ENGLISH

S. No	Lesson/ Chapter Name	Objectives/Learning Outcomes	Methodology	Teaching Aids	Activity
1.	The Last Lesson(Flamingo)	-to make the students identify the genre to which the story belongs. -to understand the techniques used by the author -to enhance vocabulary -to enable them to comprehend the cultural background of the story. -to enable them to realize the importance of a teacher in the life of a student.	The session would begin with an interaction on homework– and the way you treat it. (Student-Teacher Interaction) The learners would interpret the title of the lesson. The background knowledge of the author and his works would be given. The facilitator would develop the chain of events, with TEXT sequence or discourse/spoken with reference to the educational and personal domains. Difficult words and terms would be discussed. The prose will be explained. All possible questions and answers would be discussed and assigned.	-They would develop their optimistic attitude towards life amidst many struggles. They would be able to familiarize themselves with specific background information of Alphonse Daudet/history of France. They would be able to make connections between similar situations in different storylines/life experiences like Indians under British imperialism.	Group Discussion on Political enslavement Is a curse on any Nationalist deprives it identity. For all range of learners in a group of six comprising-
2.	TIGER KING (Vistas)	-to enhance familiarizing with specific background information of author / book excerpt / history -to raise an awareness to conserve Wild Life. -to enable them to understand the importance to sustaining ecological balance.	The session would start with a short video on save tiger. The learners would interpret the title of the story and relate it to the video shown. The background of the author would be given. The story would be read aloud. The theme and underlying Meaning would be discussed. A comparative study between Mrs Packle tide's Tiger and the lesson. Difficult words would be listed and explained. The moral of The story would be discussed.	The Learners will be able to uncover motives, absorb didactics. They would be able to familiarize with specific Royal Indian background information of the author/history of cruel insensitive kings who found Pleasure in hunting and killing innocent animals. They would understand the importance of becoming sincere and trustworthy in thought and action. They would be understanding, responsible, tolerant and have respect for class identities – democratic citizenship.	Presentation on Treatment to Wild Life through Power Point Presentation.

3.	My Mother at sixty-six (Flaming o)	-to encourage the students to appreciate poetry and read aloud with proper intonation -to prepare the students for poetic forms and adept them with the figures of speech, rhyme and rhythm -to read and recognize the purpose of economy of words and the hidden pathos and nuances of the lines, correlating them with author's background and personal experiences- to build up didactics, empathy and sympathy with the loss of the speaker.	Pre-reading activity would be the first step wherein the students would delve deep into the title of the poem and make an interpretation of the title as it indicates the subject and theme. (student- teacher interaction) They would compare the poem with the poem A Photograph. The background of the poet would be discussed. The poem would be read aloud with proper intonation rhyme and rhythm. Difficult terms and words would be explained so that the students can predict the atmosphere of the world inside the poem. The poem would be explained covering the phrases, sentences and discourse as well as their structuring. Silent reading of the poem by the students within five minutes and listing the difficult terms. The figures of speech and rhyme scheme would be discussed.	The students would be able to grasp the theme and meaning of the poem. They would be able to read the poem with proper tone and rhyme and develop an interest in poetry. Their vocabulary would be strengthened. Their analyzing skills would be enhanced.	A comparative study of the poems A Photograph and My Mother At Sixty- six. The learners would discuss in their groups and draw a comparative Analysis and present the synopsis of the discussion in the class. Group Activity For all range of learners
4.	WRITING SKILLS Notice Writing	-to enable the students to apply the correct format while writing a notice. -to make the students comprehend why a notice is written and the style and procedure.	Warm up session: Learners would share their knowledge on the importance of a notice(Student- Teacher interaction The Learners would be asked To speak about a notice they received and they remember still. The teacher would explain what a notice is and its purpose. The standard format of notice writing would be shown in the class. The teacher would discuss in detail what a notice should contain. The wide range of themes and objectives covered by notice would be discussed with examples Special note on- 5 Ws What Where When Who Whom	Students will be able to analyse any NOTICE shown to them on the basis of the knowledge imparted. They will be able to frame notice about any event. They will be able to identify important information in any given notice. Students will be able to use appropriate style and format to write a NOTICE effectively.	Group Activity: Groups would be formed according to the range of Learners and distributed the role of 5 W s and frame a notice on the subject given. Notice Writing exercises : Different topics on different fields of notice for all range of learners.

5.	INVITATION WRITING/ REPLIES	To enable the learners to express their ideas cohesively without any difficulty. -to enable them to comprehend different written texts for personal/public information, their formats and purpose.	Developing the format in sequence or discourse/spoken with reference to the educational, personal domains. The teacher would discuss with examples all kinds of invitations and the method of framing replies.	The learners would be able to express their ideas cohesively, completely, fluently and spontaneously with expressions, grammar usage and relevant vocabulary for a hospitable announcement of an event.	Framing and preparing invitation cards for different purposes. Group Activity for all range of learners in a group of three comprising-
6.	NOTE MAKING	-to summarize information from different written text, reconstructing arguments and accounts in a coherent Presentation. -to express spontaneously, concisely and precisely, Differentiating finer shades of significance even in the most complex situations -to express ideas with extra information and complexity, fluently and without difficulty in sentence construction.	In the beginning of the session, a text would be provided to the students to read and involve in note making to test previous knowledge. The facilitator would train the students to read a text minutely ,or listen carefully to Select, analyse and summarize the main points. Ways of making notes would be discussed: Annotation, outline notes, Column notes, mind maps and summary notes.	The learners would be able to differentiate between an notation, outline notes, column notes, mind maps and summary notes from a text. They would be able to use the note taking suggestions to develop good notes based on classroom discussions	
7.	DEEP WATER	-to enable the students to enhance their understanding skills and create an interest on the topic to be studied. -to make the students enrich their vocabulary and strengthen their understanding skills. -to prepare the learners for digital learning. -to enhance the Learners' listening skill. -to enable them to strengthen their logical and critical thinking skills. -to develop their creative writing	The session would begin with an interactive session wherein the teacher would ask the students to discuss about their phobias as related to the theme of the lesson. The prose would be read aloud. Difficult words would be discussed. The story outline, theme and values would be discussed by the teacher through a Power Pont Presentation. The students would be Grouped into six for the varied activities, discussions and presentations.	The learners would unfold their logical thinking skills. Their vocabulary will be enriched. They would be able to organize their thoughts, research work, compile and present in an economicwriting style. The creative writing skills would be enhanced. They would develop their listening, speaking, questioning and Presentation skills.	Listening Assessment A Snippet (song delivering courage of Amelia Earhart) Worksheets on Listening task, Crisis Management, Creative writing unfold logical thinking skills. (Individual Activity- worksheet including questions for all range Of learners.)

		skill. -to prepare them for Crisis Management. -to inculcate the values of hard work and determination.		They would strengthen their decision making skills.	Students would be divided into groups of Six comprising all range of learners for presentation and discussion on Water Sports.
8.	LOST SPRING (Flamingo)	-to sensitize the students to the Problem of child labour. -to facilitate making Connections between similar situations in different storylines/life experiences. -to enhance the integrated skills of the learners.	The session would begin with an audio–video presentation on the plight of poor children. The learners would be asked to interpret the title of the lesson relating it to the presentation. The background of the author would be given. The theme and story line would be explained. The teacher would develop the format in sequence or discourse spoken with reference to the ethical/global and personal domains.	Learners will be able to sensitize the learners to the problem of child labour. They would be able to identify the problem, consider the options, weigh the pros and Cons of each option, and reach a decision/ opinion/ solution. They would enhance their analytical skills. They would be able to uncover the motives of the poor parents/ policemen/ Industrialists/ middlemen They would be able to absorb didactics and inspiration. They would strengthen their integrated skills.	documentary on child labour, write a report on the Problem Of Child Labour in India for your school magazine. Being the head boy/girl of your school, write a notice informing students about the 'Anti-Child-Labour' day going to be observed in your school.
9.	KEEPING QUIET (Flaming)	-to read and recognize the purpose of economy of words and the hidden feelings and nuances of the lines, correlating them with author's background and Personal experiences-- -to buildup didactics, empathy and sympathy with the speaker -to enable them to Realize the need of the hour and establish peace. - to inculcate the values of introspection, retrospection, peace, sensitivity to the environment,	The session would begin with the study of silence. The teacher would ask the learners to maintain silence and the study the sounds of silence for one minute. The learners would discuss on the sounds and thoughts of silence and relate to the title of the poem. The background of the author would be given. The poem would be read aloud and discussed .Difficult Words would be listed out and discussed. The synopsis would be shown with the help of a PPT.	The learners would be able to understand the need of the hour to maintain peace and cut out the clam our and bloodshed, correlating it with contemporary background and personal experiences. They would be able to up threat and gentle heeding with the predictable loss of the world.(global domain)	Role Play on establishing Peace and Unity. Write a script on Peace and Unity and act on it. Group activity for all range of learners in a group of six comprising-

