

Sl.No	Name of the lesson	Learning outcomes
1.	The Last Lesson	The students understand the importance of learning their mother-tongue They improve their language skills They get to know more about the history of French They inculcate the value of punctuality and learn not to procrastinate anything in life They need to understand the need to make use of the available opportunities
2.	Lost Spring	The learners understand the need to raise their voice against injustice such as child labour They develop decision making and problem solving skills They enhance their analytical thinking skill They become considerate for the poor
3.	Deep Water	The pupils improve their vocabulary They improve their listening and speaking skills They inculcate the values of hard work and determination
4.	The Rattrap	The students learn to provide a synopsis of the story effectively They realize the value of honesty and transparency to enjoy liberty and freedom They understand the value of being compassionate and kind
5.	Indigo	The learners are capable of engaging in healthy discussions in an analytical and creative manner They get an understanding of the beginnings of civil disobedience movement They learn to extract ideas They enhance their communication skills
6.	My Mother At Sixty six	The students learn to appreciate poetry They recite the poem with proper intonation They develop interest in poetry They learn to write the critical appreciation of the poem They learn to recognize the poetic devices and rhyme scheme
7.	Elementary School Classroom in a Slum	They become aware of the social injustices and inequalities prevailed in the society They understand the literary meaning hidden in the poem They develop empathy and sympathy for others They understand the importance of literacy in improving

		the standard of living
8.	Keeping Quiet	The students learn to introspect themselves and strengthen their strengths They understand the importance of meditation for inner peace They realize the need to stop clamour and bloodshed for peace and harmony in life
9.	A Thing of Beauty	The students learn to perceive beauty as a source of inspiration and joy They appreciate the beauty They recite the poem with proper tune They improve their writing skill
10.	Aunt Jennifer's Tigers	The learners develop skills to comprehend the literary meaning They inculcate the habit of reading good poems They enhance their listening and writing skills
11.	The third Level	They develop hobbies They enhance their vocabulary and language skills
12.	The Enemy	The pupils learn to value humanity above everything else They develop the skill to right choices according to the situations They enhance their vocabulary
13.	Should Wizard Hit Mommy?	The students adopt with a range of styles to employ their communication skills They learn to engage in healthy discussions They try to connect the story with their life experiences They learn to appreciate the content and express their views appropriately
14.	On The Face of it	They learn to face the challenges of life bravely They learn to accept the reality They develop positive outlook
15.	Evans Tries O-Level	The learners enhance their vocabulary They improve their language They develop their writing and reading skills
16.	Writing Skills	They learn to express their ideas without grammatical error They use correct format creatively
17.		

## चिन्मय विद्यालय तारापुर

कक्षा : 12 वीं

विषय : हिंदी आधार ( 2020-2021 )

### हिंदी भाषा सीखने का प्रतिफल

क्र.सं	पाठ का नाम	मूल्य	सीखने का प्रतिफल
	काव्य खंड		
1	एक गीत	कर्तव्यनिष्ठा और समय का सदुपयोग	समय पर कार्य करेंगे और अनुशासित जीवन व्यतीत करेंगे।
2	पतंग	प्रकृति-प्रेम	निर्भय होकर जीवन की चुनौतियों का सहर्ष सामना कर सकेंगे।
3	कविता के बहाने	मानसिक विकास एवं प्रकृति-प्रेम	रचनात्मक एवं सर्जनात्मक कार्य कर सकेंगे।
4	कैमरे में बंद अपाहिज	वसुधैव कुटुंब की भावना का विकास	दैनिक जीवन में असमर्थ लोगों के प्रति संवेदनशील नज़रिया रख सकेंगे।
5	सहर्ष स्वीकारा है	बौद्धिक विकास	जीवन की चुनौतियों का सहर्ष सामना कर सकेंगे।
6	उषा	प्रकृति-प्रेम	प्रकृति के साथ एक जीवंत परिवेश की कल्पना को अपने जीवन में अनुभव कर सकेंगे।
7	1 कवितावली 2 लक्ष्मण मूर्च्छा और राम का विलाप	आध्यात्मिक विकास, ईश्वर-भक्ति एवं भ्रातृप्रेम	ईश्वरीय कृपा का जीवन में अहसास और भाईचारे के साथ जीवन में मिलजुल कर रहना सीख सकेंगे।
8	1 ऋबाइयाँ 2 गज़ल	वात्सल्य-प्रेम एवं भारतीय संस्कृति	जीवन में पर्व-एवं त्योहार के महत्त्व को जानेंगे और परिश्रमी बनेंगे।
	गद्य खंड		
9	भक्तिन	सेवा, त्याग, स्वच्छता एवं कर्तव्यपरायणता	जीवन में सेवा का भाव, त्याग पूर्ण जीवन, साफ-सफाई का पालन करते हुए कार्य के प्रति निष्ठावान बनेंगे।
10	बाज़ार दर्शन	भारतीय संस्कृति एवं देशप्रेम	सादा जीवन उच्च विचार का जीवन में पालन करते हुए स्वदेशी को बढ़ावा देंगे और सबके प्रति समानता रखेंगे।
11	काले मेघा पानी दे	बौद्धिक विकास	अंध विश्वास के प्रति सावधान रहेंगे एवं वैज्ञानिक सोच के साथ जीवन में जल की बचत करेंगे।
12	पहलवान की ढोलक	भारतीय संस्कृति एवं वसुधैव कुटुंबकम्	भारतीय सभ्यता का रखरखाव करने के साथ ही महामारी से जीतने की प्रबल इच्छाशक्ति को बनाए रखेंगे।

