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Physics is the science of how matter and energy interact and affect each other over time and space. Physics functions in an exciting dimension. What we mean by this is that things keep changing in the world of physics with every discovery. As theories progress and discoveries are made, not only the answer but the whole question changes. Due to this, many individuals define physics by what it was rather than what it is and will be. Physics is an ever-evolving field of science that aspires to describe the universe's fundamental laws. From the tiny particles that make up matter to the massive forces that govern the cosmos, physics covers many topics and concepts that continue to captivate us. If you are a physics enthusiast or student looking to dive deeper into physics, plenty of resources are available here. These physics blog posts contain information on various physics concepts, theories, discoveries and cutting-edge experiments. This physics repository contains over 1800+ scholarly articles in physics. It is an excellent resource for researchers and students, with articles covering various topics, from particle physics to astrophysics. By exploring these resources, you can better understand the fundamental laws that govern the universe. Exploring the Fundamentals: A Guide to Basic Physics Physics Laws Physics Formulas Physics Constants Values of Physics Constants Relation Between Physics Concepts Difference Between Physics Concepts Classification of Physics Concepts Applications of Physics Concepts Physics SI Units Derivation of Physics Formulas Physics Scientists Physics Puzzles Physics Resources for Students and Educators Physics Made Easy: Resources to Ace Your Exam BYJU'S Physics offers an extensive collection of more than 1800 articles designed to serve as valuable study resources for students. These articles cover a wide range of physics concepts and have been carefully categorized under their parent topics for easy navigation. Each article is available for free and can be accessed through collapsible tables that provide links to the relevant content. At BYJU'S, we are committed to providing the latest and most relevant information to our students, which is why we regularly update our library with improved or new material. With our comprehensive physics resources, students can enhance their understanding of physics and excel in their academic pursuits. NCERT Resources and Supplements for CBSE students The Central Board of Secondary Education abbreviated as CBSE is one of the most prominent and prestigious educational boards of India. We, at BYJU'S, provide various resources for CBSE students to help students with their exams. The study materials given here are prepared with respect to the latest syllabus. These resources include syllabus, books, sample papers, question papers, NCERT solutions, NCERT exemplar solutions, important questions and CBSE notes. Below, we have provided an exhaustive list of all the resources that a student would require for efficient preparation of exams. CBSE Student Essentials Physics is a science that studies the structure of matter and how the universe's fundamental building blocks interact. Its scope ranges from the infinitesimally small objects studied using the principles of quantum mechanics to the entirety of the cosmos, explored using general relativity.The cornerstones of modern physics are relativity theory and quantum mechanics. Quantum mechanics describes the physical properties of atoms and subatomic particles. At the same time, relativity revolutionized our understanding of elementary particles and their interactions and enabled predictions of astronomical phenomena like black holes and gravitational waves.Physicists use the International System of Units (SI) to use a system agreed upon by scientists worldwide.Physics is called the king of science because it helps us understand how nature works.It is possible for theoretical physics to exist without Maths but it gets difficult to analyze and describe the universal phenomena without mathematical hypothesis.Physics and Biology, when combined together, help scientists learn more about biological systems on a molecular or atomic level.Physics and Chemistry may overlap when the subject under consideration is matter composed of electrons and nuclei made of protons and neutrons.Physics is important because it helps us understand the fundamental nature of the universe. It improves the quality of life by providing quantitative and analytical skills in fields like engineering, medicine and science. At BYJU'S, our learning approach combines world-class teachers, innovative technology, proven pedagogical methods and data science to deliver personalized learning, feedback, and assessment for students. Stay tuned to BYJU'S and KEEP FALLING IN LOVE WITH LEARNING! The complete list of chapters and subtopics of the Class 11 NCERT textbook is provided below. Students can visit each and every subtopic by clicking the links provided and can learn in detail about all the concepts covered in Class 11 Physics. The list of chapters and subtopics given below is prepared according to the latest syllabus of CBSE. The content provided in the respective sub-topic is designed by expert physics teachers so that students can learn the concept in-depth. Click the links below to learn all Class 11 concepts in detail. Class 11 Physics Chapters Physical World Units And Measurements Motion In A Straight Line Motion In A Plane Laws Of Motion Work, Energy, And Power System Of Particles And Rotational Motion Gravitation Why refer to these articles? Physics is one of the most interesting subjects which is filled with numerous engaging concepts. The concepts taught in the 11th standard are the fundamentals of the subject. Students must learn these concepts in-depth to develop their skills in the subject and build a strong foundation. Stay tuned with BYJU'S to learn various interesting concepts of physics, chemistry, biology, and mathematics with the help of engaging and interactive video lessons. Branches of physics are the subjects studied within the scope of physics. The subject physics can be defined as the branch of science which deals with the study of properties of matter and energy along with the interaction between them. Physicists have divided the subject into various branches and each branch has acquired a title of a full subject in modern days. In this article, let us know in detail about the branches of physics. Table of Contents: Physics and its Branches Physics is one of the most important subjects in all science; therefore, the branches of science have evolved to understand each and every underlying aspect of the physical world. Physics asks big questions such as: How did the universe begin? What are the basic building blocks of matter? How will the universe change in the future? Many physicists work really hard and try to find answers to these types of questions. The answers they come up with often lead to unexpected technological applications. The discovery of gravitation and the knowledge of motion were among the various major breakthroughs made in the field of science. Watch the videos below to understand how these major discoveries impact our life. Various Branches of Physics Physics can be classified into various branches, but classical physics is mainly concerned with energy and matter. The traditional branches of classical physics are Optics, Acoustics, Electromagnetics, and Classical mechanics. With the rapid development of physics, the scope of the subject is growing so large that it is not possible to cover physics under the above branches. A number of main branches of physics are discussed below. Mechanics Mechanics is the branch of physics that deals with the motion of an object without or with the reference of force. Mechanics can be further divided into two branches, namely quantum mechanics and classical mechanics. Quantum mechanics deals with the behaviour of the smallest particles like neutrons, protons, and electrons, while