute for Academic Excellence, Hyderabad" in collaboration with "Collegiate Education & Technical Education Department, Telangana State.
DIRECTOR
COMMISSIONER


MANIPAL UNIVERSITY JAIPUR
(University under Section 2(f) of the UGC Act)
A+ NAAC 3.28 SCORE
60 YEARS LASER INNOVATION
Webinar Series on Research and Career in Photonics - 2020
Certificate of Participation
This is to certify that Ms./Mr./Dr./Prof. MRS. S. VIDYA RANI of MVS GOVT. DEGREE COLLEGE(A), MAHABUBNAGAR attended the webinar on Quantum Cryptography: The Next Generation for Secure Transmission of Sensitive Information held on 15.06.2020. This certificate is generated based on his / her feedback.
Dr. Manish Tiwari
Coordinator, RCP - 2020
SPIE. STUDENT CHAPTER
OSA Manipal University Jaipur Student Chapter
ECE Department


Certificate of Completion

This is to certify that

S. Vidya Rani

from M. V. S. Govt. Degree and P. G College, Mahabubnagar

successfully completed the

The BodhiTree and SAFE Tools for Effective Online Teaching: A Hands-On Workshop

on 20 June 2020

He/She has attended the interaction session and successfully completed both pre and post workshop online activities, involving 3 days of video lectures and hands-on work.

This training was organised by the Teaching Learning Centre (ICT) at IIT Bombay,

funded by the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT), MHRD, Govt. of India

Prof. Kannan Moudgalya
Project Coordinator, Teaching Learning Centre (ICT), PMMMNMTT, IIT Bombay

Prof. Bhaskaran Raman
Course Instructor, Department of Comp Sci and Engg., IIT Bombay

Prof. Kaneenika Chelvoju
Course Instructor, Department of Comp Sci and Engg., IIT Bombay

Prof. Varsha Apte
Course Instructor, Department of Comp Sci and Engg., IIT Bombay


भारतीय सुदूर संवेदन संस्थान/ INDIAN INSTITUTE OF REMOTE SENSING

भारतीय अंतरिक्ष अनुसंधान संगठन/ INDIAN SPACE RESEARCH ORGANISATION

अंतरिक्ष विभाग, भारत सरकार/ DEPARTMENT OF SPACE, GOVERNMENT OF INDIA

ONLINE DISTANCE LEARNING CERTIFICATE

सहभागिता प्रमाणपत्र/CERTIFICATE OF PARTICIPATION

This is to certify that MRS. S. VIDYA RANI has been awarded this certificate on having completed the online course on "Satellite Photogrammetry and its Application". The course was conducted by Indian Institute of Remote Sensing (IIRS), during 29-06-2020 to 03-07-2020 . The participant has attended the course at IIRS outreach network centre, Osmania University, Hyderabad, Telangana.

Date:

Dehradun

Coordinator, University/ Institution

Director, IIRS, Dehradun


Science Academies'

Science Leadership Workshop

India's first Science Leadership Program

Certificate of Participation

This is to certify that Mrs. S. Vidya Rani, Asst. Prof. of Physics has successfully participated in the Science Leadership Workshop organized by the Central University of Punjab, Bathinda, India from June 22 to June 28, 2020. The program included 26 talks by academy fellows and leading science leaders and covered topics such as mentoring, collective leadership, problem-solving, conflict-resolution, time management, women in science, active listening, cross-cultural communication, lab culture and so on.

This certificate is digitally generated on June 30 2020 and requires no signature.
Valid only if name mentioned in this certificate is listed in the curated list of delegates available at: https://bit.ly/SLW-Delegate

Course Co-ordinator: Dr. Felix Soni


Certificate for Completion of Scilab Training

This is to certify that VIDYA RANI has successfully completed Scilab test organized at S K Somaiya College of Arts & Science by sunita yadav with course material provided by the Spoken Tutorial Project, IIT Bombay.

Passing an online exam, conducted remotely from IIT Bombay, is a pre-requisite for completing this training. Marielle Assumption at S K Somaiya College of Arts & Science instigated this examination. This training is offered by the Spoken Tutorial Project, IIT Bombay, funded by National Mission on Education through ICT, MHRD, Govt., of India.

May 1st 2020

Prof. Kannan M Moudgalya
IIT Bombay


7-Day Faculty Development Programme on

Institutional Benchmarking of Best Practices

Participation Certificate


M. S. P. Mandal's

Vinayakrao Patil Mahavidyalaya, Vaijapur,

Dist. Aurangabad (MS)

NAAC re-accredited 'A' Grade (III Cycle) with 3.33 CGPA

One Week Online Faculty Development Programme

CERTIFICATE

This is to certify that

MRS. S. VIDYA RANI

From

MVS GOVT. DEGREE COLLEGE (A), MAHABUBNAGAR

has successfully completed One Week Faculty Development Programme on "MODERN TEACHING, EVALUATION AND RESEARCH METHODS" Under UGC Scheme, STRIDE Component – I (Research Capacity Building) organized by Vinayakrao Patil Mahavidyalaya, Vaijapur, Dist. Aurangabad, From June 02 to June 07, 2020.

The grade secured in the qualifying examination - A

Dr. S. D. Pardeshi
Coordinator
STRIDE Component – I

Dr. U. V. Panchal
Principal

UGC-HRDC & RUSA
OSMANIA UNIVERSITY, HYDERABAD
Opp. Law College, Osmania University, Hyderabad 500007, Telangana

E-Certificate of Participation

This is to certify that

S. Vidya Rani, Assistant Professor, Physics
MVS Govt. Degree College (A), Mahabubnagar, Palamuru University

has successfully completed One Week Online FIP Short-term Course on

ICT Tools in Higher Education

Sponsored by UGC-HRDC-RUSA organized from 27-08-2020 to 02-09-2020.

PROF B SRINAGESH
DIRECTOR

REGISTRAR/
VICE CHANCELLOR

Swami Ramanand Teerth Marathwada University,Nanded
"Dnyanteerth", Vishnupuri, Nanded-431606, Maharashtra
One Week National Online Faculty Development Program
ICT Tools for Effective Teaching Learning
11-16 May 2020
E-Certificate

This is to certify that S. VIDYA RANI, MVS GOVT. DEGREE COLLEGE(A), MAHABUBNAGAR has successfully completed One Week National Online Faculty Development Program on ICT Tools for Effective Teaching Learning, from 11th to 16th May 2020, organized by School of Mathematical Sciences, Swami Ramanand Teerth Marathwada University, Nanded.

Dr. Rupali Jain — Co-Coordinator, Assistant Professor, School of Math. Sci.
Dr. B. Surendranath Reddy — Coordinator, Assistant Professor, School of Math. Sci.
Dr. Dnyaneshwar Pawar — Convener, Professor & Director, School of Math. Sci.
Dr. Uttam Bhosle — Patron, Vice Chancellor, SRTM University, Nanded

Dr. MCR HRD INSTITUTE OF TELANGANA
డా. మర్రి చెన్నారెడ్డి మానవ వనరుల అభివృద్ధి సంస్థ, తెలంగాణ
Road No.25, Jubilee Hills, Hyderabad - 500033.
Centre for Sustainable Development Goals

Sl.No : 12465 Date : 23.07.2022

CERTIFICATE

This is to certify that Sri/Ms. S.Vidya Rani, Principal of CCE, SV GDC, Palem Department Nagarkurnool District has successfully completed the training programme Orientation on SDG – 4 Quality Education from 21.07.2022 to 23.07.2022

Dr.Kandukuri Usha Rani
Course Director / Course Coordinator

Divya Parmar, IFS
Director CSDG

Harpreet Singh, IAS
Director General

Duty performed with knowledge, Faith and Devotion becomes really effective

Mrs. S. Vidya Rani, Assistant Professor of Physics also

1. **Enrolled for different MOOCs courses on SWAYAM portal to update and enhance teaching skills.**

THE MENTOR - MENTEE SYSTEM (BEST PRACTICE-I):

The Mentor-Mentee system has been specially opted for quality improvement among students. In this system mentors closely observe the slow learners and guide them and advanced learners are given timely suggestions, project works, assignments to improve their skills.

Each faculty member of Physics department is appointed as mentor to one class to supervise student learning evaluation and act as a linkage between students and college administration.

The evaluation of the attained POs, PSOs, and COs of the college is closely monitored by students' activities is done by the class-wise mentors.

The Mentor-Mentee system and Grievance Cell of the college has taken the responsibility to mentoring and counsel the students in a needy situation.

In each academic year, Principal will allot mentor for each group. Mentor conducts election Class Representatives (CR-I, CR-II), Mentor takes responsibility of whole group. Mentor coordinates the whole class in different activities through CRs. Mentor will guide the students in academic aspects like Examinations, Fee payment, Feedback on marks obtained, maintaining decorum and advise them on issues on Scholarships. Mentors are mentoring students through Career Guidance and Counselling. Mentor-Mentee details for the academic year 2021-22 are given below.

S. No.	Academic Year	Name of the mentor	Group	Class representatives
1	2021-22	S. Vidya Rani	II MPC & MPCS	A. Thrinath
2	2020-21	S. Vidya Rani	II IMPC & MPCS	P. Naresh
3	2019-20	D. Krishna Teja	II MPC & MPCS	Maina
4	2018-19	Prathap Reddy	II MPC & MPCS	R. Ramakrishna
5	2017-18	Shaym Sundar	II MPC & MPCS	A. Kalyan Kumar
6	2016-17	Shaym Sundar	I MPC & MPCS	L. Dileep

CRITERION III

RESEARCH, INNOVATIONS AND EXTENSION

Mrs. S. Vidya Rani, Assistant Professor of physics now pursuing Ph.D. from Osmania University, Hyderabad as part-time scholar. Her area of research is "Studies on the performance of aberrated optical imaging system with variable apodisation".

To develop research attitude in the students, Department is guiding students to do projects. Students are motivated to do research in the form of quality research work.

A team of five or six students come together and identify a problem in a particular area of interest and they will do project on that problem.

Advanced learners are encouraged to take up this task. From the academic year 2021-22, University has incorporated projects in syllabus.

