

# **BIBI KAULAN JI PUBLIC SCHOOL, AMRITSAR**

## **SUBJECT-BIOLOGY**

### **CLASS-X**

**TEACHER NAME- SAWAL SURI**

#### **Learning Outcomes**

##### **Ch-6: Life processes**

- Digestive system: role of digestive enzymes in digestion of food
- Aerobic respiration - occurs in presence of oxygen and by-products are carbon di oxide, water and energy
- Anaerobic respiration - occurs in absence of oxygen and by-products are ethanol, carbon di oxide
- Transportation of food and nutrients:Transportation of substances is done by the circulatory system comprising of blood, blood vessels(arteries, veins and capillaries) and heart.
- In plants transportation of water and food take place by xylem(water) and phloem(food)
- Excretory system - The functions of nephron are purification of blood and urine formation.

##### **Ch-8: How do organisms reproduce?**

- DNA plays an important role in reproduction, because chromosomes present in the nucleus of a cell contains information to be transferred to offspring, in the form of DNA.
- Asexual mode of reproduction- the offspring arises from a single parent.

- Sexual reproduction- the offspring arises from two parents of different sexes, by combination of their gametes.
- Modes of asexual reproduction
  1. Fission
  2. Fragmentation
  3. Regeneration
  4. Budding
  5. Vegetative propagation
  6. Spore formation
- Main parts of a flower are sepals, petals, stamens and carpel. Out of this, stamen and carpel are the reproductive parts.
- Unsafe sexual act can also lead to many diseases, called sexually transmitted diseases as well as population is increasing. Therefore, birth control methods are being actively spread today.

### **Ch-9: Heredity And Evolution**

- Give a basic explanation of heredity
- Define dominant and recessive
- Describe how a Punnett Square is used

### **Ch-15: Our Environment**

- Ecosystem and its components
- Biotic and abiotic components.
- Food chain and food web
- Energy transfer through trophic levels
- Ozone layer and its concerns.

## **Chapter 16: Management of natural resources**

- Define natural resources and their conservation
- Sustainable development
- Water harvesting
- Conserving forests
- Conserving coal and petroleum

# **BIBI KAULAN JI PUBLIC SCHOOL, AMRITSAR**

## **SUBJECT-CHEMISTRY**

### **CLASS-X**

**TEACHER NAME- RAJESH PRASHAR**

#### **LEARNING OUTCOMES**

##### **Ch-1: Chemical reaction and equation**

In this unit students are able to learn about Balancing of chemical equation information conveyed and not conveyed by the balanced chemical equation types of chemical reactions, precipitation neutralization oxidation and reduction

##### **Ch-2: Acids bases and salts**

In this unit students are able to know about Definition of acids and bases in terms of furnishing hydrogen ion and hydroxide ion general properties of acids and bases Concept of pH scale importance of pH in our daily life Preparation and properties and uses of sodium hydroxide bleaching powder baking soda washing soda and plaster of Paris

##### **Ch-3: Metals and nonmetals** In days unit students are able to know about

Properties of metals and nonmetals reactivity series formation and properties of ionic compounds

##### **Ch-4: Carbon compounds**

Covalent bonding in carbon compounds versatile nature of carbon and homologous series

##### **Ch-5: Periodic classification of elements**

In this unit students are able to know about Need for the classification of elements mendeleev periodic table modern periodic table variation in properties like valency metallic and nonmetallic character and atomic radius.

**BIBI KAULAN JI PUBLIC SCHOOL, AMRITSAR**

**SUBJECT-COMPUTER**

**CLASS-X**

**TEACHER NAME- RAJBIR KAUR**

**LEARNING OUTCOMES**

**Part-A**

**Ch-1: Communication Skill**

1. In this chapter students would learn about communication skill that how to communicate with different people with different modes of communication.
2. Student will learn about the communication cycle which helps to learn or understand the process of communication.
3. Students would be able to learn the different methods of communication i.e. verbal, non verbal and visual effects.
4. Students will learn about the barriers which arise in the communication process .i.e internal and external errors.
5. Students will learn about the ways of effective communication and factors that effect the communication.