		universal brotherhood, empathy and self awareness.			
10.	WRITING SKILLS Article Writing	-to enhance familiarizing with specific background information of author / book excerpt / history -to express ideas fluently and spontaneously without difficulty in expressions, grammar usage, format usage, relevant vocabulary	The session would start with a pre-writing activity to create an interest towards writing. The teacher would define what an article is and discuss the purpose of article writing. The different styles, subjects, purpose of article writing would be discussed. The teacher would explain the technique of accumulating ideas, focusing on ideas and facts, planning, organizing, evaluating, structuring and editing. They would be taught the importance and way of producing a finished piece of work with examples. The requirements of the content, beginning, body and end would be focussed.	The students would develop an interest towards writing. Their planning and organizing techniques would be enhanced. They would be able to research on any subject and derive information from facts and present him in the form of a written piece. The creative writing would be analysed. The interpreting and evaluative skills would be strengthened.	Article Writing on facts (based on research) Article Writing deriving ideas from interviews. Article Writing based on Bravery and Will Power (hints would be given)
11.	REPORT WRITING	-to develop students' abilities to organise information and construct it into a text. -to develop students' abilities to revise, redraft and improve their writing -To develop students' abilities to construct questions	The teacher in the beginning of the session would give students the opportunity to collect information on a declared issue before writing the report. During the session students will go through the process of developing ideas and collecting and organising information. They will then use the information to create the first draft of an imaginary report. They will then focus on some key areas of good writing and try to redraft their reports with these in mind.(Inductive Learning)	The learners will be able to discuss the purpose of various reports. They will be able to describe the kinds of information to include in specific reports and identify tips for writing a clear, concise, and useful report. They will recognize and address patterns and trends and be able to explain how the tone of a report can affect worker morale and motivation.	Write a Report on the sites visited by you during the school trips. Write a Report on a recent disaster with complimentary news paper clip. Individual activity to note progress.
12.	ELEMENTARY SCHOOL CLASSROOM IN A SLUM (Flamingo)	-to guide the students to relate the characteristics of literature to larger cultural and human values. -to sensitize the students to the problem of child labour. -to guide the students to become a social human and erase the prevalent inequalities of the society.	Pre- reading Activity: The session would start with an interaction on Government's eye on the schools of the slum areas. The title of the prose would be open for class interpretation. The facilitator would develop the format of text in sequence or discourse (spoken with reference to the ethical/global ,public and personal domains of social and personal life.	The learners would familiarize themselves with specific background information of social inequalities. They would recognize the purpose of theme and the hidden pathos and nuances of the lines, correlating them with indigenous/ personal	A comparative study of the poem Elementary school classroom in a slum with Lost Spring and present it through a PPT. Group activity for

				experiences. They would be able to buildup empathy and sympathy with the prevalent inequalities of the society which rest on financial status and lost opportunities for children.	all range of learners in a group of three.
13.	THE RATTRAP (Flamingo)	-to guide the students to relate the characteristics of literature to larger cultural and human values. -to facilitate making connections between similar situations in different storylines/life experiences.	The session would begin with an interactive stage wherein the students would discuss on the temptations in life on basis of the theme of the story. The title of the lesson would be opened to the class for interpretation. The background knowledge of the author would be given. The prose would be explained. Difficult words would be listed and explained. The moral of the story would be discussed.	The students would be able to effectively provide a synopsis of the story. They will be able to analyze the values and thought process of the story. They would be able to identify the insecurity while tackling personal fears and horrors that lurk in the recess so four mind. They would be able to appreciate the significance of developing personal fears yet rising above them to save our real liberty. Their vocabulary would be enriched.	Debate on The whole World is nothing but a great Rattrap. Group activity for all range of learners in a group of six comprising:
14.	WRITING SKILLS	-to express ideas harmoniously and chronologically	The format, rules, technique would be discussed with examples.	The learners would be able to organize their thoughts and express freely.	Writing a report/ letter to the editor on a recent disaster/metro with
15.	Letter to the Editor	without difficulty in expressions, grammar usage, format usage, relevant vocabulary. .	The usage of language would be taught and students would be assigned written tasks.	They would develop an interest towards writing thus enhancing their writing skills. Their thinking skills would be enhanced.	congruent newspaper clip. For all range of learners to note progress.
16.	POSTER MAKING	-to express ideas aesthetically and relevantly with definition in purpose, expressions, grammar usage, format usage, relevant vocabulary.	The teacher will acquire and display several different posters from various sources. Some examples may include: Movie posters, Community events, Advertisements Campaign signs, Billboard pictures Full-page newspaper ads Learners will brainstorm the purpose of posters.(Student-Teacher Interaction) Some responses may include: To get people's attention To get people to do something To give people	Comprehend an effective Poster making as a tool of Visual Communication. Focus on the message to be delivered. Keep the sequence well ordered. Use graphs and images effectively. Plan and organize a poster presentation.Use spacing, margins, colours, and layout to maximize	Poster Making for all range of learners.

			information. The teacher would discuss and demonstrate the presentation stage, consolidation stage and the closing stage.	effectiveness and list information about their invention.	
17.	SHOULD WIZARD HIT MOMMY (Vistas)	-to enable the Students to respect the generation gap. -to strengthen family bonds enabling them to handle personal choices and happiness.	The session would start with an interaction on Are nursery rhymes and fairy tales a reflection of reality? The title of the lesson would be open for interpretation. The background of the author would be given. The lesson would be read aloud and discussed. Difficult words would be listed out and discussed.	The learners would be able to familiarize with specific background while tackling personal choices on security, familiarity and happiness. They would be able to make connections between similar situations in personal experiences. They will be able to appreciate the timeless significance of universal fears of loss and gain, of happy ending and parenting issues.	Debate on Should Parents always decide what is best for their children? Group activity for all range of learners
18.	ON THE FACE OF IT (Vistas)	-to enable the learners to view others by removing the glasses of prejudice, hatred, and dislike. -to adapt reality of life bravely -to build inner strength and look at the brighter sides of life.	The session would start with an interaction on appearances are deceptive. The title of the story would be open for interpretation. The background of the author would be given. The prose would be read aloud and discussed. It would follow by Developing the format of text in sequence or discourse /spoken with reference to the global, cultural, public domains of social life.	The learners would be able to fight out their loneliness, depression and disappointment. They would accept the physically challenged people positively in their life and expand their social interaction. They would be able to buildup optimism and elf-confidence.	Group discussion on "It's got nothing to do with my face and what I look like" Group activity for all range of learners
19.	WRITING SKILLS Advertisement (commercial/ classified)	-to culminate in the production of an advertisement in one of several various forms of media, Intended for a specific demographic. -to enhance their creativity of ideas. -to improve their critical media literacy. -to construct own messages to convey the meanings they intend and to evoke the responses they desire.	A visual clipping of advertisements would be shown to the learners and they would interpret it through interaction. (student-student interaction) The concept, format, style and purpose would be explained with examples.	Students will learn persuasive techniques used in advertising, specifically, pathos or emotion, logos or logic, and ethos or credibility/character. They will use this knowledge to analyze advertising in a variety of sources: print, television, and Web-based advertising. Students will also explore the concepts of demographics and marketing for a specific audience.	Creating Commercial advertisement in pairs. Pair Activity comprising-