13	नमक	देशप्रेम	देशप्रेम की भावना के साथ जीवन में बड़ों के प्रति आदर का भाव रखेंगे।
14	बाबा साहेब भीमराव आंबेडकर	समानता , नागरिक कर्तव्य और मानवता	सबसे मिलजुल कर रहना, अपनी ऋचि के अनुरूप व्यवसाय करना एवं नागरिक कर्तव्य को जानेंगे।
	पूरक पाठ्यपुस्तक वितान		
1	सिल्वर वैडिंग	भारतीय संस्कृति	ग्रामीण परिवेश और हमारे पर्व-त्योहार की उपयोगिता को जानेंगे। बड़ों के प्रति आदर एवं संयुक्त परिवार के महत्त्व को जानेंगे।
2	जूझ	बौद्धिक विकास एवं मानसिक विकास	कर्तव्यनिष्ठा, लगन, परिश्रम से जीवन में आगे बढ़ने के लिए प्रवृत्त होंगे और ज्ञान के महत्त्व को जानकर सृजन कार्य करेंगे।
3	अतीत में दबे पाँव	भारतीय सभ्यता एवं संस्कृति	अपनी सभ्यता एवं संस्कृति के महत्त्व को जानकर गर्व का अनुभव करेंगे। जल की बचत के प्रति सचेत होंगे।
4	डायरी के पन्ने	वसुधैव कुटुंब की भावना	लेखन कार्य के प्रति प्रवृत्त होंगे। संवेदनशील जीवन व्यतीत करेंगे।

Sr.No	Chapters	Learning Outcomes
1	Relations and functions	To differentiate between different types of functions. To find given relation is a function or not.
2	Inverse Trigonometric Functions	To find range, domain, principal values and graph of inverse trigonometric functions.
3	Matrices	To find order, types and operations on matrices. To find inverse by elementary transformations.
4	Determinants	To calculate determinants of square matrix. To find minors, cofactors and adjoint of a matrix.
5	Continuity and Differentiability	To find derivatives of composite functions, exponential and logarithmic functions and functions in parametric form.
6	Applications of Derivatives	To find rate of change of quantities, increasing and decreasing functions, tangent and normal, maxima and minima.
7	Integrals	To find integrals of different functions by substitution, partial fraction and by parts. To study basic properties of definite integrals.
8	Applications of Integrals	To find area under curves and area of triangle.
9	Differential Equations	To find solution of differential equations by method of variable separable, solutions of homogeneous and linear differential equations.
10	Vector Algebra	To acquire knowledge of vectors and properties and application of scalar and cross products.
11	3-D geometry	To find cartesian and vector equations of lines and planes. Angle between two lines or two planes.
12	Linear Programming	To mathematically formulate L.P. problems and find their solutions graphically.
13	Probability	To acquire knowledge of conditional probability and Bayes Theorem.

Sr No.	Chapter's Name	Learning Outcomes
1	Electric charges and fields	To help pupil gain knowledge and understanding about electric charges and its properties, Coulomb's law, electric field lines formed due to electric field, Gauss' law and its application.
2	Electrostatic potential and capacitance	To help pupil gain knowledge and understanding about electrostatic potential and potential difference. To help pupil understand about potential due to an electric dipole, capacitors and its combination.
3	Current Electricity	To help pupil gain knowledge and understanding about resistance of various materials, combination of resistors and cells. To help pupil understand about the working of Wheatstone bridge, potentiometer.
4	Moving charges and magnetism	To help pupil acquire knowledge and understanding about magnetic field formed due to magnets and current carrying elements like solenoid and toroid. To help pupil learn about the working of moving coil galvanometer
5	Magnetism and matter	To help pupil acquire knowledge and understanding about magnetic strength at various points due to a bar magnet. To help pupil learn about the Earth's magnetism and properties of various magnetic materials.
6	Electromagnetic induction	To help pupil gain knowledge and understanding about effects of changing magnetic field produced due to current carrying element and working of AC Generator.
7	Alternating Current	To help pupil gain knowledge and understanding about the RLC circuit along with the phasor diagrams. To help pupil learn about the working principle of transformer.
8	Electromagnetic waves	To help pupil acquire knowledge and understanding about the production, propagation of electromagnetic waves, electromagnetic spectrum and uses of different types of electromagnetic waves.