classical mechanics is the branch that deals with laws of motion of forces and physical objects. Optics This branch of physics deals with the behaviour, propagation, and properties of light. Optics can be simply described as the study of the behaviour of infrared light, visible light, and ultraviolet. Thermodynamics Thermodynamics deals with the study of heat and its relation with work and energy. Thermodynamics also deals with the transmission of heat energy by means of convection, conduction, and radiation. Electromagnetism Electromagnetism deals with the study of electromagnetic force like electric fields, light, magnetic fields, etc. There are two aspects of electromagnetism which are "electricity" and "magnetism". Relativity This branch of physics deals with the theorem that was formulated by Albert Einstein. The theory of relativity states that space and time are relative and all the motion must be relative to a frame of reference. Acoustic Acoustics deals with the study of sound and its transmission, production, and effects. Acoustics mainly involves the mechanical waves in gases, liquids, and solids, which include vibration, sound, ultrasound, and infrasound. The branch of physics known as mechanics is concerned with the investigation of motion under the influence of forces or displacements, as well as the subsequent consequences of the bodies on their surroundings.A branch of physics called optics studies how light behaves and has certain characteristics, as well as how light interacts with materials and the instruments that measure it. A type of physical interaction that takes place between electrically charged particles is the electromagnetic force. It combines all magnetic and electrical forces and operates between charged particles. Both attraction and repulsion are possible with the electromagnetic force. Wave motion refers to the movement of energy and momentum between two locations in a medium without the physical movement of any substance. There are three different categories of wave motion: The medium of propagation, The dimensions in which a wave propagates energy, The energy transfer According to the law of conservation of energy, "the entire energy of the system is preserved in a closed system, i.e., a system that is separated from its surroundings." Stay tuned with BYJU'S to learn more interesting Physics topics with the help of engaging and interactive video lessons. NCERT Books for Class 12 Physics are prepared by educational experts who have in-depth knowledge of the subject. Most CBSE schools follow these NCERT Books for Class 12. They build the base for engineering courses for students who plan to pursue a higher degree. For engineering and medical competitive exams, the level of questions asked in the Physics section is difficult. Hence, to solve questions of this level, students should be well-versed in the basic concepts of NCERT Class 12 Physics. Most teachers use the NCERT Books for Class 12 Physics for teaching and preparing questions for midterm and final exams. The NCERT books of Class 12 Physics are divided into 2 parts. The first part of Class 12 Physics deals with electricity, magnetism, electromagnetic induction, etc. The second part deals with wave optics, radiation, atoms, nuclei, circuits etc. These books are available on BYJU'S website for free download, along with NCERT Solutions for Class 12 Physics and Exemplar solutions. NCERT Books are one of the standard publications across the country. Students who study at CBSE schools are advised to study from NCERT Books for Class 12 Physics. NCERT Book for Class 12 Physics Chapter-wise PDFs in English NCERT Book for Class 12 Physics Chapter-wise PDFs in Hindi Access NCERT Solutions here. Why One Should Read NCERT Book for Class 12 Physics? A question might arise – why NCERT? Below is the answer to this – why NCERT books are preferred. There is an added advantage when the students study from NCERT Books. Provides in-depth knowledge – All the NCERT books are written by renowned authors after substantial research. These books are outlined in such a way that every student can easily comprehend the concepts. Clarifies all the basic concepts – If a student goes through the previous years' question papers of the CBSE board, they can find that most of the questions are asked from the NCERT books. Many times, the questions are twisted. Extends an option to solve more problems – In the NCERT books, students can find a number of questions at the end of each chapter. This helps them to practise more and answer the twisted questions asked in the examinations. Enhances communication skills – Though the lessons are easy to understand in the NCERT books, the language used is standard. When the students read these books thoroughly while studying, their communication skills get enhanced too. These are the merits of studying from the NCERT books, which prepare the students for the board exams. Here, at BYJU'S, students can download all components of NCERT Physics Class 12 Books and other study materials. The NCERT Class 12 Physics Part 1 PDF is prepared to provide students with a clear understanding of the various concepts and topics explained as per the CBSE syllabus. The books contain explanations in a detailed and elaborate manner to help students obtain better academic scores. By referring to these books, students will be able to prepare for the board exam and score well. Students can access the NCERT books from BYJU'S website anywhere and anytime without any time constraints.Students can strongly rely on NCERT Physics Class 12 Part 2 PDF for exam preparations since subject experts have designed these books according to the latest CBSE syllabus. By learning the concepts provided in the PDFs, students will be able to write precise and elaborate answers to the textbook questions and prepare better for the board exams.The advantages of using the NCERT Physics Books for Class 12 at BYJU'S are as follows: 1. The concepts are written in an understandable language to help students with their exam preparation. 2. The concepts and topics covered are based on the latest CBSE syllabus and guidelines. 3. The content is drafted in an organised way so that students can relate to the concepts efficiently. 4. During revision, the NCERT books prove to be time-saving for the students. NCERT Solutions for Class 11 Physics for all chapters can be accessed here by following the links provided below. The highly experienced subject matter experts have explained each and every minute concept in the best way possible to help students face the exam without fear. Physics is a subject which contains a lot of concepts and numerical problems. For this purpose, a thorough understanding of the concepts is necessary to solve the problems effortlessly. NCERT Solutions is prepared in order to provide the students with authentic information completely based on the latest syllabus prescribed by the CBSE board. From Class 11 Physics, students will study the various concepts which are important both from the exam and competitive exam perspective. The solutions provided here can be accessed by the students in online mode or can be downloaded as a PDF. Each chapter of NCERT Solutions for Class 11 Physics can be downloaded in a PDF format by clicking on the "Download PDF" button at the top of each chapter page given below. The following chapters have been removed from the NCERT Class 11 Physics textbook 2023-24. Physical World Class 11 is an important stage in the life of a student because they are exposed to learning various new concepts. The solutions at BYJU'S not only helps them to understand it but also provides them with a basic knowledge of their applications in our daily life. So learning the chapters present in the NCERT textbook will help them to obtain a strong hold on the basic concepts. There are numerical problems and examples present in each chapter, which are explained in a step-wise manner to improve the problem-solving abilities of the students. Download NCERT Solutions for Class 11 Physics to speed up the exam