As per the instruction of Palamuru University, every student can choose optional paper or a project in any one of the optional subjects. Project works can be allotted to group of students and there can be a maximum of 4 students in a group.

EXTENSION ACTIVITY

Mrs. S. Vidya Rani of this department is appointed as the expert nominated by the Vice-Chancellor in the BoS of MVS Govt. Arts & Science College for the academic year 2021-22.

MVS GOVT. ARTS AND SCIENCE COLLEGE (A),
MAHABUBNAGAR.

COMPOSITION OF THE BOARD OF STUDIES 2021-2022

Name of the Department: DEPARTMENT OF PHYSICS

S.No	Member/ Chairman	Nature	Name	Signature
1	Honorable Chairman	Expert in the subject from outside nominated by Academic Council	Prof. M.Jayapal Reddy Dept. of Physics, Palamuru University Mahabubnagar.	
2	Chairman	Head of the Department	Dr.G.Paul Devadanam Asst. Professor Dept. of Physics MVS Govt Arts & Science College-MBNR	
3	Members	Faculty of Each Specialization	2. Sri. K.Gopal Asst. Professor Dept. of Physics 3. Smt. K.Sunitha Asst. Professor Dept. of Physics	
4	Member	Expert nominated by the Vice Chancellor from a panel of six Recommended by the College Principal	4. Mrs. S. Vidya Rani Asst. Professor Dept. of Physics SV Govt Degree College-PALEM.	
5	Member	Representative from the Industry/ Corporate Sector/ allied area relating to placement	5. Mrs. Surayya Jabeen Asst. Professor Dept. of physics NTR GDC (women), Mahabubnagar.	
6	Member	Post Graduate meritorious alumnus nominated by the Principal	6. K. Manjula Asst. Professor Dept. of Physics DR BRR GOVT DEGREE COLLEGE, Jadcherla.	

Functions: 1. Prepare syllabi for various courses keeping in view the objectives of the college, interest of the stake holders and national requirement for consideration and approval of the academic council.

2. Suggest methodologies for innovative teaching and evaluation techniques.

3. Suggest panel of names to the academic council for appointment of examiners.

4. Coordinate research, teaching, extension and other activities in the department/college.

5 .SEC-I, II ,III & IV and GE-I & GE-II is formed for the above said academic year.

MVS GOVT. ARTS AND SCIENCE COLLEGE (A),
MAHABUBNAGAR.

COMPOSITION OF THE BOARD OF STUDIES 2020-2021

Name of the Department: DEPARTMENT OF PHYSICS

S.No	Member/ Chairman	Nature	Name	Signature
1	Honorable Chairman	Expert in the subject from outside nominated by Academic Council	Prof. Karunasagar Dept. of Physics, Osmania University Hyderabad.	
2	Chairman	Head of the Department	1. Mrs. S. Vidya Rani Asst. Professor Dept. of Physics MVS Govt Arts & Science College-MBNR	
3	Members	Faculty of Each Specialization	2. Sri. K.Gopal Asst. Professor Dept. of Physics 3. Smt. K.Sunitha Asst. Professor Dept. of Physics	
4	Member	Expert nominated by the Vice Chancellor from a panel of six Recommended by the College Principal	4. Dr. G.Paul Devadanam Asst. Professor Dept. of Physics GDC-Palvoncha.	
5	Member	Representative from the Industry/ Corporate Sector/ allied area relating to placement	5. Mrs. Surayya Jabeen Asst. Professor Dept. of physics NTR GDC (women), Mahabubnagar.	
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STUDENT STUDY PROJECTS:

Student Project means a study in which a student investigator (individually or as part of a group) gathers or analyzes information in a systematic manner, primarily for pedagogical purposes.

Collaboration: Relationships formed during collaboration is a huge part of PBL. Not only do students learn how to work better in groups—providing their own input, listening to others, and resolving conflicts when they arise—they build positive relationships with teachers, which reinforces how great learning is. Students also form relationships with community members when working on projects, gaining insight for careers and beyond.

Problem Solving: Students learn how to solve problems that are important to them, including real community issues, more effectively—even learning from failure and possibly starting over.

Creativity: Students apply creative thinking skills to innovate new product designs and possibilities for projects.

In-Depth Understanding: Students build on their research skills and deepen their learning of applied content beyond facts or memorization.

Self-Confidence: Students find their voice and learn to take pride in their work, boosting their agency and purpose.

Critical Thinking: Students learn to look at problems with a critical thinking lens, asking questions and coming up with possible solutions for their project.

Perseverance: When working on a project, students learn to manage obstacles more effectively, often learning from failure and making adjustments until they're satisfied with their work.

Project Management: Students learn how to manage projects and assignments more efficiently.

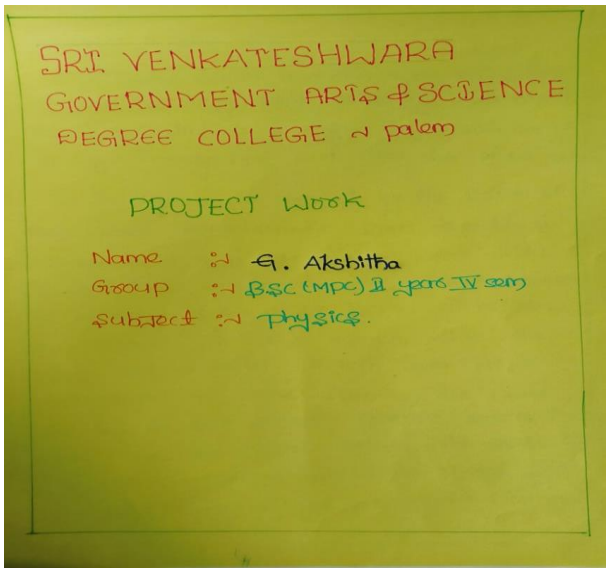
Curiosity: Students get to explore their curiosities, ask questions and form a new love for learning.

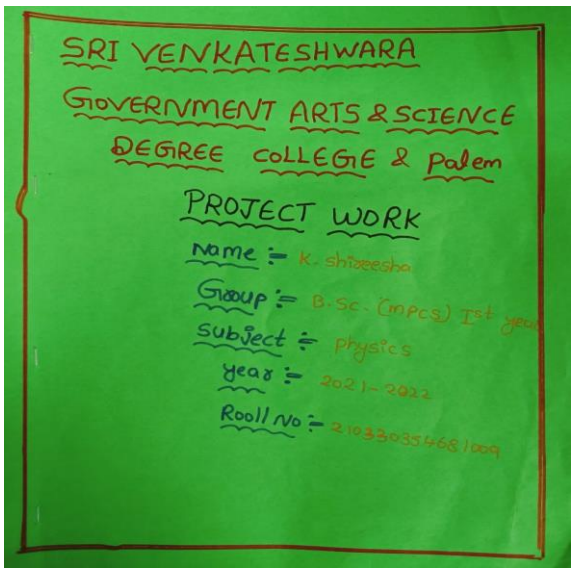
Empowerment: Students take ownership over their projects, reflecting on and celebrating their progress and accomplishments.

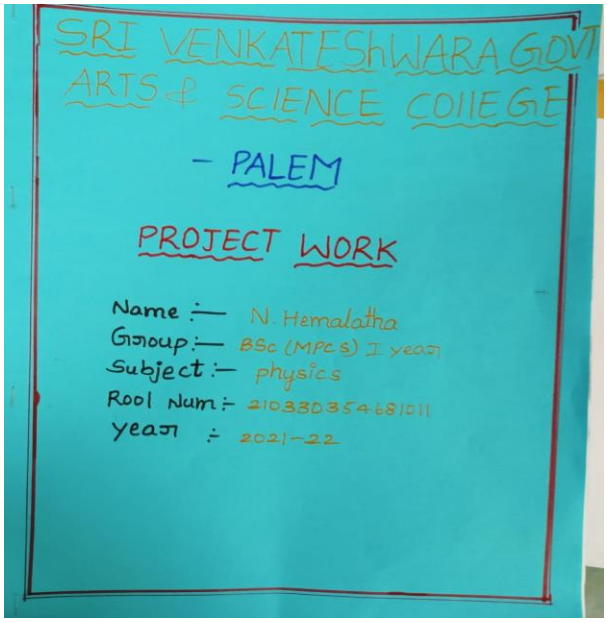
LIST OF STUDENT STUDY PROJECTS IN THE AY 2021-22

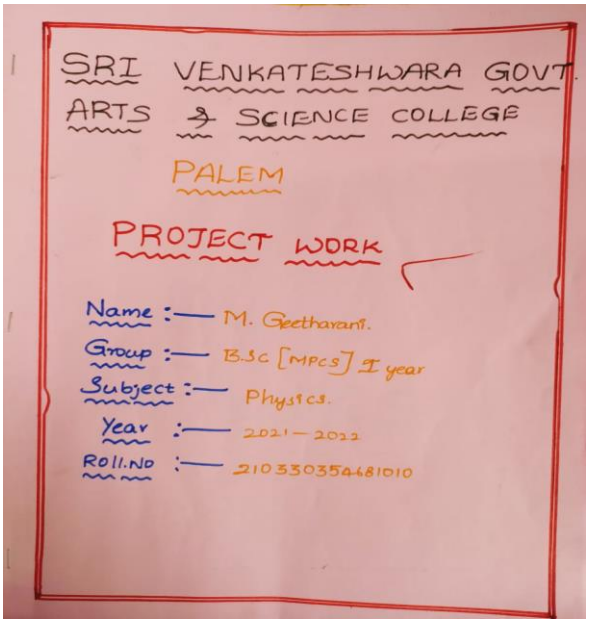
S.NO.	STUDENT NAME	TOPIC
1	G. Akshitha	Fresnel's Biprism
2	A. Thrinath	
3	V. Manasa	Newton Rings
4	Reshma Begum	