20.	LETTER WRITING: Enquiry/Reply Order/Complaint /Reminder/Can c- ellation. Replies to the Letters.	-to express ideas harmoniously and chronologically without difficulty in expressions, grammar usage, format usage, relevant vocabulary and mechanics	The lesson consists of three stages that are outlined below: 1) An ordering activity for group work with cards: Each group will be given as et of cards to order and the teacher will constantly observe and move during the activity to provide any assistance required. The Correct version will then be displayed on the Green Board. 2) Find the deliberate mistakes for pair work: To vary the forms of interaction, this time the learners will be asked to work on the activity in pairs and photocopies will be provided. The correct answers will then be elicited. 3) A Questionnaire through which the learner can find out how much they know about letter writing: The students can work on this individually and photocopies will be provided for this purpose. (Inductive Learning) The format, usage , purpose and style would be demonstrated with examples.	The learners will be able to express ideas fluently and chronologically, concisely without difficulty in purpose, expressions, grammar usage, format usage and relevant vocabulary. They will be able to express request/complaint/reminder/ cancellation fluently and orderly without difficulty in Suitable tone and expressions and relevant vocabulary.	Assignments on writing and replying to letters. Individual Activity to note progress. Warm –up Activity in group as mentioned in the methodology.
21.	THE INVISIBLE MAN by H.G. WELLS	To encourage the practice of reading for pleasure.[long text]; for gist; for specific information for detailed understanding; for implications, etc -to develop overall reading comprehension of background and content; writing style, characterization, turning points, message/ didactics, etc.	The session would begin with an interaction on What if I become invisible? The students would interpret the title of the Novel and relate to their discussions. It would follow-Developing the format of text in sequence or discourse /spoken with reference to the global, cultural, public domains of social life.	The learners will be able to receive and process written texts [literary, discursive and descriptive] for general orientation and understanding. They would develop their reading and logical thinking skills.	Debate on Science and invention can lead to reign of terror. For all range of learners
22.	GOING PLACES (Flamingo)	-to facilitate making connections between similar situations in different storylines/life experiences -to make them accept the reality of life and shed away stubbornness. -to be able to accept responsibility and devote their attention in their expected duties.	The session would begin with an interaction on Fantasy and Reality. The title of the lesson would be open for class interpretation. The background of the author would be given. The lesson would be read aloud and discussed. Difficult words would be listed out and discussed.	The learners will be able to familiarize themselves with specific background information of adolescents and adolescent fantasizing. They would identify and make connections between similar situations in own life experiences where each of us suffers dreams are	Group Discussion on Hero-worship is the most favourite pastime of most Indians. For all range of learners

				not rooted to the ground of common sense and tend to be exotic, glamorous and sophisticated.	
23.	THE ENEMY (Vistas)	-to make the students realize the essential worth of human life and universal brotherhood. -to help them think beyond countries and continents and races and wars.	The session would start with an interactive session on the services of a doctor. The title of the lesson would be open for class interpretation. The background of the author would be given. The lesson would be read aloud and explained. The historical background of the story and war related issues would be discussed. Difficult words would be listed out and discussed.	The learners will be able to familiarize themselves with specific background of political enmity. They will be able to identify and make connections between similar situations in own life experiences where our prejudices often hinder our human compassion and empathy for a political enemy. They will be able to understand the significance of professional ethics and social obligation in sensitive times.	A Study on War Stories and present it through a Power Point Presentation. For all range of learners
24.	EVAN TRIES AN O' LEVEL (Vistas)	-to facilitate making connections between similar situations in different storylines/life experiences. -to help learners distinguish different perspectives; analyzing them; drawing conclusion/s -to encourage the uncovering of motives; absorbing didactics.	The session would start with an interaction on Would Education in the jails help in refining prisoners. The title of the lesson would be open for class interpretation. The background of the author would be given. The lesson would be read aloud and discussed. Difficult words would be listed out and discussed.	The learners will be able to familiarize themselves with specific background of the cat and mouse role of the police and the criminal. They will be able to identify and make connections between similar situations in their own country where each of us witness the dereliction of duty of the law keepers and their complacent laxity.	Discuss in your group analyzing the story and justify the title 'Evans Tries an O-Level' Discuss and suggest another title for the story. For all range of learners in comprising-
25.	WRITING SKILLS Letter of Job Application	-to enable the learners to express their ideas fluently, chronologically and concisely. -to express request fluently and orderly with proper tone and expressions.	The teacher would stress the students on the importance of application–they may lead to an interview and discuss the content of a letter of application and note the responses on the blackboard/or discuss through a PPT.	The learners will be able to understand the nature and purpose of a letter of application. They will be able to examine a variety of letters to determine best lay out, content and style. They will be able to develop and produce their own letter of application and prepare cover letter and attached bio data.	Select a job advert from the Times Classified(would be provided) and write an appropriate letter of application. Exchange letters with a partner and use the checklist to

					see how well your partner has completed the letter. Feedback your thoughts to your partner offering CONSTRUCTIVE criticism(how it could be improved, what could be done differently?) Pair Activity comprising-
26.	MEMORIES OF CHILDHOOD (Flamingo)	-to enable the learners to develop comprehension. -to guide them to have a broader outlook. -to understand the problems related to casteism and racial discrimination.	The session would begin with a presentation on the great personalities who fought against social injustice. The title of the lesson would be open for class interpretation. The back ground of the author Would be given. The lesson would be read aloud and discussed. Difficult words would be listed out and discussed.	The learners would be able to sensitize themselves to the issues of estranged cultural ties. They will be able to make connections between similar situations in different storylines/life experiences. They will be able to initiate the role of an ambassador in the world ridden with racial and class differences. They would be able to recognize the universal/global theme of inequality.	Creating Posters for Cultural equality. Individual activity to note progress.
27.	AUNT JENNIFER'S TIGERS (Flamingo)	-to enable the learners to appreciate poetry -to infer the deeper meaning/message - to prepare the students for poetic forms and adept them with the figures of speech, rhyme and rhythm -to develop the ability of	Pre-reading activity would be the first step wherein the students would delve deep into the title of the poem. The learners would make an interpretation of the title indicates the subject and theme. The background of the poet Would be discussed. The poem would be read aloud with proper intonation rhyme and rhythm. Difficult terms and words would be explained so that the students can predict the atmosphere of the world inside the poem. The poem would be explained covering the phrases,	The learners will be able to facilitate making connections between similar situations in different storylines/life experiences. They will be able to empathize with Aunt Jennifer's problems and seek resolution. They will be able to think and produce spontaneous, fluid and expression in poetic texts to	Critical appreciation of the poem (Creative Writing Task) Individual Activity to note progress.

		appreciation of ideas and criticizing the thinking.	sentences and discourse as well as their structuring. Silent reading of the poem by the students within five minutes and listing the difficult terms. The figure of speech and rhyme scheme would be discussed.	convey a social change. They would discern prevailing in equalities in various guises.	

PHYSICS

S. No	Chapters Name	Objective / Learning Outcome	Methodology	Teaching Aids	Activity
01.	**Electric charges & fields**	Student will be able to: • Understand the concept of charge & its properties. • Basic idea of modes of charging • State coulomb's law and its mathematical expression in scalar form & vector form. • Define electric field & its significance • Find an expression for an electric field due to single charge and an electric dipole • Concept of electric flux & field lines. To find torque due to dipole • Define linear charge density, surface charge density, volume charge density with SI units	Lecture method Demonstration with explanation. Brainstorming Deductive method	Use of electric devices like ammeter, voltmeter, electric cell, battery, plug key, connecting wires etc. Ohm's law apparatus	Multimedia and Lab activity: identification of different types of electrical equipment. Disscussion on case study regarding learning outcome topics
02.	**Electric potential &capacitance.**	Student will be able to: • Understandthe concept of equipotential surfaces. • Due to point charge, due to system of charges • Differentiate between conductors, dielectrics and polarization. • Define capacitors and capacitance with SI units. • Deriveequivalent capacitance of capacitances of individual capacitors connected in series & parallel. • Expression for capacitance of plate capacitor	Lecture method Demonstration method with explanation Brainstorming Deductive method.	Use of electric devices like ammeter, voltmeter, electric cell, battery, plug key, connecting wires etc. Introduction about capacitor, potentiometer etc.	Multimedia and Lab activity Disscussion on assertion and reason based questions regarding learning outcome topics.

