

ACADEMIC PLANNER 2022-2023 (S.D PUBLIC SCHOOL.PITAM PURA.DELHI)

CLASS X

SCIENCE

| Date/day | CONTENTS | Teaching pedagogy | Assignments given | EXPERIMENT/ACTIVITY |
|----------------|--|--|------------------------------------|---|
| April 1-15 | | | | |
| No. of days-10 | | | | |
| Phy. | Chap-10 Light- Reflection & Refraction:Reflection of light, spherical mirrors | Lecture cum demonstration | Intext Questions | To Determine the focal length of Concave mirror and Convex lens by obtaining the image of distant object. |
| Chem. | Chap-1 : Chemical Reactions & Equations | Direct instruction and demonstration method | Intext Questions | |
| | Balancing a chemical equation | | | To perform &observe the following reactions & classify them into |
| | Types of chemical reactions - Combination reaction | | ONLINE EDUCOSOFT ASSESSMETS | (a) combination reaction |
| | Decomposition reaction,Displacement reaction . | | | (b) decomposition reaction |
| | | | | (c) displacement reaction |
| | | | | (d) double displacement reaction |
| Bio. | Chap- 6 : Life processes | | | |
| | Nutrition,Autotrophic Nutrition in plants and Heterotrophic | Project based | | |
| | Nutrition in human beings | | | |
| April 16-30 | | | | |
| No. of days-13 | | | | |
| Phy. | Chap-10 Light- Mirror formula , image formation,Refraction | | Intext Questions | To Determine the focal length of Concave mirror and Convex lens by obtaining the image of distant object. |
| Chem. | Chap -1 : Chemical Reactions and Equations | | Intext Questions | |
| | Types of chemical reactions- double displacement , precipitation, | | | |
| | oxidation & reduction (redox) , Application of oxidation in daily life: corrosion and rancidity | | TBQ and assignment | |
| Bio. | Chap-6 : Life Processes | | TBQs and assigment | |
| | Types of respiration , respiratory system, | | | |

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| | transportation - structure of heart, blood vessels , lymph | | ONLINE EDUCOSOFT ASSESSMETS | |
| | Transportation in plants, transport of water and food , excretion in human beings and in plants | | | |
| MAY 1-15 | | | | |
| No. of days-10 | | | | |
| Phy. | Chap-10 Light- image formation by lenses | | Intext Questions | To trace the path of ray of light passing through a rectangular glass slab. |
| Chem. | Chap -2 : Acid, Bases and Salts | | | |
| | Definitions of acids and bases, examples & uses, physical properties , indicators, strength of acids & bases | Observation and Kinesthetic learning | Intext Questions | To study the properties of acids & bases by reaction with: (1) Litmus solution (2) Zn metal (3) Solid sodium carbonate |
| Bio. | Chap-7 : Control and Coordination | | | |
| | Nervous system, reflex action, human brain, action caused by brain | Crossword puzzles and quiz | TBQs and assignment | |
| | | | ONLINE EDUCOSOFT ASSESSMETS | |
| | CLASS TEST- I (2 MAY-10 MAY) 20 MARKS (4th May 2022) | | | SYLLABUS CHAPTER-1 CHEMICAL REACTIONS AND EQUATIONS CHAPTER-6 LIFE PROCESSES (till topics covered) CHAPTER-10 LIGHT: REFLECTION AND REFRACTION (till topics covered) |
| MAY 16-31 | | | | |
| No. of days-12 | | | | |
| Phy. | Chap-10 Light- lens formula , power of lens | | TBQs and assignment | |
| Chem. | Chemical properties of acids and bases, a) Reaction of acid & bases with metals, metal carbonates, metal bi-carbonates b) reaction of metallic oxide with acids & reaction of non metallic oxide with bases c) Reaction of acids and bases with each other | | Intext Questions | |
| Bio. | Chap-7 : Control and Coordination Contd. | | | |