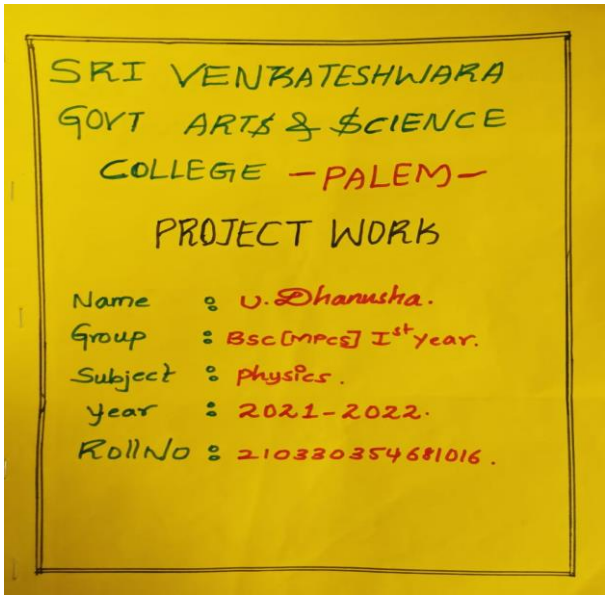
S.NO.	STUDENT NAME	TOPIC
1	U. Dhanusha	Quantum theory of radiation
2	M. Geetha Rani	Joule Thomson effect using porous –plug experiment
3	S. Hemalatha	
4	K. Shireesha	Carnot Engine theorem
5	N. Hemalatha	

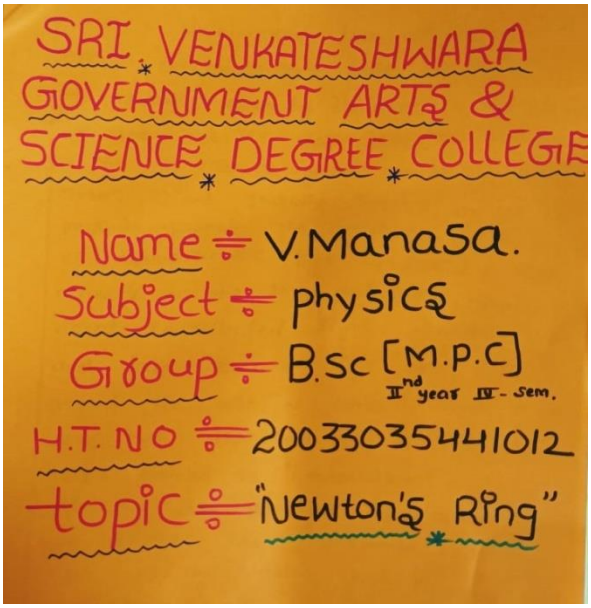

SRI VENKATESHWARA
GOVERNMENT ARTS & SCIENCE
DEGREE COLLEGE :: palem
PROJECT Work
Name :: G. Akshitha
Group :: B.Sc (MPC) II year IV sem
Subject :: Physics.


SRI VENKATESHWARA
GOVERNMENT ARTS & SCIENCE
DEGREE COLLEGE & Palem
PROJECT WORK
Name :- K. shireesha
Group :- B.Sc. (MPCS) Ist year
Subject :- Physics
year :- 2021-2022
Rooll No :- 2103303546810009


SRI VENKATESHWARA GOVT
ARTS & SCIENCE COLLEGE
- PALEM
PROJECT WORK
Name :- N. Hemalatha
Group :- BSc (MPCS) I year
Subject :- physics
Rool Num :- 2103303546810111
Year :- 2021-22


SRI VENKATESHWARA GOVT.
ARTS & SCIENCE COLLEGE
PALEM
PROJECT WORK
Name :- M. Geetharani.
Group :- B.Sc [MPCS] I year
Subject :- Physics.
Year :- 2021-2022
Roll.No :- 2103303546810101


SRI VENKATESHWARA
GOVT ARTS & SCIENCE
COLLEGE -PALEM-
PROJECT WORK
Name : U. Dhanusha.
Group : BSc[MPCS] Ist year.
Subject : Physics.
year : 2021-2022.
RollNo : 2103303546810116.


SRI VENKATESHWARA
GOVERNMENT ARTS &
SCIENCE DEGREE COLLEGE
Name :- V.Manasa.
Subject :- physics
Group :- B.Sc [M.P.C]
IInd year IV- sem.
H.T.NO :- 2003035441012
topic :- "Newton's Ring"

CRITERION IV

INFRASTRUCTURE & LEARNING RESOURCES

INFRASTRUCTURE:

The department is well established with one staff room and two labs with sufficient equipment's. Department purchases the required equipment as per the syllabus & norms of Palamuru University and availability of funds provided by the State Government and University Grants Commission. Following equipment is available in the department.

Details of infrastructure in Physics department

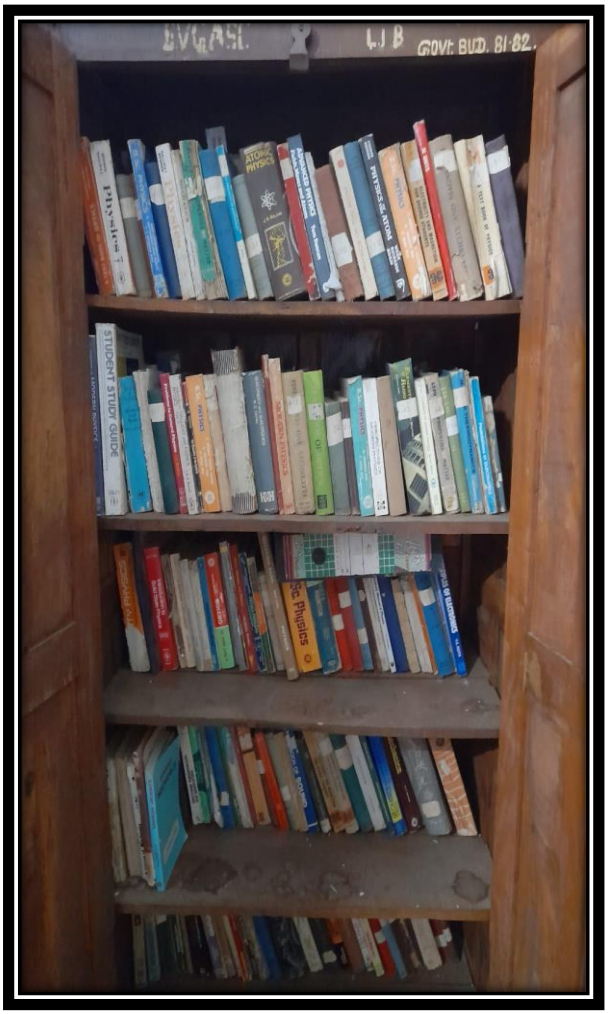
S. No.	Name of the item	Quantity
1	Staff room	1
2	Mechanics & Electronics Lab	1
3	PHOTON (Optics & Thermal Physics) Lab	1
4	Computer	1
5	Broad Band Connection	100 MBPS
6	Store room	1
7	White Marker Board	1
8	Working tables for Practicals	15
9	Power Supply with power sockets	35
10	Almirahs	6
11	Lab Stools	20
12	Racks for keeping materials	Almirahs and racks
13	Notice Board	1
14	Dark Room	1
15	Projector	1

LIST OF LABORATORY EQUIPMENT:

S. No.	Name of Apparatus	Quantity	S. No.	Name of Apparatus	Quantity
1	Compound Pendulum	5	26	Bridge Rectifier	8
2	Diffraction Grating	5	27	Zener diode	10
3	Fly Wheel	4	28	Junction diode	7
4	IC regulated Power Supply	6	29	Samsung TV	1
5	Mercury vapor lamp	6	30	Viscosity Apparatus	2
6	Multimeter	6	31	Melde's experiment	4
7	Optical Benches	6	32	Table Galvanometers	5
8	Physical Balance (Sensitive Balance)	2	33	Energy gap of semiconductors	4
9	Sets of pendulum bobs	4	34	Microscope	6
10	Prisms	8	35	Function generators	5
11	Polarimeter	3	36	Printer with Scanner	1
12	Pulfrich refractometer	5	37	CRO	3
13	Screw gauge	8	38	Newton rings (2 lens set up)	8
14	Stop Clock	20	39	RC Phase shift oscillator	4
15	Sonometer	5	40	e/m apparatus	6
16	Spectrometers	7	41	Photo Cell	2
17	Step down transformer	7	42	Plank Constant apparatus	4
18	Spot Reflecting Galvano meter	4	43	Hall Effect	2
19	Tuning Fork sets	5	44	Lees disc apparatus	3
20	Maximum Power Transfer Theorem	4	45	Thevenin's & Norton's Theorem	4
21	Transistor Characteristics	10	46	Super Position Theorem	4
22	Vernier Calipers	8	47	Telescope	5
23	FET characteristics	6	48	Anderson's Bridge	2
24	Logic Gates	8	49	Desauty's bridge set-up	2
25	De Morgan theorems	6	50	Daniel cell apparatus	7

DEPARTMENT LIBRARY:

- Central library is being used by the students to take the books. In addition to that, we have Department Library through which guided , reference text book reading is made possible
- Department library has 50 textbooks and reference books.
- Our college is registered in N-LIST portal through which students can access journals also.



CENTRAL LIBRARY & DIGITAL RESOURCES:

Following Digital sources are available to the students in the college along with vast collection books, Journals.

1. Digital Library
2. Web OPAC with SOUL 2.0 software
3. N-List Subscription

LECTURE HALLS WITH ICT FACILITIES:

1. Digital board
2. Projector
3. Computer Science lab
4. Computer labs-2
5. TSKC lab
6. Virtual Classroom
1. UGC NET centre with wi-fi connectivity of 200 MBPS speed.

CRITERION V

STUDENT SUPPORT AND PROGRESSION

Faculty sometimes financially supports the poor students who approach them. Department conducts Set Your Goal, Career Guidance and Counselling sessions. Faculty provides study material to students.

Department of Physics is encouraging students to pursue higher education in physics. To make this into reality, department is organizing PG entrance coaching classes for enrolled students.

Department conducts remedial classes to failed students. Department supports the students in celebrating freshers' and farewell parties which develops communication, leadership and personality development skills in students.

