



Bhiwapur Mahavidyalaya
Department of Physics
Academic session-2025-2026
Course Outcome

Sr. No.	Subject	Paper	Course Outcomes
Semester I			
1	Physics	(DSC-1) - (BPH1T01) (Measurements, Mechanics, and Properties of Matter)	<ol style="list-style-type: none"> 1. Develop interest in measurement with conceptual knowledge of physics. 2. Develop practical skills in accurate measurements with minimal errors. 3. Understand and practice these skills while performing physics practical. 4. Understand the use of apparatus and their use without fear. 5. Correlate their physics theory concepts with practical outcomes. 6. Understand the concepts of errors and their estimation.
		(DSC-2) - (BPH1T02) (Kinetic theory of gases and Thermodynamics)	<ol style="list-style-type: none"> 1. Understand the assumptions of kinetic theory of gases, ideal and real gases. 2. Understand the nature of calorimetry by specific heat of solids and gases. 3. Analyses different transport phenomena in gases 4. Describe basic concepts of Thermodynamics. 5. Analyses the laws of thermodynamics in different cases and entropy. 6. Restate definition of system, surrounding, closed and open system, extensive and intensive variables and properties. 7. Design various types of basic heat engines. 8. Apply Maxwells thermodynamic relations. 9. Understanding the low temperature physics
		(GE/OE-1) - (BGO1T01) (Space Science)	<ol style="list-style-type: none"> 1. Get acquainted with the space related events 2. Get knowledge about solar system and planets 3. Determine the average distance and sizes of heavenly bodies 4. Understand the concept of black hole and other giants 5. Know the measurement related to large distance 6. Understand the communication time requirement for longer distances

		(VSC - 1) - (BVS1P01) (Electronic and Electrical Components)	<ol style="list-style-type: none"> 1. Get acquainted hands-on practice for electronic components and their uses in electronic circuits. 2. Apply the practical knowledge in conducting various practical during graduation. 3. Apply the practical knowledge in repairing household electronic and electrical gadgets.
		(SEC - 1) - (BVS1P02) (Electric Wiring for Domestic Applications)	<ol style="list-style-type: none"> 1) Identify the line, neutral and earth wire by using test lamp. 2) Describe basic safety rules in his/her words. 3) Describe KVL and KCL in his/her words. 4) Calculate electric energy consumption by domestic appliances. 5) Perform to control lamp, fan by switches. 6) Differentiate between PVC Conduits and Casing-Capping wirings. 7) Apply the practical knowledge in conducting various practical during graduation. 8) Compare the rating of switches as per appliances. 9) Evaluate estimate cost for electric wiring. 10) Design a test lamp and extension board.
Semester II			
		(DSC-III) - (BPH2T03) (Acoustic and Ultrasonics)	<ol style="list-style-type: none"> 1. Understand the different aspects and attributes of a musical sounds. Also response of ear to sound and audible limits of human ear 2. Learn about various musical scales and musical instruments 3. Learn about acoustics of a hall and requirement of a good acoustic of a hall 4. Learn about different microphones their design and action and also about loudspeaker. 5. Learn about the characteristics and production method as well as detection of USW. 6. Learn about different applications of USW like SONAR, soldering, cleaning and medical applications like sonography etc.
		(DSC-4)- PHYSICS - Paper-IV (BPH2T04) (Oscillations and Black body radiation)	<ol style="list-style-type: none"> 1. Understand the simple harmonic motion, and properties of different oscillatory motion of an object 2. Understand the damped and forced oscillation 3. Understand mechanical waves in a medium and wave equation of the transverse waves on string and longitudinal waves in a fluid. 4. Understand black body radiation and development of quantized nature of blackbody radiation. 5. Understand the temperature of heavenly bodies
		(VSC) - PHYSICS Course Code (BVS2P03)	<ol style="list-style-type: none"> 1. Understand the function of different instruments.

		(Instrumental Errors in Measurement)	<p>2. Choose and apply proper instrument for the measurement.</p> <p>3. Handle the instrument carefully and apply the practical knowledge in his further study.</p> <p>4. Find the different man made and instrumental errors in doing different</p>
		(SEC - 2) - PHYSICS (BVS2P04) Fundamentals of Data Analysis and Data Interpretation	<p>1) Collect a big data as per requirements and automatically get it in spreadsheet for further processing.</p> <p>2) Navigate on the spread sheet to edit text and values by inserting and deleting the ranges.</p> <p>3) Use various charts and formatting tables with row and column formatting.</p> <p>4) Use various mathematical functions to explore the necessary interpretations.</p> <p>5) Use various statistical functions to explore the necessary interpretations.</p> <p>6) Perform line / curve fitting for analysis.</p>
		Indian Knowledge System (IKS) SEM2: INDIAN ASTRONOMY (BIK2T02)	<p>1. It is possible to create a map of the intellectual growth of culture using astronomy as a probe.</p> <p>2. The growth of Indian astronomy occurs in distinct stages analogous to phase transitions of the evolution of cultures</p> <p>3. Indian Astronomy therefore provides an excellent window to the past dramatic transitions.</p>