03.	**Current electricity**	Students will be able to • Understand electric current in terms of drift velocity, current density & mobility. • Briefly explain idea of colour code resistors. • Deduce Temperature dependence of resistivity • Explain electrical energy & power with its application. • State Kirchhoff's rules • Description of meter-bridge, Wheatstone bridge.	Lecture method Demonstration method with explanation Brainstorming Deductive method	Use of electric devices like ammeter, voltmeter, electric cell, battery, plug key, connecting wires etc. Carbon color code resistors, Ohm's resistors etc.	Multimedia Lab activity: identification of different types of electrical equipment. Discussion regarding questions based on the passage taken from learning outcomes.
04.	**Moving charges& Magnetism**	• Concept of dot & cross product. • Concept of magnetic force regarding sources and fields, Lorentz force and a current carrying conductor. • Concept of a charged particle in a magnetic field regarding circular motion &helical motion. • Concept of motion in combined electric and magnetic fields with velocity selector and cyclotron. • Concept of BS law & its applications. • Concept of ampere circuital's law & its application. • Definition of the ampere. • Expression for torque of a magnetic dipole in a magnetic field. • Expression for the magnetic dipole moment of a revolving electron. • Concept of principle, construction, working and calculation of the moving coil galvanometer and its conversion.	Lecture method demonstration method with explanation. Problem solving	In addition to general teaching tools like White board,marker,green board,chalk,duster ,etc ,the teacher will use electric devices like ammeter, voltmeter, electric cell, battery, plug key, connecting wires, magnet, electromagnet, solenoid, coils, shunt etc.	Through multimedia & interaction with students Through lab activity,identification of different types of electrical equipment's. **Group activity** • Project work • Experiment • Survey • Action plan • Identifying the problem testing/experimenting • Observation analysis and conclusion • Inference The area of assessment include: • Observation skill • Experimental skills • Understanding skill-viva voce • Analytical skills • Computational skills. • Drawing conclusions
05.	**Magnetism & matter**	• Concept of common ideas of magnetism & field lines. Concept of gauss's law in magnetism. Concept of the earths magnetism & its components. Concept of magnetisation& magnetic intensity.	Lecture method demonstration method with explanation.	In addition to general teaching tools like White board, marker, green board,	Through multimedia & interaction with students **Group activity** • Project work • Experiment • Survey

		Differentiate between magnetic properties of magnetic materials. Differentiate between permanent magnets and electromagnets.		chalk, duster ,etc. , the teacher will use electric devices like ammeter, voltmeter, electric cell, battery, plug key, connecting wires, magnet, electromagnet, solenoid, coils, shunt etc.	• Action plan • Identifying the problem testing/experimenting • Observation analysis and conclusion • Inference The area of assessment include: • Observation skill • Experimental skills • Understanding skill-viva voce • Analytical skills • Computational skills. • Drawing conclusions
06.	**Electromagnetic induction**	Description of the experiments of faraday & henry. Statement of magnetic flux & its units & dimensions. Statement of faradays laws of induction with mathematical expression. Statement of Lenz's law and conservation of energy & eddy currents. Concept of inductance & its types with its mathematical expression. Description, principle &construction of ac generator.	Lecture method Demonstration method with explanation. Problem solving	In addition to general teaching tools like White board, marker, green board, chalk, duster, etc, the teacher will use electric devices like ammeter, voltmeter, electric cell, battery, plug key, connecting wires, magnet, electromagnet, solenoid, coils, shunt etc., shunt etc.	Through multimedia & interaction with students **Group activity** • Project work • Experiment • Survey • Action plan • Identifying the problem testing/experimenting • Observation analysis and conclusion • Inference The area of assessment include: • Observation skill • Experimental skills • Understanding skill-viva voce • Analytical skills • Computational skills.
07.	**Alternating current**	Concept of ac currents with suitable diagram & its terminology. Description of ac voltage applied to a resistor,inductor& capacitor with phasor diagram & circuit diagram with terms & symbols x_l, x_c& z. Description of LCR circuit	Lecture method Demonstration method with explanation. Brainstorming Deductive method	In addition to general teaching tools like White board, marker, green board, chalk, duster, etc, the teacher will use electric devices like ammeter, voltmeter, electric cell, battery, plug key, connecting	Through multimedia & interaction with students **Group activity** • Project work • Experiment • Survey • Action plan Identifying the problem testing/experimenting Observation analysis and conclusion • Inference The area of assessment include: • Observation skill

				wires, capacitor, inductoretc. Configuration of LCR circuit.	• Experimental skills • Understanding skill-viva voce • Analytical skills • Computational skills. • Drawing conclusions
08.	**Electromagnetic wave**	• Definition of electromagnetic wave • Displacement current • Ampere's Maxwell law • Nature of emw • Electromagnetic spectrum • Parts of spectrum, its production detection and uses	Lecture method Demonstration method. Deductive method	In addition to general teaching tools like White board, marker, green board, chalk, duster, etc	Through multimedia & interaction with students **Group activity** • Project work • Experiment • Survey • Action plan • Identifying the problem testing/experimenting Observation analysis and conclusion Inference The area of assessment include: • Observation skill • Experimental skills • Understanding skill-viva voce • Analytical skills • Computational skills. • Drawing conclusions

09.	**Ray optics & optical instruments**	• Concept of reflection & its laws with derivation of $f=\pm r/2$, $1/f=1/u + 1/v$. • Concept of refraction & its laws with derivation of $n_2/v - n_1/u = (n_2 - n_1)/r$ • Concept of power of lens with derivative of $1/f= 1/v -1/u$ & $p=p_1+p_2$ • Description of the human eye & defects of vision. • Description of optical instruments (microscope & telescope) with its magnification.	Lecture method Demonstration method with explanation. Brainstorming Deductive method	In addition to general teaching tools like White board, marker, green board, chalk, duster, etc, the teacher will use optical devices like mirror, lenses, microscope, telescope etc	Through multimedia & interaction with students **Group activity** • Project work • Experiment • Survey • Action an Identifying the problem testing/experimenting • Observation analysis and conclusion • Inference The area of assessment include: • Observation skill • Experimental skills • Understanding skill-viva voce • Analytical skills • Computational skills. • Drawing conclusions
10.	**Wave optics**	• Concept of huygens principle with wave front & its types. • Concept of refraction & reflection of plane wavesusingHuygens principle. • Concept of coherent and incoherent of addition of waves. • Concept of interference of light waves and young's experiment. • Definition of diffraction & its derivation through the single slit &optical instruments. • Concept of polarization with moles law &brewsters law.	Lecture method Demonstration method with explanation.	In addition to general teaching tools like White board, marker,green board,chalk, duster,etc,the teacher will use optical devices like mirror,lenses,microscope, telescope etc The references used will be: physics text book for class xii.	Through multimedia & interaction with students **Group activity** • Project work • Experiment • Survey • Action plan • Identifying the problem testing/experimenting • Observation analysis and conclusion • Inference The area of assessment include: • Observation skill • Experimental skills • Understanding skill-viva voce • Analytical skills • Computational skills.

11.	**Dual nature of radiation & matter**	• Concept of electron emission & its effects. • Photoelectric effect and wave theory of light. • Einstein's photo electric equation & its mathematical expression. • Description nature of particle of light. • Description of wave nature of matter. • Concept of davission and germer experiment Concept of de broglies hypothesis.	Lecture method Demonstration method with explanation. Deductive method Problem solving	In addition to general teaching tools like White board, marker, green board, chalk, duster etc. The references used will be: physics text book for class xii.	Through multimedia & interaction with students **Group activity** • Project work • Experiment • Survey • Action plan • Identifying the problem testing/experimenting • Observation analysis and conclusion • Inference The area of assessment include: • Observation skill • Experimental skills • Understanding skill-viva voce • Analytical skills • Computational skills.
12	**Atoms**	Concept of α particle Scattering and Rutherfords nuclear model of atom. Description of atomic spectra. Description of Bohr's model of the h- atom The line spectra of the hydrogen atom. De – broglie's explanation of Bohr second postulate Energy of quantization.	Lecture method Demonstration method with explanation. Deductive method Brainstorming	In addition to general teaching tools like White board, marker, green board, chalk, duster etc. The references used will be: Physics text book for class xii.	Through multimedia &interaction with students **Group activity** • Project work • Experiment • Survey • Action plan • Identifying the problem testing/experimenting • Observation analysis and conclusion The area of assessment includes: • Observation skill • Experimental skills • Understanding skill-viva voce • Analytical skills • Computational skills.