Academic Year	Course of Higher Education	No. of Students
2020-21	M. Sc. Physics	1
	B.Ed. (Physical Science)	2
	Other PG	4
2019-20	B.Ed. (Physical Science)	1
2018-19	B.Ed. (Physical Science)	1
2017-18	M. Sc. Physics	2
	B.Ed. (Physical Science)	2
	Other PG	1
2016-17	B.Ed. (Physical Science)	4

STUDENT COUNCIL:

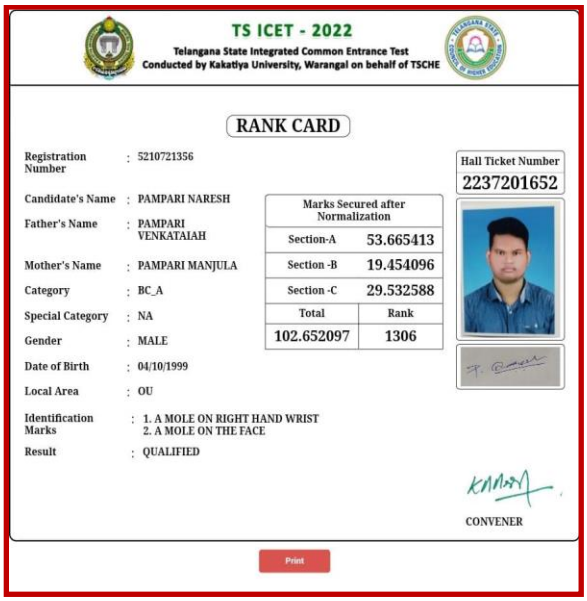
At the beginning of the academic year, a student council is formed to act between students and the management of the college. 3-4 students from this department are being nominated to the council every year.

SCHOLARSHIPS:

Every eligible student will get scholarship and tuition fee exemption in every academic year by the concerned welfare departments.

CAREER GUIDANCE & PLACEMENT CELL:

This department encourages and supports students to enroll in Career Guidance Cell and Placement cells of the college. Students further participate in all the activities like seminars, motivational classes, awareness programs, job melas organised by the concerned wings of the college.



TS ICET - 2022
Telangana State Integrated Common Entrance Test
Conducted by Kakatiya University, Warangal on behalf of TSCHE

RANK CARD

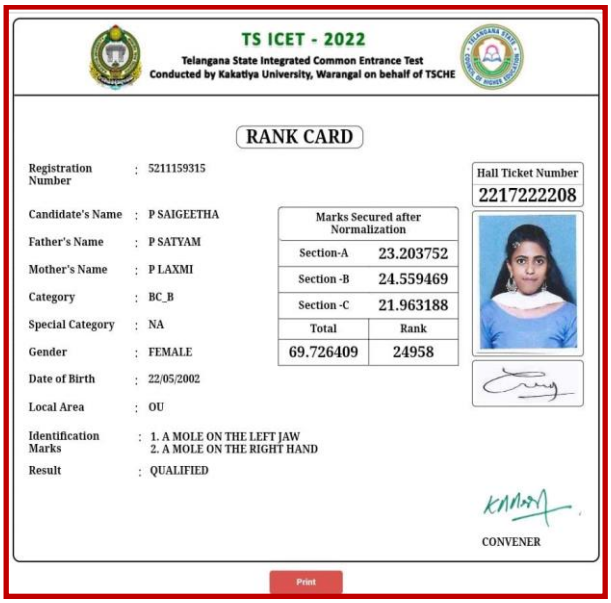
Registration Number	:	5210721356
Candidate's Name	:	PAMPARI NARESH
Father's Name	:	PAMPARI VENKATAIAH
Mother's Name	:	PAMPARI MANJULA
Category	:	BC_A
Special Category	:	NA
Gender	:	MALE
Date of Birth	:	04/10/1999
Local Area	:	OU
Identification Marks	:	1. A MOLE ON RIGHT HAND WRIST 2. A MOLE ON THE FACE
Result	:	QUALIFIED

Hall Ticket Number: 2237201652

Marks Secured after Normalization	
Section-A	53.665413
Section -B	19.454096
Section -C	29.532588
Total	Rank
102.652097	1306

CONVENER

Print



TS ICET - 2022
Telangana State Integrated Common Entrance Test
Conducted by Kakatiya University, Warangal on behalf of TSCHE

RANK CARD

Registration Number	:	5211159315
Candidate's Name	:	P SAIGEETHA
Father's Name	:	P SATYAM
Mother's Name	:	P LAXMI
Category	:	BC_B
Special Category	:	NA
Gender	:	FEMALE
Date of Birth	:	22/05/2002
Local Area	:	OU
Identification Marks	:	1. A MOLE ON THE LEFT JAW 2. A MOLE ON THE RIGHT HAND
Result	:	QUALIFIED

Hall Ticket Number: 2217222208

Marks Secured after Normalization	
Section-A	23.203752
Section -B	24.559469
Section -C	21.963188
Total	Rank
69.726409	24958

CONVENER

Print

In the Academic Year 2021-22, 4 students from Physics department took admission in ICICI ACADEMY FOR SKILLS and undergoing training in the following courses.

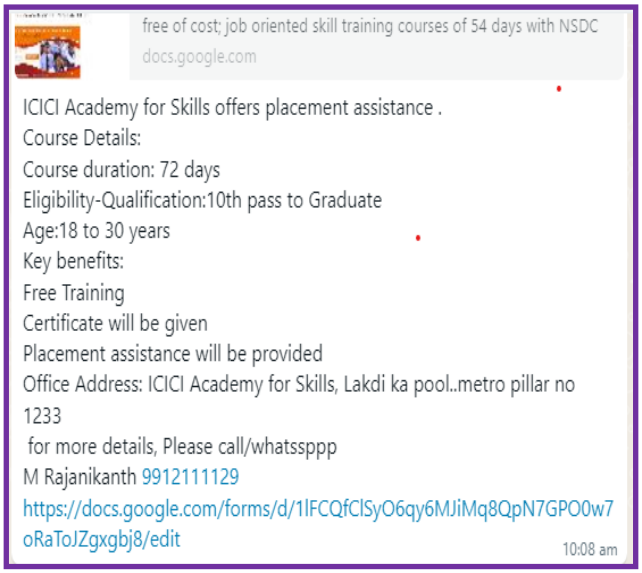
Courses offered:

1. Selling skills
2. Retail Sales
3. Office Administration

4. Refrigeration and AC Repair

5. Power & Application Engine

6. Preventive Maintenance



DISPLAY ON NOTICE BOARD

STUDENTS ENROLLED IN ICICI FOUNDATION FOR THE ACADEMIC YEAR 2021-22				
S. NO.	**STUDENT NAME**	**GROUP**	**HT. NO.**	**MOBILE NUMBER**
1	SAIGEEETHA	MPCS III YR	19033035468008	7396400905
2	MAHESH	MPCS I YR	210330354681015	9347430238
3	G. SRILATHA	MPCS I YR	210330354681007	9133284218
4	V. ANITHA	MPCS I YR	210330354681018	6304184573
5	C. ASHWINI	BZC I YR	210330354451005	9160328506
6	K. ANJALI	BZC I YR	210330354451015	9959301066
7	M. SWAPNA	BZC I YR	210330354451022	738661555
8	HASEENA BEGUM	BZC I YR	210330354451014	9550404705
9	BHANUSRI	BZCS I YR	210330354751001	9573164384
10	V. RAMAKRISHNA	BZCS I YR	210330354751005	9392424583

CRITERION VI

GOVERNANCE, LEADERSHIP AND MANAGEMENT

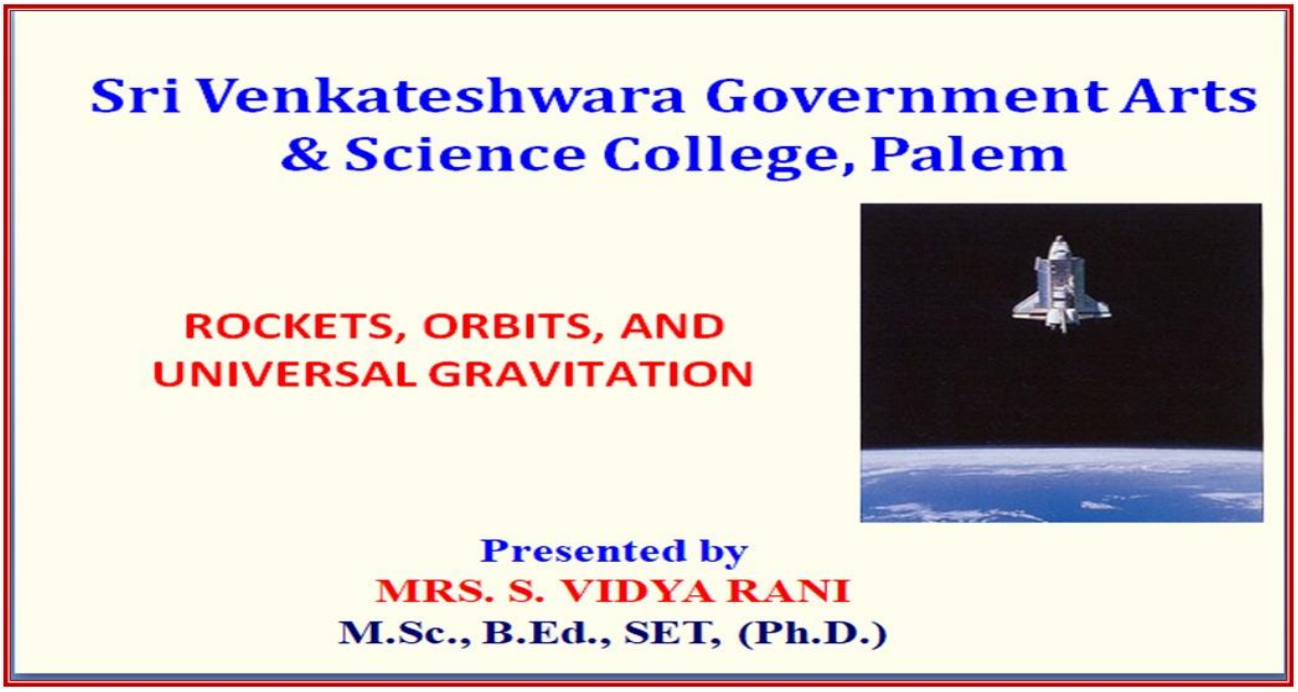
DEPARTMENT MEETINGS:

At the Institution level, faculty members meet periodically on convenient dates to discuss academic matters like distribution of the syllabus among the faculty, Course Outcomes, review of coverage of syllabus, Result Analysis and, National science day celebrations, ICT knowledge sharing.