preparation. NCERT Solutions Class 11 Physics NCERT Solutions Class 11 Physics is an important study material which helps students to master the subject. Physics is a crucial subject from the exam perspective, which is difficult to master as it deals with various properties of nature and matter. It forms a strong base for students who wish to pursue higher levels of education in the field of Science. The solutions are planned out to aid the Class 11 students in achieving good marks in the exam. The expert teachers answer each and every question in an elaborate manner so that students do not miss any concept which is important for the exam. By regular practice using the NCERT Solutions, students will be able to know the right way to approach the questions which would appear in the exam. NCERT Solutions Class 11 Physics Chapter Details and Exercises Chapter 1: Physical World In this chapter, we will be studying how things work and the reason behind it. Students will become more aware of the things surrounding them, the origin and the history of Science. They will also come across various aphorisms and their justification using Physics concepts in real life in this chapter. The concepts covered here are gravitational force, electromagnetic force, strong and weak nuclear force. The theories and observations done by various scientists and their conclusion is provided briefly here. You will gain more idea about the factors which are the reasons for the development of Science and Technology in our country. The existence of an electron is explained in this chapter in an elaborate manner to acquaint students with the basic conceptual knowledge. Topics Covered in Class 11 Physics Chapter 1 Physical World Physics: Scope and excitement; nature of physical laws; Physics, technology and society Also, access the following resources for Class 11 Chapter 1 Physical World, at BYJU'S: Chapter 2: Units and Measurements With the senses like ears, eyes etc., scientists gather information and make observations. A few of them are like figuring out the colour and texture, while others would be complex where measurement is necessary. It is a basic concept in Science without which scientists will not be able to conduct any experiments. Students will learn about the units of physical quantities and the method to be followed to evaluate them. It will also provide a good idea of the errors which would occur while measuring things and significant figures. Topics Covered in Class 11 Physics Chapter 2 Units and Measurements Need for measurement: Units of measurement; systems of units; SI units, fundamental and derived units. Length, mass and time measurements; accuracy and precision of measuring instruments; errors in measurement; significant figures. Dimensions of physical quantities, dimensional analysis and its applications. Also, access the following resources for Class 11 Chapter 2 Units and Measurements, at BYJU'S: Chapter 3: Motion in a Straight Line This chapter will cover essential topics like comparing objects as point object and the method of plotting graphs and finding the values based on them. The method plotting x-t motion graph can be learnt easily by using the NCERT Solutions from BYJU'S. The time taken by a biker, the speed of a car and the time taken by a bus to travel can be found effortlessly by referring to these solutions. Students will learn the difference between magnitude of displacement and the total length of the path covered. They will also study about the average speed, average velocity, instantaneous speed and velocity as per the CBSE guidelines. Topics Covered in Class 11 Physics Chapter 3 Motion in a Straight Line Frame of reference. Motion in a straight line: Position-time graph, speed and velocity. Uniform and non-uniform motion, average speed and instantaneous velocity. Uniformly accelerated motion, velocity-time and position-time graphs, relations for uniformly accelerated motion (graphical treatment). Elementary concepts of differentiation and integration for describing motion. Also, access the following resources for Class 11 Chapter 3 Motion in a Straight Line, at BYJU'S: Chapter 4: Motion in a Plane Students will learn about the scalar and vector quantities and their difference. The method of performing algebraic expressions on various scalar quantities are also explained here. Besides, true or false questions based on these concepts and their justification are elaborated under each answer. We will also learn the concept of magnitude of vectors and their co-linearity, magnitude of displacement vector and the various types of displacement of a moving vehicle. It will help us to understand the time taken by a person to cross a river, experience of riding a bicycle in rain and a ball thrown by a cricketer in the ground. Topics Covered in Class 11 Physics Chapter 4 Motion in a Plane Scalar and vector quantities: Position and displacement vectors, general vectors and notation, equality of vectors, multiplication of vectors by a real number; addition and subtraction of vectors. Relative velocity. Unit vectors. Resolution of a vector in a plane – rectangular components. Motion in a plane. Cases of uniform velocity and uniform acceleration – projectile motion. Uniform circular motion. Also, access the following resources for Class 11 Chapter 4 Motion in a Plane, at BYJU'S: Chapter 5: Laws of Motion This chapter is very important in mechanics. Problems based on the conservation of momentum are frequently asked in the exam. By going through this chapter, students will become well-versed with the laws of motion and their applications in our daily activities. Various numerical problems based on mechanics are solved clearly in this chapter to boost the exam preparation of students. Having a good knowledge of these concepts, students will be able to pursue well in their higher education levels. Topics Covered in Class 11 Physics Chapter 5 Laws of Motion Intuitive concept of force. Inertia, Newton's first law of motion; momentum and Newton's second law of motion; impulse; Newton's third law of motion. Law of conservation of linear momentum and its applications. Equilibrium of concurrent forces. Static and kinetic friction, laws of friction, rolling friction, lubrication. Dynamics of uniform circular motion: Centripetal force, examples of circular motion (vehicle on level circular road, vehicle on banked road). Also, access the following resources for Class 11 Chapter 5 Laws of Motion, at BYJU'S: Chapter 6: Work, Energy and Power The Work Energy Theorem is an important concept in this chapter. Students are highly recommended to learn this chapter effectively as it is continued in future classes also. The work done by a person and the energy required to do that work is explained briefly with suitable examples to make the students well-versed with the concepts. Problems on determining the energy and power are solved in a step-wise manner based on the mark weightage allotted by the CBSE board. Practising these concepts regularly will make them master the chapter effortlessly. Topics Covered in Class 11 Physics Chapter 6 Work, Energy and Power Scalar product of vectors. Work done by a constant force and a variable force; kinetic energy, work-energy theorem, power. Notion of potential energy, potential energy of a spring, conservative forces; conservation of mechanical energy (kinetic and potential energies); non-conservative forces; elastic and inelastic collisions in one and two dimensions. Also, access the following resources for Class 11 Chapter 6 Work, Energy and Power, at BYJU'S: Chapter 7: System of Particles and Rotational Motion This chapter will help students understand the motion of extended bodies, such as the system of particles. The centre of mass of a system of particles is the main concept in this chapter. The term motion and its usefulness are briefly explained as per the syllabus of the CBSE board. As many concepts are covered under this chapter, students are highly recommended to make use of a perfect study material while answering the exercise questions