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| | Coordination in plants, immediate response to stimulus | | TBQs and assignment | |
| | | | ONLINE EDUCOSOFT ASSESSMETS | |
| SUMMER VACATIONS | | | | |
| July 1-15 | | | | |
| No. of days-12 | | | | |
| Phy. | Chap-11 Human eye and colourful world: Functioning of lens in human eye, Defects of vision and their corrections | Discussion with audio-visual aids | Intext Questions | To draw the images of an object formed by a convex lens when placed at various positions |
| Chem. | Chapter 2 : pH and its importance, chemicals from common salts- sodium hydroxide, bleaching powder, baking soda, washing soda, POP (Plaster of Paris) | | TBQ and assignment | To find the pH of the following solutions using a pH paper. |
| | | | | (1) Dil. HCl |
| | | | | (2) Dil. NaOH solution |
| | | | | (3) Dil. Ethanoic acid |
| | | | ONLINE EDUCOSOFT ASSESSMETS | (4) Lemon juice |
| | | | | (5) Water |
| | | | | (6) Dil. Sodium bicarbonate |
| Bio. | Chap-7 : Control and Coordination Contd. movements due to growth, hormones in animals | | | |
| | | | | To prepare a temporary mount of a leaf peel to show stomata |
| July 16- 31 | | | | To show experimentally that carbon dioxide is given out during respiration |
| No. of Days-13 | | | | |
| Phy. | Chap-11 Human eye and colourful world : Refraction in prism ,Dispersion of light, scattering of light, Applications in daily life | Lecture cum demonstration | TBQs and assignment | To trace the path of ray of light passing through a glass prism. |
| Chem. | Chap-3 Metals and Non-Metals- Physical Properties of metals and non-metals Chemical properties: Reaction of metals with air, water and acids | Demonstration method and flip cassroom | Intext Questions | To observe the action of Zn, Fe, Cu, Al on following salts- ZnSO ₄ , FeSO ₄ , CuSO ₄ , Al ₂ (SO ₄) ₃ And arrange the metals in order of decreasing reactivity |
| Bio. | Chap-8 How Do Organisms Reproduce - | | | |
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| | Variation and its importance, asexual reproduction - fission, fragmentation, regeneration, budding, vegetative propagation, spore formation, | Observation based | TBQs and assignment | To study a) Binary fission in amoeba, b) Budding in yeast and Hydra with the help of prepared slides |
| | | | ONLINE EDUCOSOFT ASSESSMENTS | |
| | CLASS TEST- II (25 JULY-2 AUG) 20 MARKS (26 July 2022) | | | SYLLABUS- CHAPTER-1 CHEMICAL REACTIONS AND EQUATIONS (till topics covered) CHAPTER-6 LIFE PROCESSES (till topics covered) CHAPTER-10 LIGHT: REFLECTION AND REFRACTION (till topics covered) |
| Aug 1-15 | | | | |
| No. of days-9 | | | | |
| Phy. | Chap-12 : Electricity | | | |
| | Electric current, potential difference, | | Intext Questions | |
| Chem. | Reaction with metal salt solution, Reactivity series, basic metallurgical processes | | Intext Questions | |
| Bio. | Chap-8 How Do Organisms Reproduce Contd. - sexual reproduction in plants and in human beings | | ONLINE EDUCOSOFT ASSESSMENTS | |
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| Aug.16-31 | | | | |
| No. of days-13 | | | | |
| Phy | Chap-12 : Electricity - circuit diagram, Ohm's law | Lecture cum demonstration | Intext Questions | To verify Ohm's Law. |
| Chem. | Chap-3 Metals and Non-Metals- Reaction between metals & non metals, ionic bond and ionic compounds, Properties of ionic compounds, corrosion of metals & its prevention | | TBQ and assignment | |
| Bio. | Chap-8 How Do Organisms Reproduce Contd. | | TBQs and assignment | |
| | Reproductive health need and methods of family planning | Role plays | ONLINE EDUCOSOFT ASSESSMENTS | |
| Sep 1-15 | | | | |
| No. of days-12 | | | | |