This department is holding single faculty member and faculty organizes department meetings with the principal, academic coordinator along with IQAC coordinator periodically to discuss all the relevant curricular and extracurricular activities.

FACULTY FORUM:

Faculty from this department actively participated in Faculty Forum Classes. Mrs. S. Vidya Rani, Assistant Professor of Physics explained "Uses of Satellites" and "Rockets, Orbits and Gravitation" with PPT.



COORDINATOR/MEMBER OF VARIOUS COMMITTEES

Every faculty member is member of at least one committee. He/she does fulfill the work assigned by the coordinator of the committee.

Following table depicts responsibilities taken up by Department for the last 2 years.

Academic Year 2021-22:

S. No.	Name of the faculty	Position held
1	Mrs. S. Vidya Rani	Principal (FAC)

S. No.	Name of the faculty	Member in the Committee	Coordinator for the Committee
1	Mrs. S. Vidya Rani	CPDC	IQAC
		Discipline	NAAC
		Yuvatarangam	Admission
			Audio Visual
			Time Table
			Minority Cell
			Grievance & Redressal
			Anti Ragging

Academic Year 2020-21:

S. No.	Name of the faculty	Member in the Committee	Coordinator for the Committee
1	Mrs. S. Vidya Rani	CPDC	IQAC
		Discipline	NAAC
		Yuvatarangam	Admission
			Audio Visual
			Time Table
			Minority Cell
			Grievance & Redressal
			Anti Ragging

CRITERION VII

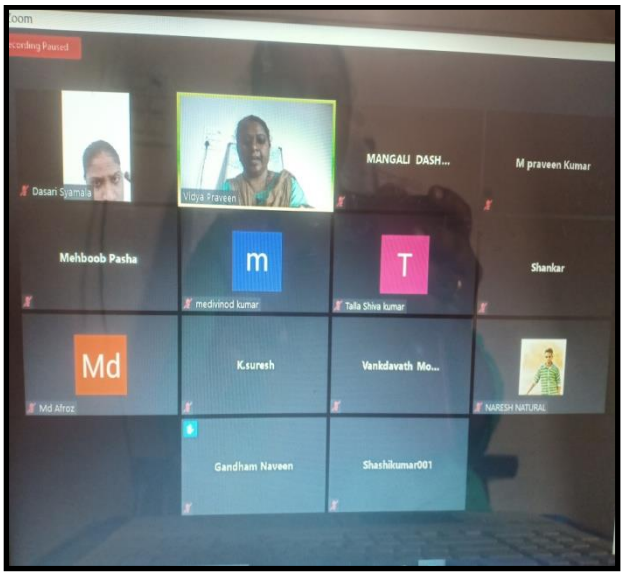
INSTITUTIONAL VALUES AND BEST PRACTICES

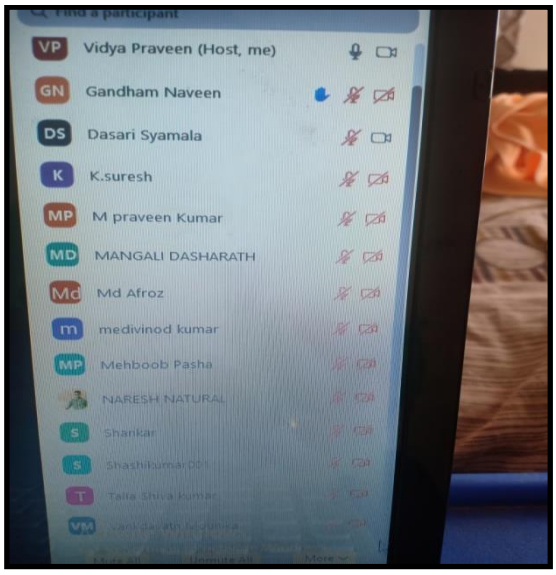
USE OF ICT TOOLS IN TEACHING:

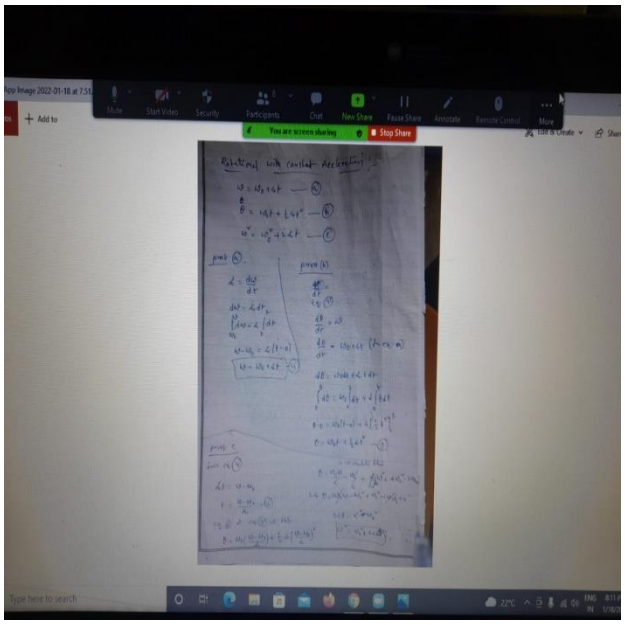
Department faculty has left no stone unturned in usage of ICT in teaching. Every member of the department is well trained in ICT tools. The crisis of COVID-19 has opened up new trends in teaching and learning process.

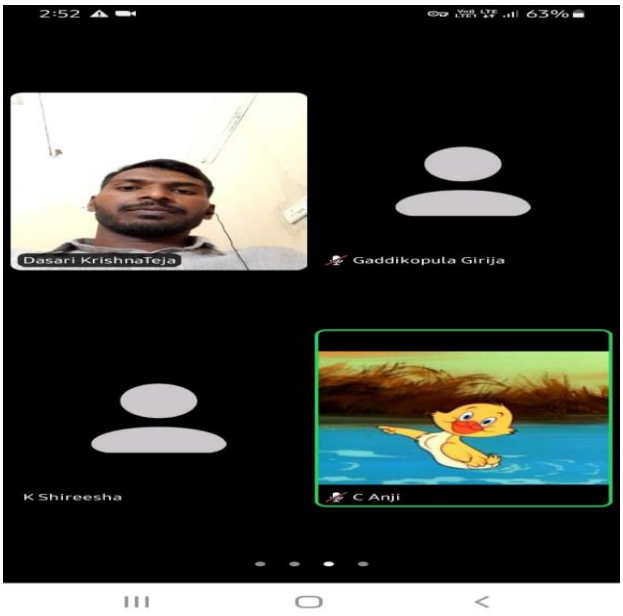
ONLINE CLASSES:

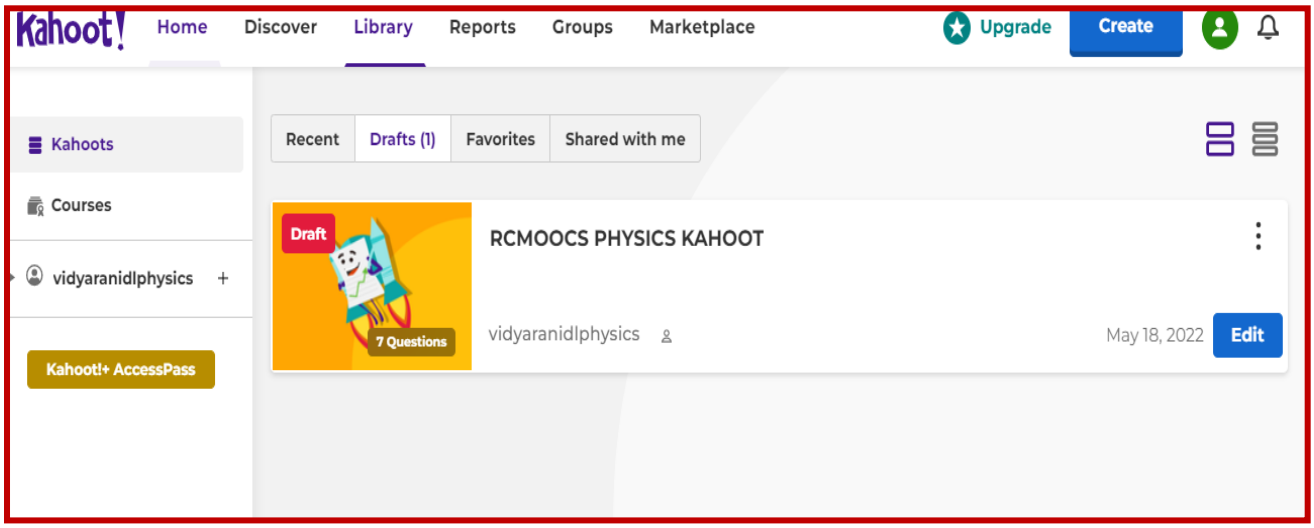
During Corona pandemic lockdowns teaching and learning are continued through online classes using ZOOM, GOOGLE MEET, GOOGLE CLASSROOM platforms and conducted online quiz, exams and assignments using EDMODO, EDPUZZLE, MICROSOFT FORMS, GOOGLE FORMS, KAHOOT etc. After the pandemic too, the classes are being taught in blended mode of teaching.

