



Shikshak Sanchalit Shikshan Sanstha's
**DR. SHANTILAL DHANJI DEVSEY ARTS COLLEGE AND
COMMERCE AND SCIENCE COLLEGE, WADA.** TAL- WADA; DIST-
PALGHAR (421303)



(AFFILIATED TO UNIVERSITY OF MUMBAI)

DEPARTMENT OF PHYSICS

Year (2022-23)

Attainment of each Cos and PSOs:

- Students' enthusiasm and interest in the subject increased through regular reinforcement of fundamental concepts in both theory and practical sessions.
- Hands-on departmental training using electronic circuit models and device demonstrations significantly enhanced students' practical knowledge and technical skills.
- Systematic training in handling laboratory apparatus, mechanical instruments, and electronic devices reduced students' apprehension and built confidence in performing experiments independently.
- Experimental mistakes and errors were minimized through continuous guidance, performance evaluation, and verification of students' practical work and assessment outcomes.
- Students showed a significant improvement in academic performance, resulting in higher examination scores, improved pass percentages, and better overall results.
- Faculty members continuously monitored the individual academic progress of students, provided personalized mentoring, and guided them towards career opportunities and industrial placements, thereby exposing them to real-world applications.
- The department successfully encouraged and supported students in pursuing postgraduate education, resulting in improved PG progression.
- Faculty members adopted innovative, model-based teaching methods using laboratory equipment such as prisms, lenses, spectrometers, and electronic circuit boards. This approach strengthened conceptual understanding, enhanced confidence, and demonstrated the practical applications of Physics.

- Both direct and indirect assessment methods, including practical examinations, departmental tests, assignments, seminars, and course-wise discussions, were effectively implemented to evaluate and improve the attainment of Course Outcomes (COs).
- Educational visits to government research institutes, participation in ISRO outreach programmes, cultural events, and sports activities enriched students' curricular and co-curricular experiences while fostering scientific curiosity, research aptitude, teamwork, and overall personality development.
- Regular practice tests focusing on fundamental concepts significantly reduced the failure percentage across various courses and improved students' success rate and overall attainment levels.

Sr. No.	Method of Course attainment	Tolls used for Attainment
1	Use of Models and components in Electronics	PCB, Bread Boards, Capacitors, Diodes, Transistors, Electronic Circuits like Multivibrator, Timers, PROJECTS.
2	Devices used in Electronics	CRO, Function Generators, Frequency meters, Voltmeters, Ammeters.
3	Equipment's and Tools used in Mechanics	Katers Pendulum, Metal Bobs, Vernier callipers, Scales, Micrometre Screw Gauge, Fly Wheels.
4	Equipment's and Tools used in optics	Spectrometers, lenses, prisms like Calcite, Double Refracting Prisms, Slits, Bi-prisms.


 I/C Principal
 Shikshak Sanchalit Shikshan Sanshthe's
 Dr. Shantilal Dhanji Devsey Arts College &
 Commerce & Science College, Wada, Dist. Palghar