from the textbook. Topics Covered in Class 11 Physics Chapter 7 System of Particles and Rotational Motion Centre of mass of a two-particle system, momentum conservation and centre of mass motion. Centre of mass of a rigid body; centre of mass of circular ring, disc, rod and sphere. Vector product of vectors; moment of a force, torque, angular momentum, conservation of angular momentum with some examples. Equilibrium of rigid bodies, rigid body rotation and equation of rotational motion, comparison of linear and rotational motions; moment of inertia, radius of gyration. Values of M.I. for simple geometrical objects (no derivation). Statement of parallel and perpendicular axes theorems and their applications. Also, access the following resources for Class 11 Chapter 7 System of Particles and Rotational Motion, at BYJU'S: Chapter 8: Gravitation We know that all material objects are attracted towards the Earth. The things which we throw up fall down. Climbing a hill is difficult when compared to going downhill. Gravitation is a very popular concept as most of them which we study in the future are in accordance with this phenomenon. To understand the more complex concepts in this chapter, students should know the difference between gravity and gravitation. The other concepts discussed in this chapter are potential energy difference between two points, acceleration due to gravity and interplanetary motion. Topics Covered in Class 11 Physics Chapter 8 Gravitation Kepler's laws of planetary motion. The universal law of gravitation. Acceleration due to gravity and its variation with altitude and depth. Gravitational potential energy; gravitational potential. Escape speed, orbital velocity of a satellite. Geostationary satellites. Also, access the following resources for Class 11 Chapter 8 Gravitation, at BYJU'S: Chapter 9: Mechanical Properties of Solids A rigid body has a definite shape and size, but in reality, it is bent, stretched and compressed. A force is necessary in order to know the shape of a solid. The concepts of importance in this chapter are plasticity and elasticity. Students will learn about the mechanical properties of a solid, Young's Modulus of copper and steel and the yield strength. Problems based on these concepts appear in the exams for more marks, so it is necessary to practise them on a daily basis. Students will also get to know about the stress-strain relationship graph, which is very important for the exam. Topics Covered in Class 11 Physics Chapter 9 Mechanical Properties of Solids Elastic behaviour, stress-strain relationship, Hooke's law, Young's modulus, bulk modulus, shear, modulus of rigidity. Also, access the following resources for Class 11 Chapter 9 Mechanical Properties of Solids, at BYJU'S: Chapter 10: Mechanical Properties of Fluids Here, we will learn about the physical properties of liquids and gases. They are called as fluids as they have the capacity to flow. This is an important property which separates solids from liquids and gases. The other important concepts covered here are Bernoulli's principle, Reynold's number, streamline flow, viscosity and surface tension. The fundamental property of a fluid is that it can flow. It has no resistance to change its shape. Students will get a clear picture about the mechanical properties of fluids which are of more marks in the final exam. Topics Covered in Class 11 Physics Chapter 10 Mechanical Properties of Fluids Pressure due to a fluid column; Pascal's law and its applications (hydraulic lift and hydraulic brakes). Effect of gravity on fluid pressure. Viscosity, Stokes' law, terminal velocity, Reynold's number, streamline and turbulent flow. Bernoulli's theorem and its applications. Surface energy and surface tension, angle of contact, application of surface tension ideas to drops, bubbles and capillary rise. Also, access the following resources for Class 11 Chapter 10 Mechanical Properties of Fluids, at BYJU'S: Chapter 11: Thermal Properties of Matter We all are familiar with heat and temperature. The method used to determine the temperature is covered in this chapter. Students will also get a clear idea about Newton's Law of Cooling, which is an important concept for various competitive exams. Temperature is the hotness possessed by a body that can be measured using a thermometer. The various thermal properties of matter are listed in a step-wise manner in this chapter to make students more confident about the concepts. Topics Covered in Class 11 Physics Chapter 11 Thermal Properties of Matter Heat, temperature, thermal expansion; specific heat capacity – calorimetry; change of state – latent heat. Heat transfer – conduction, convection and radiation, thermal conductivity, Newton's law of cooling. Also, access the following resources for Class 11 Chapter 11 Thermal Properties of Matter, at BYJU'S: Chapter 12: Thermodynamics Thermodynamics is a concept of heat and temperature and its conversion to other energy forms. It is one of the main topics which the question paper setters focus on, and most of the questions in the exams can appear from this chapter. In order to attain remarkable grades, it is crucial for students to learn all these concepts effectively. The laws of thermodynamics, specific heat capacity, various thermodynamic processes and the Carnot engine are some of the important concepts covered in this chapter. Topics Covered in Class 11 Physics Chapter 12 Thermodynamics Thermal equilibrium and definition of temperature (zeroth law of thermodynamics). Heat, work and internal energy. First law of thermodynamics. Second law of thermodynamics: Reversible and irreversible processes. Heat engines and refrigerators. Also, access the following resources for Class 11 Chapter 12 Thermodynamics, at BYJU'S: Chapter 13: Kinetic Theory This chapter is a more scoring section when it comes to exam preparation. Apart from the properties of solids and liquids, the properties of gases are easy to understand. Students will learn concepts like molecular nature of matter, behaviour of gases, kinetic theory of an ideal gas, law of equipartition of energy, specific heat capacity and mean free path in this chapter. The problems are also solved in a systematic manner following the CBSE guidelines so that scoring good marks would be an easy task for the Class 11 students. Topics Covered in Class 11 Physics Chapter 13 Kinetic Theory Equation of state of a perfect gas, work done on compressing a gas. Kinetic theory of gases: Assumptions, concept of pressure. Kinetic energy and temperature; rms speed of gas molecules; degrees of freedom, law of equipartition of energy (statement only) and application to specific heat capacities of gases; concept of mean free path, Avogadro's number. Also, access the following resources for Class 11 Chapter 13 Kinetic Theory, at BYJU'S: Chapter 14: Oscillations Oscillations are one of the basic concepts in Physics. It is very important for the students to learn the concepts from this chapter, as it will be continued in further classes as well. The concepts explained in this chapter are periodic and oscillatory motions, simple harmonic motion, uniform circular motion etc. To learn these concepts effectively, it is necessary for the students to follow suitable study material for this purpose. By learning the chapter on a daily basis, students will be able to face the more complex questions that would arise in the exam. Topics Covered in Class 11 Physics Chapter 14 Oscillations Periodic motion – period, frequency, displacement as a function of time. Periodic functions. Simple harmonic motion (SHM) and its equation; phase; oscillations of a spring – restoring force and force constant; energy in SHM – kinetic and potential energies; simple pendulum – derivation of expression for its time period; free, forced and damped oscillations (qualitative ideas only), resonance. Also, access the following resources for Class 11 Chapter 14 Oscillations, at BYJU'S: Chapter 15: Waves This chapter contains comprehensive questions on important concepts like wave dynamics. Questions present