13.	**Nuclei**	Description of atomic mass and its composition of nucleus Concept of radioactivity,alpha,beta,gamma,particles/rays and their properties Concept of radioactive decay laws Mass energy relation and mass defect Binding energy per nucleon and its variation with mass number Concept of nuclear fission Concept of nuclear fusion	Lecture method demonstration method with explanation Brainstorming	In addition to general teaching tools like White board, marker, green board, chalk, duster etc. The references used will be: physics text book for class xii.	Through multimedia & interaction with students **Group activity** • Project work • Experiment • Survey • Action plan • Identifying the problem testing/experimenting • Observation analysis and conclusion The area of assessment include: • Observation skill • Experimental skills • Understanding skill-viva voce • Analytical skills • Computational skills.
14.	**Semiconductor electronics.**	• Description of basic idea of semiconductor with base terms & symbols. Mention types of semi conductors Intrinsic semiconductor. Extrinsic semiconductor. Concept of n type semiconductor & p type of semiconductor with suitable diagrams. Concept of transistor and its types.	Lecture method demonstration method with explanation. Problem solving	In addition to general teaching tools like White board, marker, green board, chalk, duster etc.	Through multimedia & interaction with students The area of assessment includes: • Observation skill • Experimental skills • Understanding skill-viva voce • Analytical skills • Computational skills

CHEMISTRY

S. No.	Lesson/Chapter name	Objective/learning outcome	Methodology	Teaching aids	Activity
1.	The Solid State	Students will be able to • Define general characteristics of solid states. • State the difference between amorphous and crystalline solids • Define crystal lattice, unit cell, and different types of voids. • Correlate density of a substance with its unit cell. • Explain point defects	Recap of previous knowledge. Lecture discussion Brainstorming Project method	Multimedia NCERT Text book , Reference books	Make a list of different types of solid used in day to day life state their lattice type also.

2.	Solutions	Students will be able to: • Describe the formation of different types of solutions with the different methods of expressing their concentration. • State and explain Henrys law and Raoult's law along with their practical applications. • Distinguish between ideal and non- ideal solutions and the cause of deviation from ideality. • Describe colligative properties of solutions and correlate these with molar masses of the solutes.	Recap of previous knowledge. Lecture discussion Brainstorming Project method	Multimedia NCERT Text book , Reference books	Experiment: preparation of solutions of given molarity in lab practical periods.
3.	Electrochemistry	Students will be able to: • Describe an electrochemical cell and differentiate between electrolytic and galvanic cell. • Apply Nernst equation for calculating the emf of galvanic cell and define standard potential of cell. • Define resistivity, conductivity and molar conductivity of ionic solutions. • Differentiate between ionic and electronic conductivity. • Describe the methods for the measurement of conductivity and molar conductivity.	Recap of previous knowledge. Lecture discussion Brainstorming Project method	Multimedia NCERT Text book , Reference books Models of different types of cells	Experiment: study of the variation of cell potential with change in concentration of electrolytes at room temperature in lab period.
4.	Chemical Kinetics	Students will be able to: • Define and differentiate between the average and instantaneous rate of a reaction. • Express the rate of a reaction in terms of change in concentration of either of the reactants or products with time. • Distinguish between elementary and complex reactions, ionic and electronic conductivity, molecularity and order of a reaction. • Define rate constant and its unit for reactions of zero, first and second order. • Derive integrated rate equation for zero and first order reaction.	Recap of previous knowledge. Lecture discussion Brainstorming Project method	Multimedia NCERT Text book , Reference books	Experiment: study the dependence of rate of a chemical reaction on concentration and temperature in lab period.
5.	Surface Chemistry	Students will be able to: • Define interfacial phenomenon with their significance. • Define and classify the mechanism of adsorption. • Understand the factors that control adsorption from gases and solutions on solids. • Explain adsorption by using Freundlich adsorption isotherms. • Distinguish between true solutions and suspensions.	Recap of previous knowledge. Lecture discussion Brainstorming Project method	Multimedia NCERT Text book , Reference books Specimen showing adsorption of liquids on solids.	Experiment: preparation of lyophilic and lyophobic colloidal solution in lab period.

6.	The p-block Elements	Students will be able to: • Appreciate the general trends in the chemistry of elements of groups 15-18. • Describe the preparation, properties and uses of some compounds nitrogen. • Learn the preparation, properties and uses of sulphur di oxide, sulphuric acid and oxoacids of sulphur. • Explain the preparation, properties and uses of compounds of halogens and oxoacids of halogen. • Write general electronic configuration and properties on noble gases.	Recap of previous knowledge. Lecture discussion Brainstorming Project method	Multimedia NCERT Text book , Reference books Periodic table	Experiment: analysis of one acidic (S^{2-}, Cl^{-}, Br^{-}, I^{-}) and one basic (Pb^{2+}, Al^{3+}) radical in the given salt in lab period. Make a flow chart for the manufacture of sulphuric acid by contact process.
7.	The d- and f-block elements	Students will be able to: • Learn the position of d- and f- block elements in the periodic table. • Write the general electronic configuration of transition elements. • Describe the general trends in properties of the first row transition metals. • Explain properties of lanthanides and consequences of lanthanide contraction.	Recap of previous knowledge. Lecture discussion Brainstorming Project method	Multimedia NCERT Text book , Reference books Periodic table	Experiment: analysis of Cu^{2+}, $Fe^{3+}Mn^{2+}$, Zn^{2+}, Ni^{2+} radical in the given salt in lab period. Use $KMnO_4$ as oxidising agent in titration in lab period.
8.	Coordination Compounds	Students will be able to: • Appreciate the postulates of Werner's theory. • Learn the rules of IUPAC nomenclature of coordination compounds. • Define different types of isomerism and nature of bonding in terms of VBT and crystal field theory.	Recap of previous knowledge. Lecture discussion Brainstorming Project method	Multimedia Ball and stick model NCERT Text book , Reference books	Experiment: Preparation of crystals of ferrous ammonium sulphate and potash alum in the lab period.
9.	Haloalkanes and Haloarenes	Students will be able to: • Name halo alkanes and halo arenes according to IUPAC system of nomenclature. • Describe, physical and chemical properties of halo alkanes and halo arenes. • Explain stereo chemical aspects of reaction mechanisms. • Define directive influence of halogen in mono substituted compounds only.	Recap of previous knowledge. Lecture discussion Brainstorming Project method	Multimedia Ball and stick model NCERT Text book , Reference books	Write any five polyhalogen compounds used in medicinal and cosmetic and industry.

10.	Alcohols, Phenols and Ethers	Students will be able to: • Name alcohols, phenols and ethers according to IUPAC system of nomenclature and learn their classification. • Describe methods of preparation, physical and chemical properties and uses of alcohols, phenols and ethers. • Co- relates the physical and chemical properties of these compounds with the structure of functional group.	Recap of previous knowledge. Lecture discussion Brainstorming Project method	Multimedia Ball and stick model NCERT Text book , Reference books	Experiment: Detection of alcoholic and phenolic group in the given organic compound in the lab period.
11.	Aldehydes, Ketones and Carboxylic acids	Students will be able to: • Name aldehydes, ketones and carboxylic acids according to IUPAC system of nomenclature. • Describe the structure, method of preparation, physical and chemical properties of these compounds. • Explain mechanism of few selected reactions. • Understand the factors affecting acidity of carboxylic acids.	Recap of previous knowledge. Lecture discussion Brainstorming Project method	Multimedia Ball and stick model NCERT Text book , Reference books	Experiment: Detection of aldehyde, ketone and carboxylic group in the given organic compound in the lab period.
12.	Amines	Students will be able to: • Name amines according to IUPAC system and classify them. • Explain methods of preparation, physical and chemical properties of amines. • Write few uses of amine. • Know the identification of primary, secondary and tertiary amines.	Recap of previous knowledge. Lecture discussion Brainstorming Project method	Multimedia Ball and stick model NCERT Text book , Reference books	Experiment: Detection of amino group in the given organic compound and to distinguish between primary, secondary and tertiary amines the lab period.
13.	Biomolecules	Students will be able to: • Define biomolecules like, proteins, carbohydrates, nucleic acids etc. • Classify carbohydrates as aldoses and ketoses. • Define proteins with their structure. • Enumerate the difference between DNA and RNA.	Recap of previous knowledge. Lecture discussion Brainstorming Project method	Multimedia NCERT Text book , Reference books 3D model of DNA	Experiment: Study of some simple reactions of carbohydrates, fats and proteins in the lab period.

BIOLOGY

S. No	Chapters	Objective / Learning Outcomes	Methodology	Teaching aid	Activity
1.	**Reproduction in Organisms**	• Study of asexual reproduction and its type in organisms • Sexual reproduction and the events involved in it.	• Demonstration method • Explanation method • Discussion method	• Text book • Chart • Multimedia • Permanent slides	• Study the binary fission in amoeba and budding in hydra through a permanent slide.