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| Phy | Revision | | | |
| Chem. | Revision | | | |
| Bio. | Revision | | | |
| | | | | REVISION and NOTE BOOK ASSESSMENT-I |
| | | | | |
| Sep 16-30 | TERM-1 EXAMINATION (12 SEPT-28 SEPT 2022.) 16 SEPT 2022 | | | |
| No. of days-13 | | | | HALF YEARLY EXAM: SEPTEMBER (SCIENCE) |
| | | | | Chap-1 Chemical Reactions and Equations |
| | | | | Chap-2 Acid bases and salts |
| | | | | Chap-3 Metals & Non metals (till topics covered) |
| | | | | Chap- 6 Life processes |
| | | | | Chap-7 Control and coordination |
| | | | | Chap-10 Light-Reflection and Refraction |
| | | | | Chap-11 Human eye and colourful world |
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| Oct 1-15 | | | | |
| No. of days-8 | | | | |
| Phy | Chap-12 : Electricity : Arrangement of resistance-in series & in parallel | Oservation based | Intext Questions | 1) To determine the equivalent resistance of two resistances when connected in parallel. 2) To determine the equivalent resistance of two resistances when connected in series. |
| Chem. | Ch 4: Carbon and its compound Bonding in carbon, saturated & unsaturated compounds, Homologous Series, | Direct instruction | Intext Questions | |
| Bio. | Chap- 9 Heredity & Evolution Contd.-Heredity, Mendel's contribution, trait expression Sex determination. | | TBQs and assignment | |
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| | | | ONLINE EDUCOSOFT ASSESSMETS | |
| OCT 16-31 | | | | |

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| No. of days-10 | | | | |
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| Phy | Chap-12 : Electricity : Heating effects of electric current ,electric power | | TBQs and assignment | |
| Chem. | Nomenclature of carbon compounds | | Intext Questons | |
| Bio. | CHAP 15 OUR ENVIORNMENT | | | |
| | Addition of waste, ecosystem,its components, food chain & Effect of activities on enviornment, ozone layer, its depletion, garbage management | Field trips | TBQs and assignment | To identify the different parts of an embryo of a dicot seeds.(Pea, gram & Red kidney bean) |
| | Chap 16 Management of Natural Resources | Portfolios | ONLINE EDUCOSOFT ASSESMETS | |
| | Students to read the chapter and not to be assessed | | | |
| | in the year end examination will be internally | | | |
| | assessed as periodic assessment or portfolio | | | |
| Nov 1-15 | | | | |
| No. of days-11 | | | | |
| Phy. | Chap-13 Magnetic Effects of Electric Current: | | | NOTE BOOK ASSESSMENT-II |
| | Magnetic field & magnetic field lines,magnetic field due to current carrying conductor | | Intext Questons | PRACTICAL SKILLS ASSESSMENT-II |
| Chem. | Chemical properties of carbon compounds, soaps and detergents | | TBQs and assignment | |
| Bio. | REVISION | | | |
| | | | ONLINE EDUCOSOFT ASSESMETS | |
| | CLASS TEST- III (1 NOV-9 NOV) 20 MARKS (2 NOV 2022) | | | SYLLABUS- CHAPTER- 4 CARBON AND ITS COMPOUND (till topics covered) CHAPTER-8 REPRODUCTION IN LIVING ORGANISMS CHAPTER-12 ELECTRICITY |
| Nov.16-30 | | | | |
| No. of days-13 | | | | |
| No. of days-13 | | | | |
| Phy. | Chap-13 Magnetic Effects of Electric Current | | | |
| | magnetic field due to a current carrying coil or solenoid,Force on current carrying conductor, Fleming's L.H.R, Direct Current, Apternating Current,Frequency of AC,Advantage of AC over DC, Domestic electric circuit Revision | | TBQs and assignment | |
| Chem. | REVISION | | ONLINE EDUCOSOFT ASSESMETS | |

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| Bio. | | | | |
| Dec.1-15 | | | | |
| No. of days-12 | | | | |
| Phy | | | | |
| Chem. | PREBOARD (5 Dec-21 Dec) 9 Dec 2022 | | | Complete Syllabus |
| Bio. | | | | |
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| Dec.16-31 | | | | |
| No. of days-14 | | | | |
| Phy | Revision for Board Examination | | | |
| Chem. | | | | |
| Bio. | | | | |
| Jan 1-15 | WINTER BREAK | | | |
| No. of days-3 | | | | |
| Jan 16-31 | | | | |
| No. of days-13 | Revision for Board Examination | | | |
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| Feb.1-15 | Revision | | | |
| No. of days-12 | | | | |
| Feb.16-28 | | | | |
| No. of days-10 | | | | |
| March 1-31 | | | | BOARD EXAMINATION |
| No. of days-25 | | | | |
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