in this chapter will assist students through concepts like the types of waves, speed of sound in air, the tension on strings and the dependence of the speed of sound in air. The important formulas and concepts are highlighted in the solutions to make a revision of concepts easier for the students. The various wave characteristics, such as amplitude, frequency, phase, wavelength, displacement of waves and resonance, are covered in this chapter. Topics Covered in Class 11 Physics Chapter 15 Waves Wave motion. Longitudinal and transverse waves, speed of wave motion. Displacement relation for a progressive wave. Principle of superposition of waves, reflection of waves, standing waves in strings and organ pipes, fundamental mode and harmonics. Beats. Doppler effect. Also, access the following resources for Class 11 Chapter 15 Waves, at BYJU'S: As there are many concepts present in each chapter, students have to revise the concepts on a regular basis to get a grip on them. It will help them to understand the right way of approaching the difficult questions in the final exam. NCERT Class 11 Books can be accessed by the students to get a clear understanding of the syllabus. Features of BYJU'S NCERT Solutions for Class 11 Physics The Class 11 Physics NCERT Solutions provided by BYJU'S have the following features: Elaborate explanations for all the textbook questions. A systematic process for answering numerical problems. Clear-cut answers for all the questions based on theory. Authentic information from highly experienced subject matter experts. Solutions are present in both online and offline modes. Note: Class 11 Physics students (who are studying under the CBSE syllabus) can bookmark this page in their browser to easily access NCERT Solutions for Class 11 Physics in the future. CBSE Marking Scheme 2023-24 CBSE board has divided the academic sessions covering the entire syllabus to help students learn the concepts effectively. A systematic approach is followed based on the interconnectivity of topics and concepts by the experts. The exams will be conducted by the CBSE board at the end of the academic year as per the bifurcated syllabus. This basically improves the condition of having board-conducted classes at the end of the year. Unit No. Name of the Unit Marks Unit–I Physical World and Measurement 23 Chapter–2: Units and Measurements Unit-II Kinematics Chapter–3: Motion in a Straight Line Chapter–4: Motion in a Plane Unit–III Laws of Motion Chapter–5: Laws of Motion Unit–IV Work, Energy and Power 17 Chapter–6: Work, Energy and Power Unit–V Motion of System of Particles and Rigid Body Chapter–7: System of Particles and Rotational Motion Unit-VI Gravitation Chapter–8: Gravitation Unit–VII Properties of Bulk Matter 20 Chapter–9: Mechanical Properties of Solids Chapter–10: Mechanical Properties of Fluids Chapter–11: Thermal Properties of Matter Unit–VIII Thermodynamics Chapter–12: Thermodynamics Unit–IX Behaviour of Perfect Gases and Kinetic Theory of Gases Chapter–13: Kinetic Theory Unit–X Oscillations and Waves 10 Chapter–14: Oscillations Chapter–15: Waves Total 70 Why Should One Opt for BYJU'S NCERT Solutions? The NCERT Solutions at BYJU'S are the best study material for students under the CBSE board. The content provided is accurate, and students can rely on these solutions to perform better in the annual exam. The solutions strictly follow the NCERT Class 11 Physics Syllabus, which is prescribed by the CBSE board. Some of the advantages of using the NCERT Solutions provided by us are given below. Top-notch experts prepare the solutions The NCERT Solutions have been prepared by a set of highly experienced faculty at BYJU'S with the main aim of making quality educational content for each student. The precise and informative solutions are considered to be the best among all the other materials available online. Students will be able to answer complex questions in the exam The NCERT Solutions at BYJU'S are famous for being student-friendly and easy to understand. Answers to difficult questions and problems are explained in steps to help students understand the method of solving them easily. The solutions provided are concept-focused and not question focused, which enables the students to face the different questions that would arise in the exam. The best study material for revision After learning all the chapters, students are advised to revise all the concepts a month prior to the exam. This will help them to remember all the problems and concepts which are important from the exam perspective. It will also help them to memorise all the formulas and problems which are of high marks as per the CBSE exam pattern. After Going through Our Class 11 Physics NCERT Solutions, Also Explore, Have any questions/issues regarding our NCERT Solutions for Class 11 Physics? Our support team is always available to resolve your queries. Register with BYJU'S and get in touch with them NOW! The solutions from BYJU'S are extremely useful for the students to find answers to the textbook questions in one place. Most of the students find the Class 11 Physics chapters difficult at the beginning as the syllabus is vast and the concepts are new. So, by choosing NCERT Solutions from BYJU'S, students can clear their doubts and prepare for the exams with much confidence. This syllabus is also very important to crack various competitive exams, like JEE and NEET, apart from board exams.If the students focus on all the concepts and work on them regularly, no chapter will be difficult. Students usually get scared by looking at the syllabus as the content is very vast. But as the syllabus is covered, students will become comfortable with the subject. If any doubts regarding this subject exist, you can get in touch with the expert faculty at BYJU'S, who possess many years of experience in this field. The solutions PDF can also be downloaded for free from BYJU'S website.The chapters present in the NCERT Solutions for Class 11 Physics are: 1 – Physical World 2 – Units and Measurements 3 – Motion in a Straight Line 4 – Motion in a Plane 5 – Laws of Motion 6 – Work, Energy, and Power 7 – Systems of Particles and Rotational Motion 8 – Gravitation 9 – Mechanical Properties of Solids 10 – Mechanical Properties of Fluids 11 – Thermal Properties of Matter 12 – Thermodynamics 13 – Kinetic Theory 14 – Oscillations 15 – WavesThe NCERT Solutions for Class 11 Physics from BYJU'S can be used by the students to score well in the annual exams. The solutions cover all the concepts from the NCERT textbook, intending to help students with their annual exam preparation. Every question is solved with the utmost care by keeping in mind the CBSE syllabus and marks weightage allotted for each concept. So, the NCERT Solutions from BYJU'S can be considered as one of the reliable reference materials for the students. Here, we have provided a complete list of chapters and subtopics discussed in the Class 12 National Council of Educational Research and Training textbook (NCERT). Access free study material by clicking on the respective subtopics. The chapters and subtopics listed below are according to the latest syllabus of Central Board of Secondary Education. The exhaustive content provided for each of these subtopics will guide you through what you can expect to study in Class 12 Physics. Class 12 Physics Chapters NCERT Solutions for Class 12 Physics is the best study material for students who find difficulty in answering the questions from the textbook. The solutions are created in a comprehensive manner in order to help students grasp the concepts faster. The main aim of preparing the solutions is to make the exam preparation easier for the students. The subject matter experts design the NCERT Solutions in an easy-to-understand manner to boost confidence among students to face the board exams without fear. By making use of these solutions, students will be able to identify the concepts of importance based on the marks weightage allotted by the CBSE board. The solutions of all chapters are available here for the perusal of CBSE