**Ch- 2: Self Management Skill.**

1. Students will learn about the stress, causes of stress and how to manage the stress level.
2. Different techniques to remove the stress level i.e yoga, exercise, meditation etc
3. Students will learn about the ability to work independently and what are the advantages of learning work independently.
4. Students will learn how to become self aware, self regulate, self confidence, self Regulation.

### **Ch-3: Information and communication technology skill.**

1. Students will learn about the advanced technology that helps to operation of the technical things.
2. What is operation system and what are the types of operating system.
3. Students will learn about the file and folder their management and techniques to manage the different devices and also about the antivirus software.
4. Students will learn to clean hardware and software devices
5. Students will learn the different types of viruses their effects and ways to clean the software.

### **Ch-4: Entrepreneurship skill**

1. Students will learn about the entrepreneur and entrepreneurship that what is the need to become an entrepreneur and what is the role of them in society.
2. Student will learn the role of entrepreneur in society and their contribution towards the society.
3. Learning about different types of venture
4. Government role of encouraging entrepreneurship.
5. Learning Skill to become entrepreneur and qualities of entrepreneur.

### **Ch-5: Green Skill**

1. Students will learn about the sustainable development i.e meet the need of the future generation without compromising the present people needs.
2. Tips to smooth running of the present generation.
3. Features and consequences of sustainable development.
4. Efforts of sustainable development.

## **Part-B**

### **Ch-1: Web Application and security**

1. Students will learn about the window 7 basic concepts that are helpful in many ways.
2. Students will learn about the shortcut keys, menus and narrators which helps to Physical impaired people to take advantage in case of eye, ear, and other problems.
3. Students will learn about the Networking, Types of networking and advantages and disadvantages of networking.
4. Students will learn internet topologies which helps to understand networking system.
5. Students would be able to learn introduction of instant messaging i.e. skype, hangouts, what's apps etc.
6. Students will learn about the publishing of the blocks i.e. help to interact with the outer world and make yourself be aware by everyone by means of poetry, novels, sayings etc.
7. Students will learn about the online transactions which helps for online banking, ticket booking, paying bills etc.
8. Learning about the internet security by installing cleaning softwares.

### **Ch-2: Digital documentation**

1. Students will learn about different styles to apply on the document.creating their own styles, importing and exporting styles. Students will learn about the typing features to improve their ability for writing
2. Students will learn about the creation of their own templates and make new from existing templates.
3. Students will learn about creating and customozong table of contents. Inserting symbols, special characters by different tabs and another shortcut ways.
4. Character formatting feature, text wrapping, inserting images etc their steps and by different shortcut ways.
5. Students will learn about the special feature of mail merge for adding main document with different addresses.

## **Ch-8: Electronic Spreadsheet.**

1. Students will learn about to solve mathematical operations and calculations by using computer software i.e- Ms Excel
2. Learning about analysing of data using scenario manager and goal seek options.
3. Formatting and editing techniques by using tabs, shortcut keys and another simple methods.
4. Linking data and spreadsheet with internal and external sources.
5. Managing workbook views, apply cell and Range names to cell in excel for more widely use of different techniques.
6. Creating and using macros and functions.
7. Calculations of different worksheets and workbooks by using sheet references.
8. Learning about sharing a worksheet by dealing s

## **Ch-4: Database Management system**

1. Learning about the database that is how to manage data using database management software i.e Microsoft Access.
2. Learning about the types of databases, database concepts.
3. Learning about data types to store particular type of data.
4. Learning about Manipulation of data, creation of table using ms access.
5. Learning about creation of forms, reports and queries For easy handling of data.