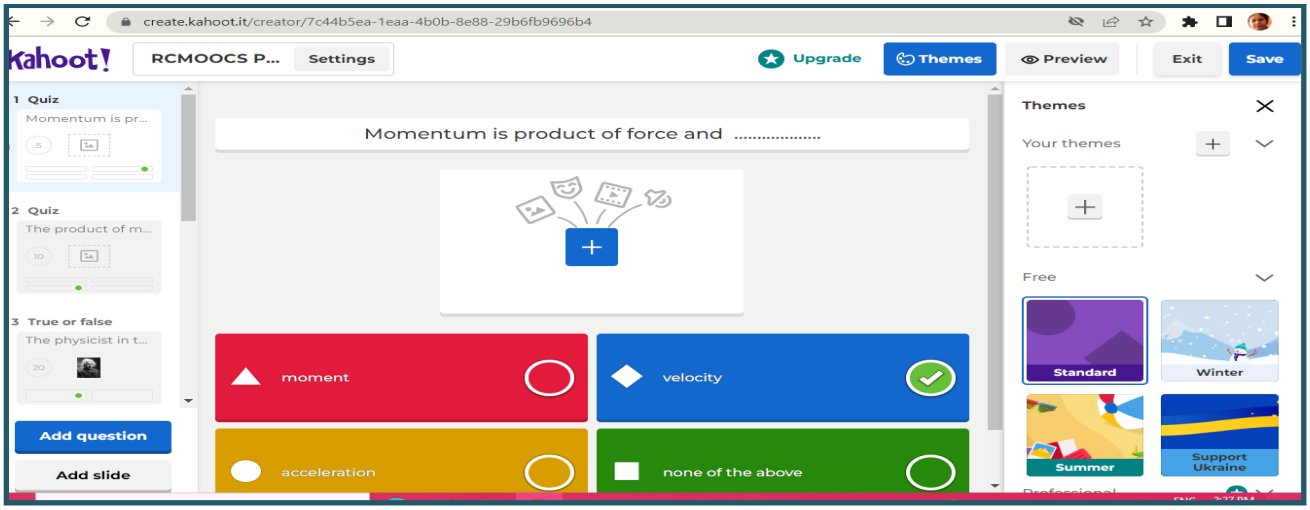


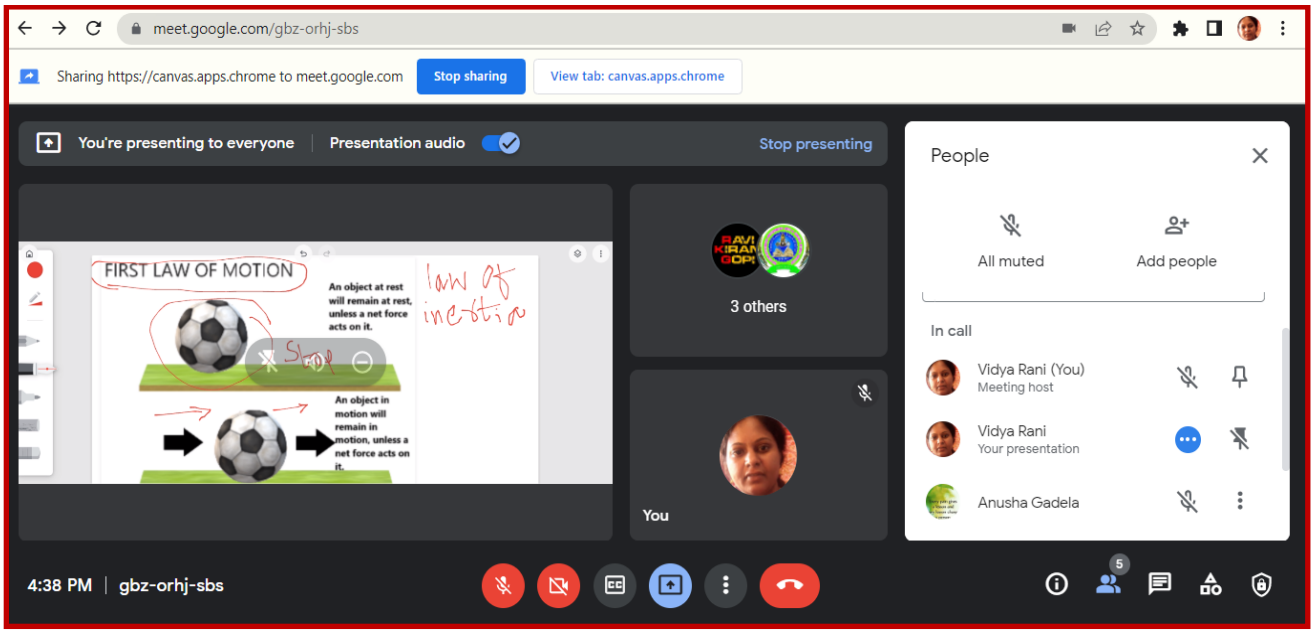


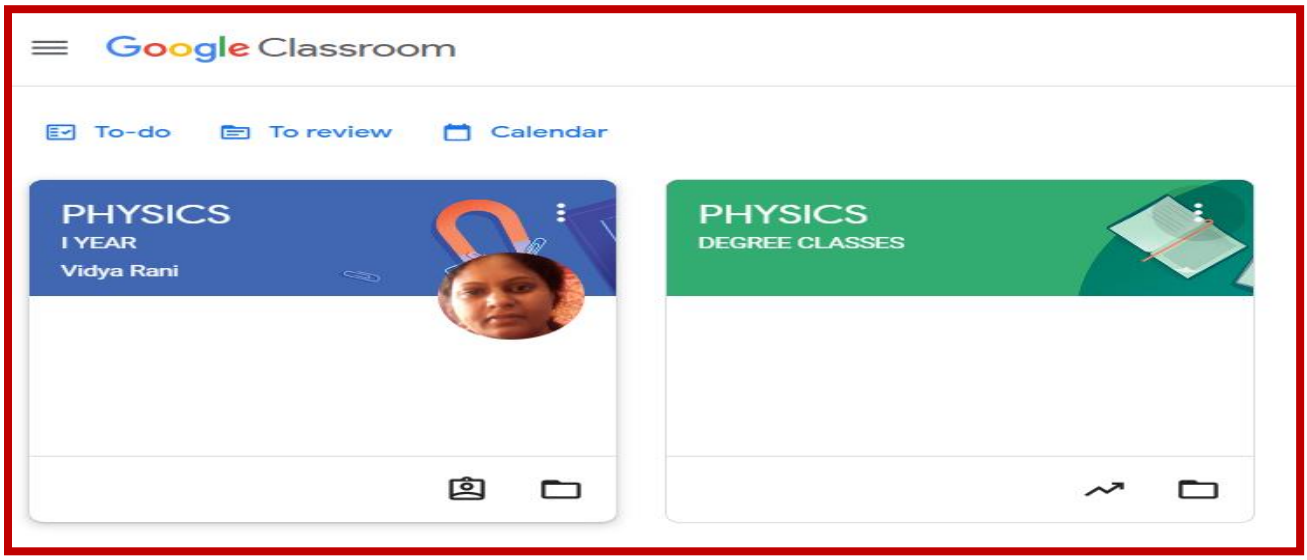


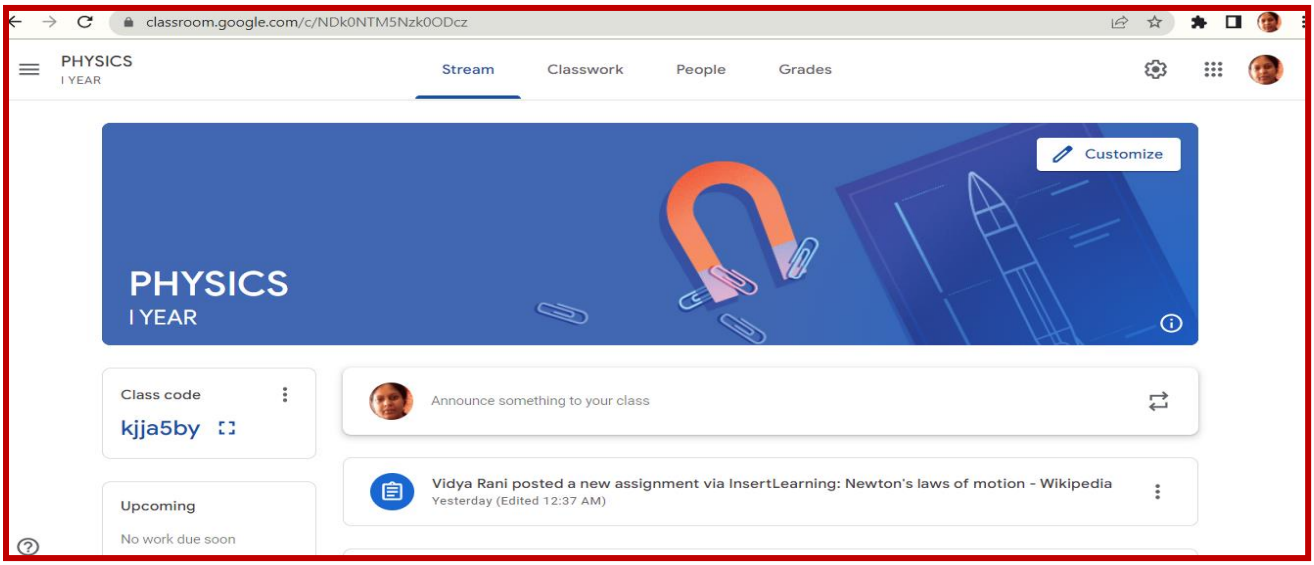

2:52
63%
Dasari KrishnaTeja
Gaddikopula Girija
K Shireesha
C Anji

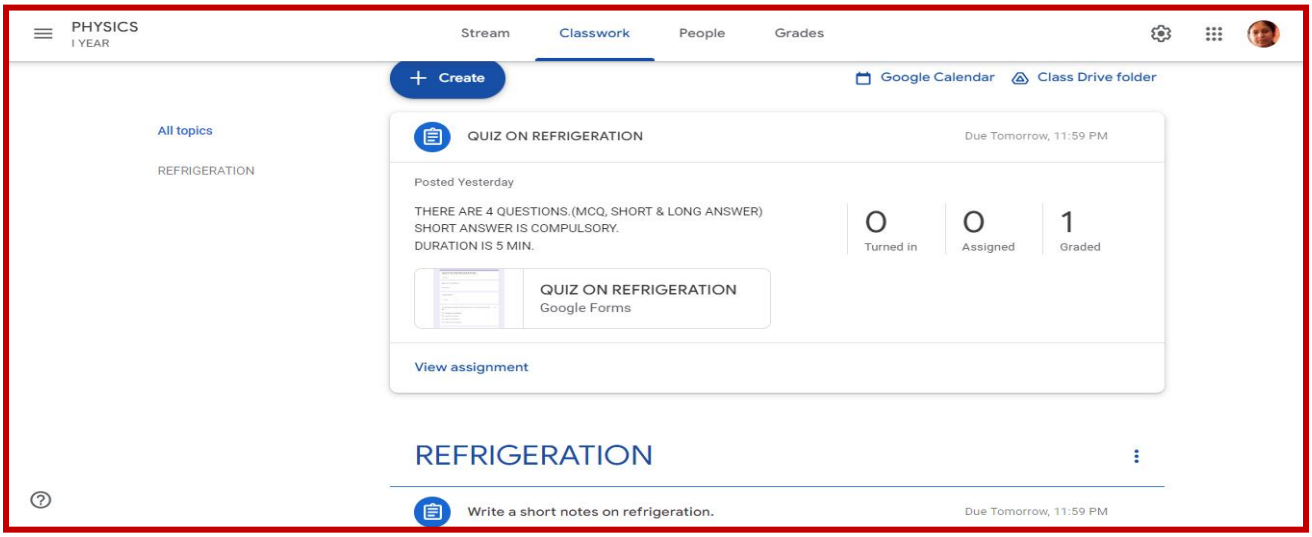

Kahoot!
Home
Discover
Library
Reports
Groups
Marketplace
Upgrade
Create
Kahoots
Courses
vidyaranidlphysics
Kahoot!+ AccessPass
Recent
Drafts (1)
Favorites
Shared with me
Draft
7 Questions
RCMOOCS PHYSICS KAHOOT
vidyaranidlphysics
May 18, 2022
Edit

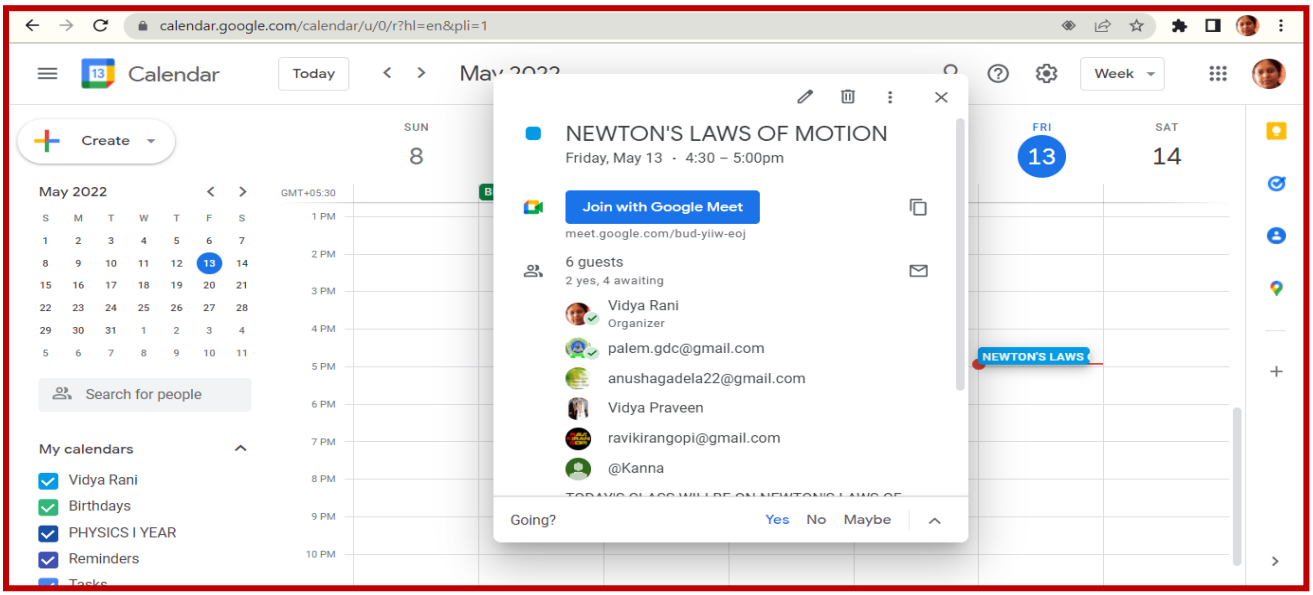

create.kahoot.it/creator/7c44b5ea-1eaa-4b0b-8e88-29b6fb9696b4
Kahoot!
RCMOOCS P...
Settings
Upgrade
Themes
Preview
Exit
Save
1 Quiz
Momentum is pr...
2 Quiz
The product of m...
3 True or false
The physicist in t...
Add question
Add slide
Momentum is product of force and .....
moment
velocity
acceleration
none of the above
Themes
Your themes
Free
Standard
Winter
Summer
Support Ukraine


meet.google.com/gbz-orhj-sbs
Sharing https://canvas.apps.chrome to meet.google.com
Stop sharing
View tab: canvas.apps.chrome
You're presenting to everyone
Presentation audio
Stop presenting
FIRST LAW OF MOTION
An object at rest will remain at rest, unless a net force acts on it.
An object in motion will remain in motion, unless a net force acts on it.
3 others
You