students. To access these free NCERT Physics Class 12 Solutions PDF Chapters 1-15, follow the links tabulated below. The solutions provided here are free to view online or to download in a PDF format. To download a PDF of the NCERT Solutions for Class 12 Physics for a specific chapter, click the "Download PDF" button, which is provided at the top of each of the chapter pages listed below. The following chapters have been removed from the NCERT Class 12 Physics textbook 2023-24. Communication Systems Most students don't really understand the concepts but try to memorise them for the sake of marks. However, this does not work all the time. Learning and understanding every concept is crucial when it comes to board exam preparation. So, making use of the right reference material for this purpose is very important. Students can answer the textbook questions effortlessly by referring to the NCERT Solutions available at BYJU'S. Download NCERT 12th Physics Solutions PDF to start your board exam preparations. NCERT Solutions Class 12 Physics NCERT Solutions Class 12 Physics is not only important for the board exams but also to face competitive exams. The solutions are curated by our experienced faculty to help students grasp the concepts, irrespective of their intelligence level. The answers are elaborated in a simple language to assist students as per the CBSE syllabus and exam pattern. The solutions cover all the chapters present in the latest NCERT textbook. Various important concepts are explained in the solutions in order to provide accurate information to the students. Students can also access the NCERT Solutions Class 12 Physics in PDF format, along with various study materials in both online and offline mode. NCERT Solutions Class 12 Physics Chapter Details and Exercises Chapter 1: Electric Charges and Fields This chapter will help you solve questions based on calculation of forces between two charged particles, which are placed at a distance from one another. You will also learn the reason behind the charge which appears in materials when you rub it against one another, for example, when you rub a silk cloth with a glass rod. In large scale charges, do you know why quantization of charges are ignored? You will also find questions on determining the total charge and dipole moment of the system with torque and electric field. Topics Covered in Class 12 Physics Chapter 1 Electric Charges and Fields : Electric charges and their conservation. Coulomb's law – force between two point charges, forces between multiple charges; superposition principle and continuous charge distribution. Electric field, electric field due to a point charge, electric field lines; electric dipole, electric field due to a dipole; torque on a dipole in a uniform electric field. Electric flux, statement of Gauss's theorem and its applications to find field due to infinitely long straight wire, uniformly charged infinite plane sheet and uniformly charged thin spherical shell (field inside and outside). Also access the following resources for Class 12 Chapter 1 Electric Charges and Fields at BYJU'S: Chapter 2: Electrostatic Potential and Capacitance Students will get a brief idea about the electrostatic potential using the solutions at BYJU'S. This chapter contains derivations on topics, such as potential energy of the system of charges, energy stored in the capacitor and potential due to electric dipole. Problems based on effective capacitance of capacitors are also solved in a step-wise manner as per the CBSE syllabus. These concepts and numericals are answered in the simplest way in order to help students perform well in the board exams. Topics Covered in Class 12 Physics Chapter 2 Electrostatic Potential and Capacitance : Electric potential, potential difference, electric potential due to a point charge, a dipole and system of charges; equipotential surfaces, electrical potential energy of a system of two point charges and of electric dipoles in an electrostatic field. Conductors and insulators, free charges and bound charges inside a conductor. Dielectrics and electric polarisation, capacitors and capacitance, combination of capacitors in series and in parallel, capacitance of a parallel plate capacitor with and without dielectric medium between the plates, energy stored in a capacitor, Van de Graaff generator Also access the following resources for Class 12 Chapter 2 Electrostatic Potential and Capacitance at BYJU'S: Chapter 3: Current Electricity In this chapter, students will learn the definitions of important terms like conductance, resistance, cell EMF, drift velocity, conductance, resistivity and internal resistance. Students will also get to know the graphing of resistivity for semiconductors, metals and alloys. It will provide a good hold on the conversion of complex circuits into simple series and parallel circuits. The concepts of meter bridge or potentiometer is explained in brief under this chapter. Numerous problems based on these concepts are available for practice at the end of the chapter. Topics Covered in Class 12 Physics Chapter 3 Current Electricity : Electric current, flow of electric charges in a metallic conductor, drift velocity and mobility, and their relation with electric current; Ohm's law, electrical resistance, V-I characteristics (linear and non-linear), electrical energy and power, electrical resistivity and conductivity. Carbon resistors, colour code for carbon resistors; series and parallel combinations of resistors; temperature dependence of resistance. Internal resistance of a cell, potential difference and emf of a cell, combination of cells in series and in parallel. Kirchhoff 's laws and simple applications. Wheatstone bridge, metre bridge. Potentiometer – principle and applications to measure potential difference, and for comparing emf of two cells; measurement of internal resistance of a cell. Also access the following resources for Class 12 Chapter 3 Current Electricity, at BYJU'S: Chapter 4: Moving Charges and Magnetism Students can learn about the various graphs, diagrams, illustrations and examples from our daily life to remember the concepts for a longer duration. Derivations of concepts such as Ampere's Circuital law and forces between two current carrying wires are also explained clearly. Problems based on these concepts carrying more marks are also present at the end of the chapter which should be practised on a regular basis. Topics Covered in Class 12 Physics Chapter 4 Moving Charges and Magnetism: Concept of magnetic field, Oersted's experiment. Biot – Savart law and its application to current carrying circular loop. Ampere's law and its applications to infinitely long straight wire, straight and toroidal solenoids. Force on a moving charge in uniform magnetic and electric fields. Cyclotron. Force on a current-carrying conductor in a uniform magnetic field. Force between two parallel current-carrying conductors – definition of ampere. Torque experienced by a current loop in a magnetic field; moving coil galvanometer – its current sensitivity and conversion to ammeter and voltmeter. Also access the following resources for Class 12 Chapter 4 Moving Charges and Magnetism, at BYJU'S: Chapter 5: Magnetism and Matter This chapter contains questions on various quantities, how to determine the magnetic field of earth, compass direction and its effects at the poles. Want to know why the magnetic field of earth varies from point to point in space? Refer to the NCERT Solutions available at BYJU'S. You will also learn about the interstellar space and its weak magnetic field. Magnetic moment of solenoid is also another important concept which is discussed in this chapter. Topics Covered in Class 12 Physics Chapter 5 Magnetism and Matter : Current loop as a magnetic dipole and its magnetic dipole moment. Magnetic dipole moment of a revolving electron. Magnetic field intensity due to a magnetic dipole (bar magnet) along its axis and perpendicular to its axis. Torque on a magnetic dipole (bar magnet) in a uniform magnetic field; bar magnet as an equivalent