# **BIBI KAULAN JI PUBLIC SCHOOL, AMRITSAR**

## **SUBJECT-MATHS**

### **CLASS-X**

**TEACHER NAME- RANJIT SINGH**

#### **Learning Objectives**

##### **Ch-1:Real Numbers**

1. Basic understanding of rational numbers is very useful in mathematics.
2. To learn about Euclid's division lemma and use it to find HCF of two numbers.
3. To learn about Fundamental theorem of arithmetic and use it to find HCF and LCM of numbers.
4. To relate concept of HCF and LCM to real life situations and appreciate their usefulness for various decisions.
5. To study about properties of irrational numbers and prove that square root of prime numbers is irrational.
6. To study about terminating and non terminating decimal expansions.

##### **Ch-2: Polynomials**

1. Basic understanding of algebra and is very useful in understanding quadratic equations.
2. To learn about zeroes of a polynomials and relate these to their graph.
3. To find zeroes of a Polynomial.
4. To learn relationship between zeroes and coefficients and its verification.
5. To find a polynomial whose zeroes or sum, product of zeroes is given.
6. To divide a polynomial with a polynomial.
7. To verify division algorithm.

### **Ch-3: Linear Equations in two variables**

1. Basic understanding of pair of linear equations and is very useful in solving various mathematical problems.
2. To learn about general form of pair of linear equations in two variables.
3. To solve given pair of linear equations by graphical method.
4. To learn about consistency and inconsistency of given pair by equating coefficients.
5. To solve given pair of linear equations by algebraic methods.
6. To solve given pair of non linear equations by reducing into linear equations.

### **Ch-4: Quadratic Equations**

1. Quadratic equations are used to solve many mathematical problems.
2. To check if the given equation is a quadratic equation.
3. To represent given situation in the form of a quadratic equation.
4. To find the roots of a quadratic equation by factorization.
5. To derive quadratic formula and use it to find roots.
6. To learn about discriminant and nature of roots.

### **Ch-5: Arithmetic Progression**

1. Students will get the idea of series and progression.
2. Appreciation of General terms will help in higher classes to understand various concepts.
3. To identify if a given series of numbers form an arithmetic progression.
4. To identify the first term and the common difference of a given A P.
5. To find the nth term of an A P.
6. To find the sum of n terms of an A P.

## **Ch- 6: Triangles**

1. Study of triangles and their similarity find many applications in real life situations such as in the study of architecture and related fields.
2. It is very useful in determining heights and distances.
3. Helps to appreciate the study of similar figures.
4. To prove Basic Proportionality Theorem and its converse.
5. To explore various criteria for similarity of triangles.
6. To study about areas of similar triangles.
7. To study about Pythagoras Theorem and its converse.

## **Ch-7: Coordinate Geometry**

1. Coordinate Geometry is very useful to determine the latitude and longitude of a given place or object.
2. Computer graphic designers also refer to the coordinates on the computer screen to create figures and computer animations.
3. Coordinate geometry is widely used in art, buildings architecture, design and cloth manufacturing.
4. It is also useful in space exploration.
5. Students will learn and apply distance formula and section formula.
6. They will also learn to find the coordinates of a point that divides a line segment in a given ratio.

## **Ch-8: Trigonometry**

1. It is very useful in the study of physics, engineering, astronomy and chemistry.
2. Trigonometry helps in various fields such as optics and statics.
3. Students will learn trigonometric ratios of acute angles of a right angled triangle.
4. Students will learn about t-ratios of complimentary angles which is very useful in higher classes.
5. Students will derive and use trigonometric identities.

### **Ch-9: Applications of trigonometry**

1. Measurement of heights and distances with the help of trigonometry is used to measure distances of difficult to reach places.
2. It is used in many applications of civil engineering.
3. Students will learn about terms line of sight, angle of elevation, angle of depression.
4. Students will learn to calculate heights and distances using trigonometric ratios.