2.	**Sexual Reproduction in Flowering Plants**	• Study of reproductive parts of flower and process of reproduction in plants. • Explain the process of pollination • Discuss double fertilization. • Describe the process of apomixis and polyembryony.	• Demonstration method • Explanation method • Discussion method • Inductive deductive method	• Text book • Chart • Multimedia • Permanent slides	• Study pollen germination on a slide. • Study pollen germination and pollen tube formation by preparing a slide. • Study the flowers pollinated by wind. • Study the flowers pollinated by insects.
3.	**Human Reproduction**	• Study of male and female reproductive system. • Explain the process of gamete formation in males and females. • Study menstrual cycle. • Describe the process of fertilization and implantation. • Explain the mechanism of pregnancy embryonic development. • Study parturition and lactation.	• Demonstration method • Explanation method • Discussion method • Inductive deductive method	• Text book • Chart • Multimedia	• Study the different reproductive organs of male and female reproductive system using a chart. • Prepare a poster describing embryonic development in humans. • Study permanent slides of T.S. of ovary and testis and identify the different stages of gamete development.
4.	**Reproductive Health**	• Study different methods used to control birth. • Importance of reproductive health. • Discuss the usage of the term MTP. • Explain the process of transmission of STDs and how to prevent it. Discuss infertility.	• Demonstration method • Explanation method • Discussion method • Question answer method	• Text book • Chart • Multimedia	Prepare a project on the different contraceptive methods used to control child birth
5.	**PrinciplesofInheritanceandVariation**	• Explain monohybrid and dihybrid cross. • Learn about Mendel's Law of Inheritance. • Explain the concept of linkage and recombination. • Discuss Sex Determination process. • Explain different genetic disorders.	• Demonstration method • Explanation method • Discussion method • Inductive deductive method	• Text book • Chart • Multimedia • Permanent slides	• Using beads and wires of different colors study Mendelian characters. • Analysis and study of Pedigree chart for genetic traits like color blindness, blood group and tongue rolling. • Study the process of artificial hybridization.

6.	**MolecularBasis ofInheritance**	• Study the structure of DNA. • Discuss the various experiments performed to search for the genetic material. • Explain the process of transcription in prokaryotes and eukaryotes. • Discuss genetic code. • Explain the process of translation in prokaryotes and eukaryotes. Study human genome project.	• Demonstration method • Explanation method • Discussion method	• Text book • Chart • Multimedia	• Using models study of the structure of DNA and RNA. Study of process of translation and transcription using chart paper
7.	**Evolution**	• Study the theories related to origin of evolution. • Discussion on the evidences supporting evolution. • Explain the concept of adaptive radiation. • Study Darwinian Theory of Evolution and Lamarckism. • Explain the process of evolution. Study origin and evolution of man.	• Demonstration method • Explanation method • Discussion method • Inductive deductive method	• Text book • Chart • Multimedia	• Chart preparation on homologous and analogous organs. • Project preparation on the evolution of Man.
8.	**Human Health and Disease**	• Learn about pathogens and common diseases caused in humans. • Study the immune system and different types of immunity. • Discuss the concept of vaccination and immunization. • Explain transmission, causative agents and symptoms of AIDS and cancer. • Discuss the different drugs abused as commonly. Discuss the consequences of drugs and alcohol abuse.	• Demonstration method • Explanation method • Discussion method • Inductive deductive method	• Text book • Chart • Multimedia	• Study the forms of bacteria through prepared slides. • Study Ascaris, Entamoeba, Plasmodium, Ringworm through permanent slides or specimens. Draw the structure of different drugs
9.	**Strategies for Enhancement in Food Production**	• Discuss the management of dairy and poultry farm. • Study the mechanism of animal breeding. • Study the process of rearing of bees and fishes. • Explain the aim of plant breeding. Discuss the role of SCP and tissue culture	• Demonstration method • Explanation method • Inductive deductive method	• Text book • Chart • Multimedia	• Prepare a project on the different uses of plant breeding. Enlist the different breeds used in dairy farming

10.	**Microbes in Human Welfare**	• Study the microbes present in the household products. • Discuss the microbes in industrial products. • Study the microbes used in treating sewage and in biogas production. • Discuss the microbes used as bio-control agents and as bio-fertilizers. • Study of recombinant technology and the tools used in this technology. Discuss the processes involved in recombinant DNA technology.	• Demonstration method • Explanation method • Discussion method • Inductive deductive method	• Text book • Chart • Multimedia	• Study the algal bloom in a eutrophic lake. • Prepare a flow chart on the steps involved in treating a sewage.
11.	**Biotechnology: Principles and Processes**	• Study of biotechnology application in agriculture and medicine. • Discuss transgenic animals. Discuss the ethical issues.	• Demonstration method • Explanation method • Discussion method	• Text book • Chart • Multimedia Permanent slides	• Isolation of DNA from plant material like spinach leaves/green pea seeds/ papaya.
12.	**Biotechnology and its Applications**	• Study of various abiotic factors. • Discuss the mechanism of adaptation. • Explain the attributes of a population. • Study the different models of population growth. Explain the different types of population interaction between species.	• Demonstration method • Explanation method Discussion method	• Text book • Chart • Multimedia Permanent slide	• Prepare a project on the uses of transgenic animals.
13.	**Organisms and Population**	• Study the term ecosystem and its components. • Study the steps involved in decomposition process. • Explain the mechanism of energy flow among the organisms. • Discuss ecological pyramids and its types. • Discuss the process of ecological succession and mineral cycling.	• Demonstration method • Explanation method • Discussion method • Inductive deductive method	• Text book • Chart • Multimedia	• Study the physical characteristics of a given soil sample • Study the water holding capacity and moisture content of a given soil sample. • Study the plant population density and percentage frequency by quadrate method. • Study of xerophytes and desert animals using specimens. Study hydrophytes and aquatic animals using specimens.

14.	**Ecosystem**	• Study the term biodiversity. • Study the distribution and abundance of species on Earth. • Discuss the causes of loss of biodiversity. • Discuss the methods used to conserve biodiversity.	• Demonstration method • Explanation method • Discussion method • Inductive deductive method	• Text book • Chart • Multimedia	• Study the water sample of a given pond for its Ph, clarity and living organisms in it. • Prepare an aquarium for a class. • Prepare a model to show carbon cycle.
15.	**Biodiversity and Conservation**	• Study air pollution and its control. • Discuss water pollution and its control. • Explain solid wastes, agro-chemical wastes and radio-active wastes and their effects. • Study the greenhouse effect and global warming. • Discuss ozone depletion and its causes. Study deforestation	• Demonstration method • Explanation method • Discussion method	• Text book • Chart • Multimedia	• Enlist the list of a) endangered and extinct species b) wildlife sanctuaries and nationa park
16.	**Environmental Issues**		• Demonstration method • Explanation method • Discussion method • Inductive deductive method	• Text book • Chart • Multimedia	• Estimate the presence of a particulate matter in a given water sample. • Study the presence of suspended particulate matter in air at two different locations. Prepare a chart on global warming.

Mathematics

S.No	Lesson / Chapter Name	Objectives/Learning outcomes	Methodology	Teaching Aids	Activity
1.	Relation and Functions	Students will be able to know about • Cartesian product and Definition of relation, different type of relations. • Reflexive, symmetric, transitive and equivalence relations. • Definition of function, different types of functions, their domain and range. • One-one (injective) functions, onto	1- Demonstration method 2- Deduction method 3- Problem solving method	Multimedia, Chalk, duster, Board, relation and function chart, text books etc.	1. To verify that the relation R in the set L of all lines in a plane, defined by (i) R ={$(\ell, m): \ell \perp m$} is symmetric but neither reflexive nor transitive (ii) R = {$(\ell, m) : \ell \| m$)} is an equivalence relation. 2. To identify whether the given function f(x) = x^2 is many one or one

<table>
<tr><td></td><td></td><td>(surjective) functions, bijective functions.
• Composite functions.
• Invertable and inverse of function and their properties.</td><td></td><td></td><td>– one, into or onto by given domain A ={0,1,2} and codomain B ={0,1,4,9}</td></tr>
<tr><td>2.</td><td>Inverse Trigonometric functions</td><td>Students will be able o learn and recall :
• Trigonometric function and their inverse with range
• Can draw graphs of inverse T-function with their range.
• Principal values of inverse Trigonometric functions.
• Properties and formulae of inverse trigonometric function
• The domains and ranges of inverse Trigonometric functions.</td><td>• Deduction method
• Lecture cum-demonstration method</td><td>Multimedia , Chalk, duster, Board, Formulae chart, text books etc.</td><td>1. To draw the graph of the function $f(x) = \sin^{-1} x$ using the graph of sinx Demonstrate the concept of mirror reflection. (about the line y = x)</td></tr>
<tr><td>3.</td><td>Matrices</td><td>Students will be able to understand about
• Basic concept, Definition order of matrix .
• Types of matrix, Properties of matrix .
• Addition, subtraction and multiplication of two matrix and their properties.
• Transpose of a matrix and their properties.
• Symmetric and skew symmetric matrix .
• Can learn elementary operations of matrix and apply them in related problem.
• Know about invertable matrix and can find inverse of given matrix using by elementary operations.</td><td>• Question answer method.
• Inductive-deductive method.
• Problem solving method.</td><td>Multimedia , Chalk, duster, Board, Formulae chart, text books etc.</td><td>To relate the matrices with real life as an example a manufacturer products three products say A,B and C which he sells in two cities Annual sales of these product are as follow .