solenoid, magnetic field lines; Earth's magnetic field and magnetic elements. Para-, dia- and ferro – magnetic substances, with examples. Electromagnets and factors affecting their strengths. Permanent magnets. Also access the following resources for Class 12 Chapter 5 Magnetism and Matter, at BYJU'S: Chapter 6: Electromagnetic Induction This chapter explains about both electricity and magnetism together. The main concepts of importance here are the Faraday's law and the Lenz's law. The definitions and problems based on these laws are explained in a systematic manner to help students understand the concepts effectively. The direction of induced emf and magnetic field should be considered while solving problems from the exercise questions. Topics Covered in Class 12 Physics Chapter 6 Electromagnetic Induction : Electromagnetic induction; Faraday's law, induced emf and current; Lenz's Law, Eddy currents. Self and mutual inductance. Also access the following resources for Class 12 Chapter 6 Electromagnetic Induction, at BYJU'S: Chapter 7: Alternating Current You will be able to learn about the AC Voltage applied to a resistor, inductor, capacitor and series LCR circuit. The various diagrams and graphs present in the textbook help you to clearly understand the concept. By regularly learning this chapter, students can answer the complex questions and problems that would appear in the board exams. The important concept here is the transformer. Learning this chapter completely will help students score good grades not only in the board exams, but will also help clear the competitive exams. Topics Covered in Class 12 Physics Chapter 7 Alternating Current : Need for displacement current. Alternating currents, peak and rms value of alternating current /voltage; reactance and impedance; LC oscillations (qualitative treatment only), LCR series circuit, resonance; power in AC circuits, wattless current. AC generator and transformer. Also access the following resources for Class 12 Chapter 7 Alternating Current, at BYJU'S: Chapter 8: Electromagnetic Waves Electromagnetism is a physical attraction that occurs in particles which are electrically charged. If a capacitor is charged from an external source, there will be a potential difference among two capacitive plates, which can be determined along with displacement. Students will also learn about the Kirchhoff's rules which is of higher marks in the board exams. The RMS value of the conduction current and the similarities between displacement and conduction current is explained here in brief. Topics Covered in Class 12 Physics Chapter 8 Electromagnetic Waves : Electromagnetic waves and their characteristics (qualitative ideas only). Transverse nature of electromagnetic waves. Electromagnetic spectrum (radio waves, microwaves, infrared, visible, ultraviolet, x-rays, gamma rays) including elementary facts about their uses. Also access the following resources for Class 12 Chapter 8 Electromagnetic Waves, at BYJU'S: Chapter 9: Ray Optics and Optical Instruments From this chapter, students will learn about the phenomena of refraction, reflection and dispersion of light using the ray picture. By using the laws of reflection and refraction, the image formation is clearly explained in this chapter. The construction and working of optical instruments including the human eye is covered here. Students will study about the natural phenomena due to sunlight, which is important from the exam point of view. Topics Covered in Class 12 Physics Chapter 9 Ray Optics and Optical Instruments : Reflection of light, spherical mirrors, mirror formula. Refraction of light, total internal reflection and its applications, optical fibres, refraction at spherical surfaces, lenses, thin lens formula, lensmaker's formula. Magnification, power of a lens, combination of thin lenses in contact. Refraction and dispersion of light through a prism. Scattering of light – blue colour of the sky and reddish appearance of the sun at sunrise and sunset. Optical instruments: Human eye, image formation and accommodation, correction of eye defects (myopia, hypermetropia, presbyopia and astigmatism) using lenses. Microscopes and astronomical telescopes (reflecting and refracting) and their magnifying powers. Also access the following resources for Class 12 Chapter 9 Ray Optics and Optical Instruments, at BYJU'S: Chapter 10: Wave Optics The Huygens's laws of reflection and refraction is the concept which carries more marks from this chapter. The angular width expression and the Brewster's Law is explained with suitable examples to provide clear knowledge to students. Apart from the theory and derivations, students are highly recommended to solve all the problems from the NCERT Textbook. The Doppler Effect is explained in a comprehensive manner to improve the conceptual knowledge among students. Topics Covered in Class 12 Physics Chapter 10 Wave Optics : Wave optics: Wavefront and Huygens' principle, reflection and refraction of plane wave at a plane surface using wavefronts. Proof of laws of reflection and refraction using Huygens' principle. Interference, Young's double slit experiment and expression for fringe width, coherent sources and sustained interference of light. Diffraction due to a single slit, width of central maximum. Resolving power of microscopes and astronomical telescopes. Polarisation, plane polarised light; Brewster's law, uses of plane polarised light and Polaroids. Also access the following resources for Class 12 Chapter 10 Wave Optics, at BYJU'S: Chapter 11: Dual Nature of Radiation and Matter This chapter covers important topics like electron emission, photoelectric effect, experimental effect, Einstein's Photoelectric equation and the wave nature of matter. Numericals should also be given more importance as you will be able to score more marks. Most of the questions from the textbook can be expected to appear in the final exam. By a good hold on this chapter, students will be able to attain remarkable marks, and further achieve their career goals. Topics Covered in Class 12 Physics Chapter 11 Dual Nature of Radiation and Matter : Photoelectric effect, Hertz and Lenard's observations; Einstein's photoelectric equation – particle nature of light. Matter waves – wave nature of particles, de Broglie relation. Davisson-Germer experiment. Also access the following resources for Class 12 Chapter 11 Dual Nature of Radiation and Matter, at BYJU'S: Chapter 12: Atoms Class 12 is an important step in the life of a student as it will help them shape and build their career in the right path. Bohr Model of Hydrogen Atom is the important concept in this chapter. Students will be able to score good marks only if they learn and revise the concepts regularly. Physics is a subject which requires more practice as it contains many problems. The important formulas and steps to be followed in solving the problems should be memorised to score good grades. Topics Covered in Class 12 Physics Chapter 12 Atoms : Alpha – particle scattering experiment; Rutherford's model of atom; Bohr model, energy levels, hydrogen spectrum. Also access the following resources for Class 12 Chapter 12 Atoms, at BYJU'S: Chapter 13: Nuclei The concepts covered in this chapter are atomic masses and composition of nucleus, size of the nucleus, mass energy and nuclear binding energy, nuclear force, radioactivity and nuclear energy. In Physics, one of the best ways to prepare for the board exams is to take notes and make points of the important formulas and definitions. All the concepts are of high importance, as the questions even in the competitive exams, will be based on these. Topics Covered in Class 12 Physics Chapter 13 Nuclei : Composition and size of nucleus, atomic masses, isotopes, isobars; isotones. Radioactivity – alpha, beta and gamma particles/rays and their properties; radioactive decay law. Mass-energy relation, mass defect; binding energy per nucleon and its variation with mass number; nuclear fission and fusion. Also access the following resources for Class 12 Chapter 13 Nuclei, at BYJU'S: Chapter 14: Semiconductor Electronics: Materials, Devices and Simple Circuits In this chapter, most of the questions would be based on the n-type semiconductors, carriers and dopants. True or False questions on semiconductors made of carbon, silicon and germanium and the method of determining energy gap is also explained clearly in this chapter. We will be having questions on finding the output frequency of a half wave and full wave rectifier. You will also be able to find the output signal if two amplifiers are connected in series. Additional exercises to find the number of holes and electrons in atoms of indium, silicon and arsenic are also covered here. Topics Covered in Class 12 Physics Chapter 14 Semiconductor Electronics: Materials, Devices and Simple Circuits : Semiconductors; semiconductor diode – I-V characteristics in forward and reverse bias, diode as a rectifier; I-V characteristics of LED, photodiode, solar cell, and Zener diode; Zener diode as a voltage regulator. Junction transistor, transistor action, characteristics of a transistor; transistor as an amplifier (common emitter configuration) and oscillator. Logic gates (OR, AND, NOT, NAND and NOR). Transistor as a switch. Also access the following resources for Class 12 Chapter 14 Semiconductor Electronics: Materials, Devices and Simple Circuits, at BYJU'S: Chapter 15: Communication Systems Communication Systems are a collection of systems which are used for connection, transmission, interconnection and communication. These systems are arranged into three types like Media, Technology and Application Area. Transducers, sensors, amplifiers and emitters are some of the examples of modern technology which are the components in the modern devices. To obtain a grip on these concepts, students should refer to the best study material available on the internet today. Also access the following resources for Class 12 Chapter 15 Communication Systems, at BYJU'S: Learning these chapters would be overwhelming as lots of concepts are present under each chapter. However, studying these chapters using the short techniques present in the solutions, learning would become more interesting. Students can download NCERT Class 12 Books here. BYJU'S NCERT Solutions for Physics (Class 12): Primary Features The Class 12 Physics NCERT Solutions provided by BYJU'S have the following features: Detailed answers to all logical reasoning questions. Step-by-step solutions for numerical value questions. Informative answers to all theoretical questions. Verified answers provided by highly qualified subject experts. Unlimited PDF downloads (Free). Note: CBSE Class 12 Physics students can bookmark this page in their browser to easily access NCERT Solutions for Class 12 Physics in the future. CBSE Marking Scheme 2023-24 For the academic year 2023-24, the CBSE board has divided the entire curriculum into equal portions. The purpose behind this is to provide sufficient time for the students to learn the basic concepts with ease. According to the marks weightage, students will be able to analyse the chapters which are of more importance from the exam point of view. By covering the entire syllabus, students will be able to improve their logical thinking and systematic approach towards complex questions that will appear in the final exams. CBSE Class 12 Physics Syllabus Course Structure 2023-24 Unit No. Name of Unit Marks Unit–I Electrostatics 16 Chapter–1: Electric Charges and Fields Chapter–2: Electrostatic Potential and Capacitance Unit-II Current Electricity Chapter–3: Current Electricity Unit–III Magnetic Effects of Current and Magnetism 17 Chapter–4: Moving Charges and Magnetism Chapter–5: Magnetism and Matter Unit–IV Electromagnetic Induction and Alternating Currents Chapter–6: Electromagnetic Induction Chapter–7: Alternating currents Unit–V Electromagnetic Waves 18 Chapter–8: Electromagnetic Waves Unit-VI Optics Chapter–9: Ray Optics and Optical Instruments Chapter–10: Wave Optics Unit-VII Dual Nature of Radiation and Matter 12 Chapter–11: Dual Nature of Radiation and Matter Unit-VIII Atoms and Nuclei Chapter-12: Atoms Chapter–13: Nuclei Unit-IX Electronic Devices 7 Chapter–14: Semiconductor -Electronics: Materials, Devices and Simple Circuits Total 70 Why BYJU'S NCERT Solutions are Favoured by Toppers? Many students believe that the NCERT Solutions provided by BYJU'S are the most student-friendly solutions available on the internet. The reliability and accuracy of the solutions provided by us are what makes us the go-to choice for most CBSE students. Completing the NCERT Class 12 Physics Syllabus is easy for the students now using the solutions from BYJU'S. Some key attributes of the NCERT Solutions offered by us are provided below. Highly knowledgeable teachers create the solutions Physics is a subject which has numerous concepts with applications from our daily life. To understand these concepts, students are highly recommended to refer to the best study material available online. We, at BYJU'S, curate the solutions by keeping in mind the understanding ability of Class 12 students. So, the solutions are reliable and precise completely based on the exam pattern of the CBSE board. Gives a variety of problems to practise When it comes to final exam preparation, practise is the only key to attain remarkable score. For this purpose, we at BYJU'S have provided chapter-wise solutions, which can be used by the students in both online and offline mode. The solutions are highly authentic which the students can rely on to prepare well for their board exams. Can be accessed anywhere and at any time Class 12 exam is an important stage in the life of a student. So, choosing the perfect study material is extremely crucial. When it comes to board exam preparation, we at BYJU'S have created the solutions in order to boost confidence among students to answer complex questions effortlessly. The PDF of solutions can be downloaded for free at BYJU'S, which can be used anywhere and at any time while answering the exercise questions from the textbook. Other Free Resources Related to NCERT Solutions for Class 12 Physics Have any questions/issues regarding our NCERT Solutions for Class 12 Physics? Our support team is always available to resolve your queries. Register with BYJU'S and get in touch with them NOW! The correctness of the solutions provided by BYJU'S is the main reason to opt for the solution. The accurate answers provided on the website are in a student-friendly language which makes learning easier.By referring to BYJU'S NCERT Solutions for Class 12 Physics, students can achieve high marks in the finals. Practice is essential to learn and score well in Physics. The students are required to go through the NCERT Solutions thoroughly before the final exams to score well and intensify their question-solving abilities.There are 15 chapters in Class 12 Physics NCERT Textbook. Chapter 1: Electric Charges and Fields Chapter 2: Electrostatic Potential and Capacitance Chapter 3: Current Electricity Chapter 4: Moving Charges and Magnetism Chapter 5: Magnetism and Matter Chapter 6: Electromagnetic Induction Chapter 7: Alternating Current Chapter 8: Electromagnetic Waves Chapter 9: Ray Optics and Optical Instruments Chapter 10: Wave Optics Chapter 11: Dual Nature of Radiation and Matter Chapter 12: Atoms Chapter 13: Nuclei Chapter 14: Semiconductor Electronics: Materials, Devices and Simple Circuits Chapter 15: Communication SystemsNCERT Solutions for Class 12 Physics can be downloaded and viewed from the BYJU'S website in free PDF. At BYJU'S, students can avail the solutions both online as well as download and save them for offline reference. The solutions provided in this website have been solved very accurately by BYJU'S experts in Physics.NCERT Solutions are primarily designed for CBSE students and are based on the latest syllabus prescribed by the CBSE Board. Most of the questions asked in the exams are from these textbooks, which in turn, help to understand the marking scheme and exam pattern.

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