Lesson name	Learning outcomes
Solid state	Pupils learn about crystalline and amorphous solids and various types of crystalline solids; Bravais lattice; lattice parameters; packing efficiency; voids; different electrical and magnetic properties and defects in solids.
Solutions	Pupils learn different types of solutions and various concentration terms and colligative properties associated to it; calculation of molar masses; van't Hoff's factor in learning abnormal molar masses; ideal solutions and their deviation; azeotropic mixtures.
Electrochemistry	Pupils learn various types of electrochemical cells; measurement of half cell potential using reference electrode; use of Nernst equation to find cell emf; equilibrium constant of a reaction; electrolysis process and application of various cells in everyday life in vehicles etc.
Chemical kinetics	Pupils learn about kinetic terms of chemical reaction; feasibility of reaction and factors affecting on rate constant; application of kinetics in devising any chemical process in chemical plant.
Surface chemistry	Pupils learn adsorption and its types; application of phenomenon in catalysis; adsorption isotherm also learn electrophoresis and electro-osmosis; various preparation methods of sol.
General principles and process of isolation of elements	Pupils learn about various metallurgical processes such as concentration of ore; chemical leaching; reduction of ore using Ellingham diagram; use of various types of furnaces for reduction; different metal refining processes and applications of metals in daily life.
p-Block elements	Pupils learn location; physical and chemical properties of 15 to 1 group elements and their important compound and anomalous behaviour showing element.
d-block and f-block elements	Pupils learn location; occurrences; ores; physical and chemical properties of d and f-block elements; pupils learn lanthanide contraction and its consequences; important applications of some f-block elements.
co-ordination compounds	Pupils learn here new type of compounds with the help of molecular orbital theory; LCAO formation; matching orbital concept; cfse energy; inner and outer orbital complex their nomenclature and stability with magnetic property.
Haloalkanes and haloarenes	Pupils learn types; nomenclature; methods of preparation; physical properties and chemical properties of haloalkanes and haloarenes; also learn stereochemistry and some important compounds with its applications in day today life like chloroquine; DDT etc.
Alcohols; phenols and ethers	Pupils learn types; nomenclature; isomerism; preparation methods; physical properties and chemical reactions of alcohols; phenols and ethers. pupils also learns some important alcohol compounds like ethanol and methanol.
Aldehydes; ketones and carboxylic acids	Pupils learn nomenclature; methods of preparation; physical properties and chemical reaction of aldehydes; ketones and carboxylic acids. pupil also learn some important compounds of acids like methanoic acid and acetic acid.
Amines	Pupils make out in different types of amines; their nomenclature; methods of formation; physical properties and their some important chemical reactions.
Biomolecules	Pupils learn about carbohydrates; monosaccharides and disaccharides and its formation; anomeric carbon and optical activity. also learn about proteins and nucleo proteins such as DNA and RNA with its functions
15) Polymers	Pupil learn different monomer units used in making synthetic fibre and plastics like PE; PVC; Teflon ets; process of polymerization and its types. Use of PHBV in making biodegradable polymers; application of polymers in daily life.
16) chemistry in everyday life	Pupils learn about various types of medicines and its mode of action in body; learn about artificial sweetening agents and use of detergents and its cleaning actions.

S.no	Chapter	Learning Outcome
1	Reproduction in organisms	<ul style="list-style-type: none"> <li>• Pupil learns about the biological process reproduction.</li> <li>• Pupil advances their knowledge about types of reproduction in different organisms [unicellular and multicellular].</li> </ul>
2	Sexual reproduction in flowering plants	<ul style="list-style-type: none"> <li>• Pupil learns about the flower and its floral parts.</li> <li>• Pupil builds their understanding on the events of sexual reproduction [i.e. pre-fertilization events in male and female reproductive structures, events of pollination, fertilization event and post fertilization events] that occur on flower.</li> </ul>
3	Human Reproduction	<ul style="list-style-type: none"> <li>• Pupil learns about the structure of male and female reproductive system.</li> <li>• Pupil advances their knowledge about the events of sexual reproduction [i.e. pre-fertilization events in male and female, process of fertilization and implantation, stages of embryo development and process of birth and lactation] in human beings.</li> </ul>
4	Reproductive Health	<ul style="list-style-type: none"> <li>• Pupil learns about reproductive health program implemented by the center.</li> <li>• Pupil gain insights into the strategies adopted for birth control.</li> <li>• Pupil also advances their knowledge about sexually transmitted diseases and infertility cases.</li> </ul>
5	Principles of inheritance	<ul style="list-style-type: none"> <li>• Pupil learns about the principle of inheritance proposed by Mendel that governs the expression of characters.</li> <li>• Pupil advances their knowledge on how alleles determine the blood group in human beings and some characters that show deviation from Mendelian pattern of inheritance.</li> <li>• Pupil learns about the conditions that contribute for variation in the progenies.</li> </ul>