### **Ch-10: Circles**

1. Students will learn about tangents and secants of a circle, which are useful in the study of engineering and architecture.
2. Students will learn to calculate length of a tangent drawn from an external point to a circle.
3. Students will learn to prove that tangent at any point of a circle is perpendicular to radius at point of contact.
4. Student will appreciate that lengths of tangents drawn from an external point to a circle are equal.

### **Ch-11: Constructions**

1. Construction techniques are useful in the study of architecture and mechanical engineering drawings.
2. To learn how to divide a line segment in a given ratio using a compass.
3. Understanding the term scale factor which is useful to make various maps and models.
4. To construct a triangle similar to a given triangle as per given scale factor.
5. To construct a pair of tangent from an external point to a circle.

### **Ch-12: Areas related to Circles**

1. Students will learn about various terms related to a circle.
2. They will learn about chord, radius, diameter, arc, segment, sector and circumference of a circle.
3. To learn to calculate length of arc, area of segment, area of sector and area of combination of plane figures.

4. Measurement of area of sector is helpful in designing in manufacturing industry.

### **Ch-13: Surface areas and Volumes**

1. Measurement of surface areas and volumes is done in every sphere of daily life.
2. Basic requisite in art and craft field.
3. Study of ratios and volumes is useful in industrial applications.
4. Various construction and architectural activities require study of surface areas and volumes.

### **Ch-14: Statistics**

1. The concept of mean, median and mode is used to find central tendencies in different situations.
2. Students will learn about ogive which is based on ogival curves used in buildings made in Gothic architecture.
3. To learn to calculate mean by different methods.
4. To learn to calculate mode and median of grouped data.
5. To learn interrelation between mean, median and mode.
6. To learn to interconnect less than and more than type data.

### **Ch-15: Probability**

1. Students will get an idea of theoretical probability. The concept is very helpful in the higher classes.
2. Probability is used in manufacturing industry to make various decisions.
3. Probability is used in the study of games of chance.
4. Probability is used in weather forecasting.
5. Students will learn various terms used in the study of probability such as equally likely events, elementary events, compliment of an event, sure event and impossible event.

# **BIBI KAULAN JI PUBLIC SCHOOL, AMRITSAR**

## **SUBJECT-PHYSICS**

### **CLASS-X**

**TEACHER NAME- SUKHBIR SINGH**

#### **Learning Outcomes**

##### **Electricity**

After this lesson, students should be able to:

- Relate the flow of electrons to current.
- Correlate the flow of water with the flow of electricity in a system.
- Explain that static electricity is the buildup of a charge (either net positive or net negative) over a surface.
- Identify various electrical symbols and circuits
- Compare and contrast two forms of electricity—current and static.
- Explain the advantages of parallel circuit over series circuit.

##### **Magnetic Effects of Electric Current**

After this lesson, students should be able to:

- Explain magnetic field and properties of magnetic field lines.
- State various rule (right hand thumb rule, Maxwell screw rule) to find the direction of magnetic field lines of force.
- Explain the construction and working of electric motor.
- Explain faraday's laws of electromagnetic induction.

## **Light : Reflection and Refraction**

By the end of this lesson, students will be able to:

- state the law of reflection .
- describe specular and diffuse reflection.
- Differentiate between various kinds of mirrors.
- Differentiate between various kinds of lenses.
- Draw Ray diagrams in case of mirrors and lenses at different positions of the object.
- State the law of refraction of light.
- Explain the power .

## **Human eye and colourful world**

By the end of this lesson, students will be able to:

- Explain the dispersion, cause of dispersion.
- How rainbow is formed?
- Explain atmospheric refraction.
- Some phenomena occurring due to atmospheric refraction like twinkling of stars, red colour of sun during sunrise or sunset, oval shape of sun during sunset or sunrise.