Unit sale prices of products A , B and C as Rs. 2.50, Rs.1.25 and Rs.1.50 respectively. Find total revenue with
<table><tr><td>city</td><td colspan="3">Products</td></tr><tr><td></td><td>A</td><td>B</td><td>C</td></tr><tr><td>Delhi</td><td>5000</td><td>1000</td><td>20000</td></tr><tr><td>Agra</td><td>6000</td><td>18000</td><td>8000</td></tr></table>the help of matrices.</td></tr>
<tr><td>4.</td><td>Determinants</td><td>Students will be able to know / learn about:-
• Determinants of square matrix (upto 3X3 matrices).
• Properties of determinants.
• Minors and cofactors, adjoint and find inverse of matrix.
• Find area of triangle using determinants.
• Singular and non singular matrix.</td><td>• Question Answer method
• Deductive method
• Problem solving method.</td><td>Multimedia , Chalk, duster, Board, Formulae chart, text books etc.</td><td>1. Draw a triangular figure in Cartesian plane on graph paper. Find the coordinates of its vertices and find its area using determinant.</td></tr>
</table>

		• Application of determinant and matrix. (i) Consistent system of equations (ii) Inconsistent system of equation. • Can find solution of system of linear equations using inverse of matrix.			
5.	Continuity and differentiability	Students will be able to learn about: • Continuity of given function f(x) at x = c. • Differentiable function and process of differentiability. • Derivatives of composite function, inverse trigonometric function, exponential functions, logarithm function. • Chain rule, product rule, division rule of derivatives. • Derivatives of functions expressed in parametric form. • Second order derivatives of given functions. • Verify ''Rolle's theorem'' and ''Lagrange's mean value theorem'' and can apply in related function.	• Induction method • Deduction method • Lecture cum-demonstration method	Multimedia , Chalk, duster, Board, Formulae chart, text books etc.	1. To verify Rolle's theorem for given function $f(x) = x^2+2x-8$, $x\epsilon$ [-4,2] 2. To verify'' mean value theorem for the given function $f(x) = x^2- 4x-3$ in the internal [a , b] where a = 1 and b = 4.
6.	Application of derivatives	Students will be able to understand about: • Rate of change of quantities of given functions. • About increasing or decreasing function equation of tangents and normal using derivatives of given functions • Using derivatives can find approximate value of given numbers. • Which function is maxima or minima. • Can find maximum or minimum value using first order/second order derivative test. Find local minima and local maxima. • Use of maxima and minima in real life situation based problems.	• Lecture method. • Deduction method. • Problem solving method.	Multimedia , Chalk, duster, Board, Formulae chart, text books etc.	1. To understand the concept of decreasing and increasing function. 2. To construct an open box of maximum value from a given rectangular sheet by cutting equal squares. 3. To understand the concept of local maxima, Local minima and point of inflection by drawing a graph.
7.	Integrals	Students will be able to understand about : • Integration is inverse process of differentiation. • Integration of different function by substitution. • Integration of different function by partial	1. Question-answer method. 2. Inductive- deductive method.	Multimedia , Chalk, duster, Board, Formulae chart, text books etc.	1. To evaluate the definite integral $\int_a^b \sqrt{(1-x)^2}dx$ as the limit of a sum and verify it by actual integration.

		fraction. • Integration of different function by part • Integration of special types of functions. • Definite integrals as a limit of a sum. • Fundamental theorems of calculus. • Basic properties of definite integrals. • Evaluation of definite integrals by substitution.	3.Lecture method.		
8	Application of Integrals	Students will be able to find about: • Area of simple curves especially (i) Circle (ii) Parabolas (iii) Ellipses (in standard form only) • The area between any of the two above said curve (the region be clearly identified). • The area region bounded by a curve a line.	1. Lecture Method. 2. Inductive-deductive method. 3. Problem solving method.	Multimedia, Chalk, duster, Board, Formulae chart, text books etc.	• Using suitable example of curve y=f(x), find the area of region bounded by curve with x-axis, line x = a, and x = b.
9.	Differential equations	Students will be able to understand about: • Basic concept of differential equation. • Order and degree of differential equation. • General and particular solutions of differential equations. • Formation of differential equation whose general solution is given. • Procedure to form a differential equation that will represent a given family of curve. • Method of solving first order first degree, differential equation a) Differential equations with variables separable. b) Homogeneous differential equation c) Linear differential equations of the form $\frac{dy}{dx} + P\,y = Q$.	1. Induction and deduction method. 2. Explanation method. 3. Problem solving method.	Multimedia, Chalk, duster, Board, Formulae chart, text books etc.	<u>Project-1</u> Form a differential equation to explain the process of cooling of boiled water to a given Room temperature. <u>Project-2</u> Form a differential equation for the growth of bacteria in different environments.
10.	Vector Algebra	Students will be able to know about: • Basic concept and definition of vectors and scalars. • Megnitude and direction of vectors.	1. Induction – deduction method. 2. Lecture cum – demonstration method.	Multimedia , Chalk, duster, Board, Formulae chart, text books etc.	1. To verify geometrically that $\vec{c} \times (\vec{a} + \vec{b}) = \vec{c} \times \vec{a} + \vec{c} \times \vec{b}$ 2. To verify that angle in semicircle is a right angle using vector method.

		• Position vector, direction cosines. • Types of vectors • Addition of vectors and their properties. • Multiplication of a vector by a scalar. • Components of a vector, vector joining two points, section formula. • Product of two vectors: (a) Scalar (or dot) product of two vectors and their properties. (b)Projection of a vector on a line. (c) vector (or cross) product of two vectors and their properties .			
11.	Three Dimensional Geometry	Students will be able to learn and recall about : • Direction cosines and direction ratio of a line • Relation between the direction cosines of a line. • Direction cosines of a line passing through two points. • Equation of a line passing through a given point and parallel to a given vector (in vector and Cartesian form) . • Equation of line passing through two given points (in vector form and Cartesian form) • Angle between two lines. • Shortest distance between two skew lines and parallel lines. • Equation of plane in normal form (in vector and Cartesian form). • Equation of a plane perpendicular to a given vector and passing through a given point. • Equation of plane passing through non collinear points (vector form and Cartesian form). • Equation of plane passing through the intersection of two given planes. (Vector form and Cartesian form). • Coplanarity of two lines. • Angle between two planes.	1. Induction and deduction method. 2. Explanation method. 3. Problem solving method.	Multimedia , Chalk, duster, Board, Formulae chart, text books etc.	1. To demonstrate the equation of a plane in normal form . 2. To verify that the angle between two planes is same as the angle between their normal .

		• Distance of a point from a plane (Vector and Cartesian form). • Angle between a line and a plan.			
12.	Linear programming	Students will be able to understand about: • Linear inequalities and their graphical representation. • Terms related to linear programming as objective function, constraints feasible region, optimal solution etc. • Working rules of solving linear programming problems • Types of linear programming problems (a) Manufacturing based problems. (b)Transport based problems. (c) Diet based problems.	1. Lecture method. 2. Demonstration method. 3. Problem solving method.	Multimedia , Chalk, duster, Board, Formulae chart, text books etc.	1. To collect the data related to day to day life like collecting data form families of their expenditures and requirements from the factories to maximum out put . 2. to collect the data from transporters, agents , of transporting cost and distance covering by transport point for minimum transportation cost .
13.	Probability	Students will be able to learns the concept given : • Meaning and terms related to probability. • Conditional probability and their properties. • Multiplication theorem on probability. • Multiplication rule for more than two events. • Independent events. • Bayes' theorem (i) Partition of a sample space. (ii) Theorem of total probability • Random variables and its probability distribution . • Mean of random variable • Variance of a random variable • Bernoulli trials and binomial Distribution.	1. Question – Answer method. 2. Lecture method. 3. Brainstorming method. 4. Discussion method.	Multimedia , Chalk, duster, Board, Formulae chart, text books etc.	1.to explain the computalion of conditionl probability of a given event A. when event B has already occured , through an example of throwing a pair of dice .