People
All muted
Add people
In call
Vidya Rani (You)
Meeting host
Vidya Rani
Your presentation
Anusha Gadela
4:38 PM | gbz-orhj-sbs


Google Classroom
To-do
To review
Calendar
PHYSICS
I YEAR
Vidya Rani
PHYSICS
DEGREE CLASSES


classroom.google.com/c/NDk0NTM5Nzk0ODcz
PHYSICS
I YEAR
Stream
Classwork
People
Grades
Customize
PHYSICS
I YEAR
Class code
kjja5by
Announce something to your class
Vidya Rani posted a new assignment via InsertLearning: Newton's laws of motion - Wikipedia
Yesterday (Edited 12:37 AM)
Upcoming
No work due soon





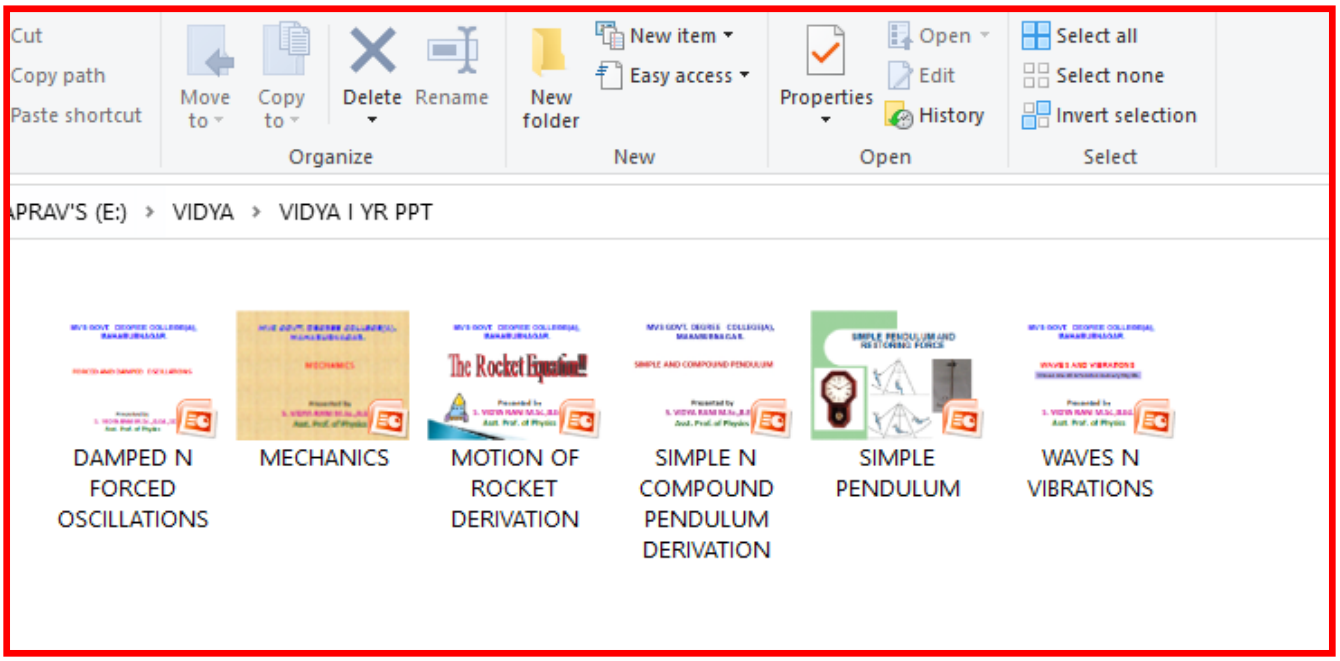
DETAILS OF ICT ENABLED EDUCATION:

I. Abstract of PPT presentations

S. No.	Name of the Faculty	No. of PPTS	Total No of Slides
1	Mrs. S. Vidya Rani	25	1000 slides (approx)

POWERPOINT PRESENTATIONS

PPTs are prepared to fill the academic learning gaps of the students where regular blackboard teaching is limited as we cannot present animated and visuals of the pictures.



VIDEO LECTURES & YOUTUBE CHANNEL

Mrs. S. Vidya Rani, Asst. Prof. of Physics has created and uploaded videos of her lectures on YouTube channel. These video lecture links are available in department website for access to students. There are good numbers of subscribers and view hours.

For record of Video lectures and PPTs can be accessed through the following link.