		<ul style="list-style-type: none"> <li>• Pupil also gather knowledge on determination of sex in human, insect, bees and birds.</li> <li>• Pupil builds their understanding about pedigree analysis and how it can be applied to study the different types of genetic disorders noticed among human population.</li> </ul>
6	Molecular basis of inheritance	<ul style="list-style-type: none"> <li>• Pupil learns about the genetic material and its structure.</li> <li>• Pupil also develops their understanding about the events of gene expression [i.e. replication, transcription and translation].</li> <li>• Pupil advances their knowledge on human genome project and DNA fingerprinting technique.</li> </ul>
7	Evolution	<ul style="list-style-type: none"> <li>• Pupil learns about the theories, evidences and process of evolution.</li> <li>• Pupil advance their knowledge on evolutionary stories of different life forms.</li> </ul>
8	Human Health & Disease	<ul style="list-style-type: none"> <li>• Pupil learns about common diseases that affect human health.</li> <li>• Pupil advances their knowledge about immunity and how the components of immunity protects the body.</li> <li>• Pupil gain a deeper understanding on communicable, non-communicable disease and socially relevant adolescent problems of drug abuse and alcohol addiction.</li> </ul>
9	Strategies in food production	<ul style="list-style-type: none"> <li>• Pupil learns about improved animal husbandry practices, plant breeding strategies and tissue culture program that enhance the productivity to cater the ever growing need of population.</li> </ul>
10	Microbes in human welfare	<ul style="list-style-type: none"> <li>• Pupil learns about microbes that are useful in different sectors [i.e. household practices, sewage treatment, biogas production, increasing soil fertility and enhancement, pest control and commercial production of industrial goods] for the welfare of humans.</li> </ul>

11	Biotechnology: Principles and processes	<ul style="list-style-type: none"> <li>• Pupil learns about the principles and tools of biotechnological practices.</li> <li>• Pupil learns about the strategies and processes involved in rDNA technology to produce commercially viable products.</li> </ul>
12	Biotechnology and its applications	<ul style="list-style-type: none"> <li>• Pupil learns about application of biotechnological principles in the field of medicine, agriculture.</li> <li>• Pupil develops an insight on ethical issue concerns for modified genomic products.</li> </ul>
13	Organism and environment	<ul style="list-style-type: none"> <li>• Pupil learn about abiotic factors that affect the organismic responses to a habitat and interactions among different life forms.</li> <li>• Pupil develops their understanding on standard models to study population growth.</li> </ul>
14	Ecosystem	<ul style="list-style-type: none"> <li>• Pupil learns about the structure and functions of ecosystem [i.e. process of decomposition and energy flow, ecological succession and pyramids of ecology, ecological services and nutrient cycling processes].</li> </ul>
15	Biodiversity	<ul style="list-style-type: none"> <li>• Pupil learns about the strategies to conserve biodiversity.</li> <li>• Pupil advances their knowledge towards the need and the significance for conservation.</li> </ul>
16	Environmental issues	<ul style="list-style-type: none"> <li>• Pupil learns about the control and causes for various types of environmental issues [i.e. pollution, issues of deforestation, global warming, and ozone depletion].</li> </ul>

Sr No.	Name of the topic	Learning outcomes
1.	Data Handling using Pandas I&II	Understand aggregation operations, descriptive statistics, and re-indexing columns in a DataFrame.
2.	Data Visualization	Understanding making charts and histogram
3.	Database Query using SQL functions I	Students understand and learn the concept SQL functions and write simple Queries
4.	Database Query using SQL group functions IIII	Connect a Python program with a SQL database, and learn aggregation functions in SQL.
5.	Computer Network	Students understand the concepts of network devices ,structure and its type and use it to identify networks in home and school.
6	Internet and world wide web	Learn the use and importance of internet and use it day to day life
7.	website concepts	To learn the concept and use of different website for different purpose
8.	W web Browser	Understanding concepts of web Browserand its use in daily life
9.	Societal Impacts-Digital footprint, Netiquettes, Data protection, IPR,FOSS	Understanding societal impact of ICT and learn different concepts of ICT
10.	Societal Impacts- Cybercrime and cyberlaw, IT Act, E-waste management, Health issues-technology	Have a clear understanding of cyber ethics and cybercrime. Understand the value of technology in societies, gender and disability issues, and the technology behind biometric ids.