# **BIBI KAULAN JI PUBLIC SCHOOL, AMRITSAR**

## **SUBJECT-ENGLISH**

### **CLASS-X**

**TEACHER NAME- MANJU PRASHAR**

#### **Learning Outcomes**

##### **Book - First flight**

##### **Ch :A letter to God**

1. To make them understand importance of Faith.
2. To make them believe that faith can move mountains.
3. To Develop such a faith in them, to develop confidence in them.

##### **Ch : Nelson Mandela: long Walk to Freedom**

1. Learn that individual can challenge unjust system.
2. Create fairer society.
3. Learn no exploitation of Man by man.
4. Believe in equality of men and women
5. No room for racialism

##### **Ch : two stories about flying**

1. To inculcate the moral values.
2. To enhance the vocabulary.
3. Learn that no one attains success instantly.
4. Learn that have to get success over Terror

##### **Ch : from the diary of Anne Frank**

1. Students will gain an understanding of the fact that people often like or dislike other people.
2. Learn that we have to express our feeling freely.



3. Be confident
4. Develop your creativity

**Ch: the hundred dresses**

1. Always stand against bullies
2. Adjust yourself in an environment.
3. Any kind of discrimination does torture those who suffer it silently.
4. Never tease anyone for their poverty.

**Poem Dust of snow**

1. Learn that goodness helps the man to change his mind.
2. Decided to live, forget the regret and sorrow to enable healing.
3. Learn that the little things in life can make huge changes in our future.

**Poem : Fire and ice**

1. To enable the students to see how poetry illuminates the human condition.
2. Encourage the students to show their creativity.
3. Learn that we have to control our Desires

**Poem : A tiger in the zoo**

1. To enable the students to understand the dangers of deforestation and blessing of forestation.
2. To enable the students to understand that all animals will be happy only in their natural habitat.
3. Understand the responsibility of present generation in preserving environment and earth.

**Poem: the ball poem**

1. Understand that we have to accept the challenges of life.
2. Learn that we should move on with the changing time.

3. Learn that it is very difficult to deal with the loss but it must be done.
4. Understand that we have to cherish every moment of life.

**Poem: Amanda**

1. Learn and enjoy the theme and language.
2. Students identify the connection To words aur phrases that that resonate resonate with other things
3. To enable the students enrich their vocabulary.

**Poem : Animals**

1. Learn that don't run after material other than their food.
- 2 understand that humans have lost the token of love and understanding.
- 3 give care and love for wild animals.

**Book : footprints without feet**

**Ch : The triumph of surgery**

1. To enhance the four skills among pupils.
2. It depicts love for animals.
3. To understand nature of animals and their habits.
4. Don't try to overfed animals, trade them as an animal not as your on babies.
5. Try to make healthy relationship with animals.

**Ch: The thief story**

1. Don't trust blindly.
2. It depicts that self realisation is more powerful than any other thing.
3. Don't break trust of those person who trust you blindly.
4. It depicts that education is must for everyone.

**Ch: Footprints without feet**

1. To build greater confidence and proficiency in oral and written communication.
2. Never misuse of power.
3. Never break law.
4. Help the needy person with your power.

**Ch : the making of a scientist**

1. To encourage the learner for their inclination towards beginning with small discoveries and encourage the Habit thereof.
2. To make them learn about Richard ebright and his journey to become scientist.
3. Learners can get knowledge of various stage, species and growth of butterflies.
4. Learners can get ample knowledge about the theory of cell.

**Ch :The Necklace**

1. We should be what we are. Fake Pride is the course of our suffering.
2. Face the reality of the life bravely.
3. Happy be happy whatever given by God.
4. Accept all the situation happily.

**Ch : The Hack Driver**

1. Don't break the law.
2. Never cheat anybody.
3. Be loyal to that person who believe you blindly.
4. Learn that not to disguise any person.

**Ch :Bholi**

1. To sensitize the students to the importance of education.
2. Learn the importance of emotional security and family support for children.
3. Learn the need of love, encouragement and education for the disabled to fight against their odds.