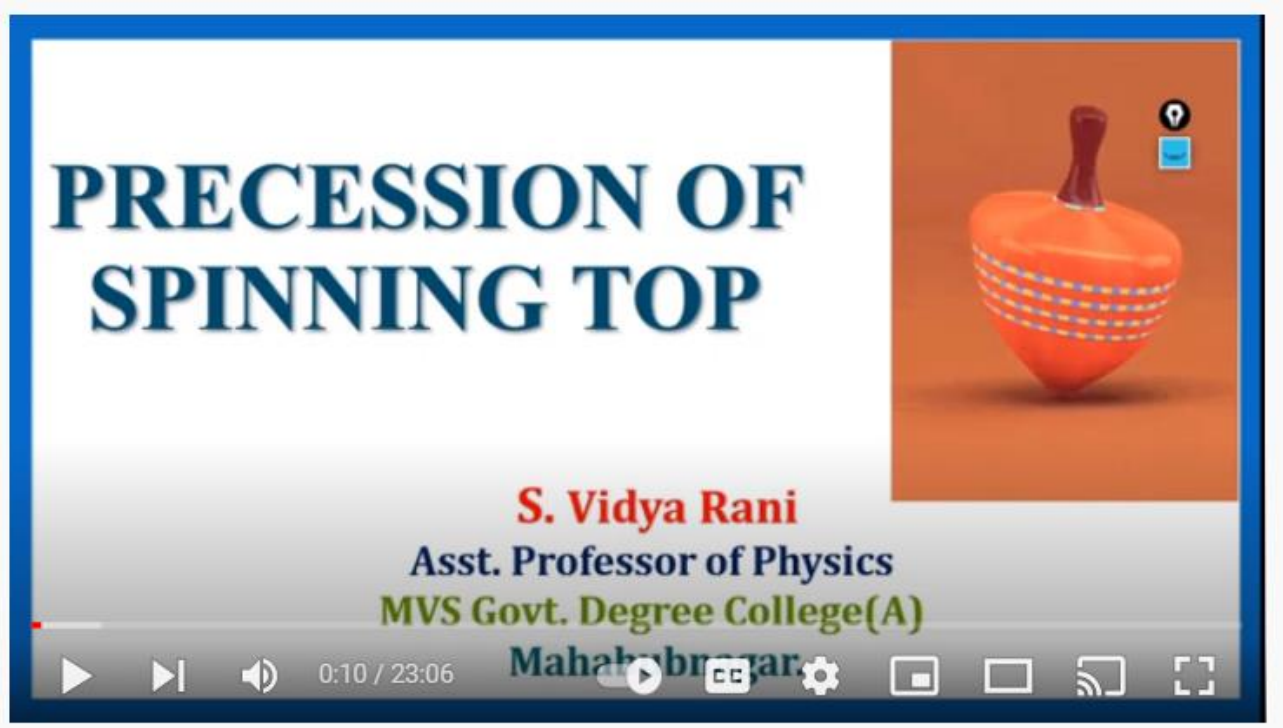
YOUTUBE CHANNEL LINK

https://www.youtube.com/channel/UCU7cPT08IsKTcGXIAWq9tlQ

II. Abstract of recorded video lessons on Youtube

S. NO.	TOPIC	YOUTUBE LINK	VIDEO DURATION
1	I YEAR: NEWTONS LAWS	https://youtu.be/CGjHTHIic1E	25 MIN
2	I YEAR: VECTORS PART-1	https://youtu.be/-9QJYD953Jw	59 MIN
3	I YEAR: VECTORS PART-2	https://youtu.be/ilJ6VIZRMHQ	53 MIN
4	I YEAR: VECTOR OPERATORS &TYPES OF INTEGRALS	https://youtu.be/jOryO8jNDZk	38 MIN
5	I YEAR: STOKES'S AND GAUSS DIVERGENCE THOEREM	https://youtu.be/kfe_7kwR1lM	29 MIN
6	I YEAR: GREEN'S THEOREM, LAPLACIAN OPERATOR, PROBLEMS PART-1	https://youtu.be/ltWRxYCcpxc	36 MIN
7	I YEAR: VECTOR ANALYSIS PROBLEMS PART-2	https://youtu.be/4RjX3H5m49Y	26 MIN
8	I YEAR: EQN. OF MOTION OF VARIABLE MASS SYSTEM & MOTION OF ROCKET	https://youtu.be/8xZJfs5kJtY	45 MIN
9	I YEAR: TYPES OF ENERGY, WORK-ENERGY THEOREM	https://youtu.be/NU3dzKWr6gw	46 MIN
10	I YEAR: CONSERVATION LAWS: MASS, ENERGY, LINEAR MOMENTUM	https://youtu.be/POp7DXOD77M	62 MIN
11	I YEAR: LAW OF CONSERVATION OF ANGULAR MOMENTUM	https://youtu.be/wUf44MAAf70	48 MIN
12	I YEAR: PROOF OF CONSERVATION OF LINEAR AND ANGULAR MOMENTUM	https://youtu.be/T_rrgN88sqk	61 MIN
13	I YEAR: ONE DIMENSIONAL ELASTIC & INELASTIC COLLISION, TWO DIMENSIONAL COLLISION	https://youtu.be/qu9VxJVx-t8	62 MIN
14	I YEAR: 2 DIMENSIONAL ELASTIC OBLIQUE COLLISION	https://youtu.be/IgQVxCA2fuc	30 MIN
15	I YEAR: RUTHERFORD ALPHA SCATTERING EXPERIMENT	https://youtu.be/nG4EIi0xi4E	33 MIN
16	I YEAR: COLLISION-PROBLEMS	https://youtu.be/P7b2MEHm4nM	35 MIN
17	I YEAR: MECHANICS OF RIGID BODY	https://youtu.be/9b_rk3J7ue8	27 MIN
18	I YEAR: ANGULAR MOMENTUM & INERTIA TENSOR	https://youtu.be/N5TQzLp_Yd4	30 MIN
19	I YEAR: PRECESSION OF SPINNING TOP	https://youtu.be/VqCDMogLY0A	24 MIN
20	I YEAR: GYROSCOPE	https://youtu.be/D8f2OI-U9Ok	21 MIN
21	I YEAR: CENTRAL FORCES	https://youtu.be/ueQ5QPg6hkE	35 MIN

S. NO.	TOPIC	YOUTUBE LINK	VIDEO DURATION
22	I YEAR: CENTRAL FORCES-PROPERTIES	https://youtu.be/aw6Ea6rSj4k	33 MIN
23	I YEAR: CONSERVATIVE FORCE-POTENTIAL ENERGY	https://youtu.be/rww9JdRvOVI	44 MIN
24	I YEAR: KEPLER'S LAWS OF PLANETARY MOTION	https://youtu.be/lJAL6ORZjvk	27 MIN
25	I YEAR: INTRODUCTION TO GRAVITY & ORBITS	https://youtu.be/hiM3S1-Eyk4	56 MIN
26	I YEAR: NEWTON'S UNIVERSAL LAW OF GRAVITATION & GRAVITATIONAL FIELDS	https://youtu.be/g6b82uog7cI	47 MIN
27	I YEAR: TERMS TO KNOW ABOUT SATELLITE ORBITAL MOTION	https://youtu.be/hyIVNEB6ig4	56 MIN
28	I YEAR: SATELLITES	https://youtu.be/OCbUj2uUxNQ	50 MIN
29	I YEAR: CENTRIPETAL & CENTRIFUGAL FORCES	https://youtu.be/4hvizlTm-Wo	34 MIN
30	I YEAR: CORIOLIS FORCE	https://youtu.be/BaWdEIwVLLA	34 MIN



With 1.7k views

With 977 views

PEN TABLET:

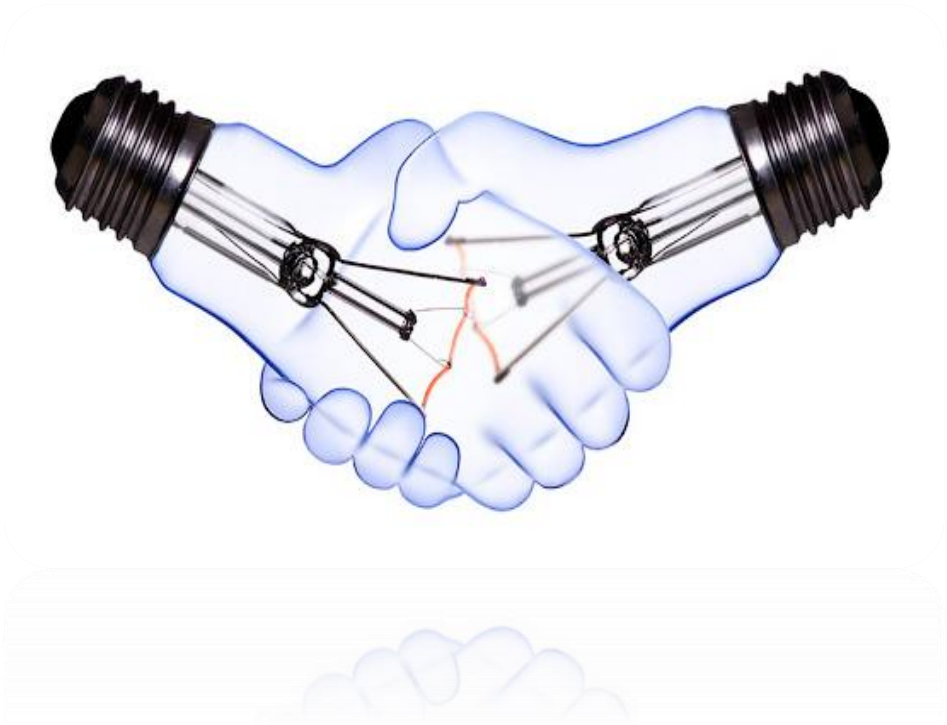
Wacom's pen display and tablets help teachers and students reclaim the experience of the classroom when working remotely. Wacom's digital pen technology can help by making it easier to interact with and engage your students.

Whenever long derivations are involved in the topic, we are using pen tablet enabling teacher to write on the screen and when we use this device with the screen sharing option of ZOOM, it allows us to save whatever we write on the screen in pdf format. Later these pdf formats can be shared to students after the class. Following image is screenshot of the device.

FUTURE ACTION PLAN

- Planned to conduct Minor Research Projects and Student study/Research projects to instil research ideology in the students.
- To do MOU with industries under project work in final semester.
- To encourage students to join in certificate courses related to Physics those are offered in MOOCS (Swayam) or by Teaching-Learning Centres of National & State Universities platforms.
- To continue blended mode teaching with significant priority to e-Content through different modalities simultaneously with traditional blackboard teaching.
- To give coaching for PG/JAM/JEST/CUCET entrance and other competitive exams.
- To conduct more industrial field trips for experiential learning and deep understanding of the physics principles.

THE SCIENCE OF TODAY IS THE TECHNOLOGY OF TOMORROW



THANK YOU