PHYSICAL EDUCATION

S. No	Name of the chapter	Learning outcome/objectives	METHODOLOGY	TEACHING AIDS	ACTIVITY/ CO-SCHOLASTIC	ASSIGNMENT
1	Planning in sports	• The students should know about Meaning and objectives of planning • Various committee& responsibilities • Tournament-knock out, round robin • Procedure to draw fixture Specific sports programme	Reading and explanation draw the fixture	Audio-visual presentation	Group activity: Groups would be formed according to the range of learner.	What is fixture What is seeding?
2	Sports & nutrition	The students should know about Balanced diet & nutrition: Macro & Micro nutrients • Nutritive& Non -nutritive components of diet • Eating for weight control	students would be known about the balanced diet	Poster on Nutrient values and calories	Demonstration Method	What is Balanced diet?
3	Yoga and life style	The students should know about Asana as preventive measures • Obesity procedure benefits • Diabetes: procedure Bhujangasana • Back pain: Tadasanas, vakrasana	Lecture cum demonstration & practice yoga asana	Power Point presentation	Group Activities Yoga Asana	What is yoga?
4	Physical Education & sports for CWSN	The students should know about Concept of disability and disorder • Types of disorder: its causes & Nature • Advantage of physical activities for children with special needs	Discussion interact with student	Smart class	individual activity: (for all range of learners)	What is ODD? What is disability?
5	Children& women in sports	The students should know about Motor development and factors effecting it • Common postural deformities- knock knee, flat foot • Special consideration • Female athlete triad	Lecture and discussion method used by the teacher during the class	Demonstration come lecture method	Recreational activity: Different types of playing game	What is motor development? Define good posture.

6	Test & Measurement in sports	e students should know Motor fitness test, general motor fitness • Measurement of cardio vascular fitness • Rikli& jones- senior citizen fitness test	Project method used by teacher to teach this lesson	Marking of field	Pair activity: measurement of the different games field	What is physical fitness test? What is Rikli& johns test
7	Physiology & injuries in sports	The students should know about Effect of exercise on cardio respiratory system • Sports injuries (soft tissue injuries, fractures) • First aid- aim & objectives	Lecture and discussion method used by the teacher. Group activity also conducted by the teacher to teach the various part5 of the lesson	Lecture come demonstratio n method	Pair activity: For all range of learners comprising.	What is sports injuries? What is First Aid?
8	Biomechanics & sports	The students should know about Meaning and importance biomechanics in sports • Types of movements • Friction & sports	Brainstorming Lecture Discussion Method used by the teacher.	Audio-visual presentation	Group activity: Different game for all range of learners	What is Biomechanics? What is friction?
9	psychology in Sports	The students should know about Personality: its definition & types • Motivation its types and techniques • Meaning, concept & types of aggression in sports	Various stories tell by the teacher to motivate the student. Teacher also uses lecture method.	Smart class	Individual activity	What is motivation? What is personality?
10	Training in sports	e students should know about Speed- definition types & methods to develop speed • Coordinative abilities- Definition & types • Circuit training – introduction & its importance	In this lesson teacher used lecture and discussion method.	Smart class	Demonstration method	What is speed? What is circuit training?

URDU

S.NO	اسباق کے نام	تدریسی نتائج/ آموزشی ماحصل	تدریسی طریقہ کار	دیگر سرگرمیاں/ شریکی تعلیم	تفویض
	حصّہ نثر				
1	میگھالیہ (مضمون)	طلباء کو مضمون کی تعریف سمجھانا اور انھیں میگھالیہ کی مخصوص تہذیب سے واقف کرانا اور بتانا کہ وہاں کون کون سی زبانیں بولی جاتی ہیں اور زندگی کے دوسرے کام کس طرح انجام دیے جاتے ہیں۔	سابقہ معلومات، تمہیدی گفتگو، اعلانِ سبق، معلّمہ کی معیاری بلند خوانی، مشکل الفاظ کی تشریح، طلباء کی تقلیدی بلند خوانی، اصلاحِ تلفّظ، تفہیمی سوالات، اعادۂ سبق، گھر کا کام	صوبہ میگھالیہ کی امتیازی خصوصیات کا ذکر کرتے ہوئے اپنے دوست کو ایک خط لکھیے۔	لفظوں کو جملوں میں استعمال کرانا۔
2	دعوت (انشائیہ)	طلباء کو انشائیہ کی تعریف سے واقف کرانا رشید احمد صدّیقی کی تحریروں میں موجود معاشرتی زندگی کی پرچھائیاں دکھانا۔	سابقہ معلومات، تمہیدی گفتگو، اعلانِ سبق، معلّمہ کی معیاری بلند خوانی، مشکل الفاظ کی تشریح، طلباء کی تقلیدی بلند خوانی، اصلاحِ تلفّظ، تفہیمی سوالات، اعادۂ سبق، گھر کا کام	سبق سے کچھ جملے دے کر ان کی وضاحت کرانا۔	تفہیمی سوالات کرانا۔
3	گاؤں کی لاج (افسانہ)	طلباء کو افسانے کی تعریف سمجھانا اور اس سبق کے ذریعے یہ بتانا کہ ہندوستان گنگا جمنی تہذیب کا آئینہ دار ہے۔ اس میں سبھی مذہب کے لوگ مل جل کر محبت سے رہتے ہیں ایک دوسرے کے دکھ سکھ میں شریک ہوتے ہیں۔ ذاتی رنجشوں کو بھلا کر گاؤں کی عزّت کو اوّلیت دی جاتی ہے	سابقہ معلومات، تمہیدی گفتگو، اعلانِ سبق، معلّمہ کی معیاری بلند خوانی، مشکل الفاظ کی تشریح، طلباء کی تقلیدی بلند خوانی، اصلاحِ تلفّظ، تفہیمی سوالات، اعادۂ سبق، گھر کا کام	اس کہانی کو ڈرامے کی شکل میں اسٹیج کرانا۔	محاوروں کو جملوں میں استعمال کرانا۔
4	بے مثال گلو کارہ (لتا منگیشکر)	اس مضمون کے ذریعے طلباء کو بتانا کہ لتا منگیشکر ایک ایسی گلوکارہ ہیں جن کی آواز کو ہر انسان پسند کرتا ہے کیونکہ انکی آواز میں ایک نغمگی ہے لطافت ہے جو انسان کو بے خود کر دیتی ہے۔	سابقہ معلومات، تمہیدی گفتگو، اعلانِ سبق، معلّمہ کی معیاری بلند خوانی، مشکل الفاظ کی تشریح، طلباء کی تقلیدی بلند خوانی، اصلاحِ تلفّظ، تفہیمی سوالات، اعادۂ سبق، گھر کا کام	'لتا منگیشکر کے گیتوں کی کیسٹس کے ساتھ ایک شام' عنوان سے ایک اشتہار کا مضمون تحریر کرانا۔	تفہیمی سوالات کرانا۔
5	جاپان (ستمبر کا چاند)	طلباء کو سفرنامے کی تعریف اور اہمیت سے واقف کرانا اور بتانا کہ قرۃ العین حیدر نے اپنے سفرنامے میں جاپان کا سفر بیان کیا ہے اور اپنے تجربوں سے لوگوں کو واقف کرایا ہے کہ وہاں چائے کی رسم کی اب بھی اتنی ہی قدر و منزلت ہے جتنی پہلے تھی۔	سابقہ معلومات، تمہیدی گفتگو، اعلانِ سبق، معلّمہ کی معیاری بلند خوانی، مشکل الفاظ کی تشریح، طلباء کی تقلیدی بلند خوانی، اصلاحِ تلفّظ، تفہیمی سوالات، اعادۂ سبق، گھر کا کام	طلباء سے ان کے کسی سفر کے بارے میں زبانی سننا۔	طلباء سے سبق کے کچھ جملے دے کر مصنّفہ کے لطیف طنز کی وضاحت کرانا۔

6	چچا چھکّن نے خط لکھا	چچا چھکّن ایک مزاحیہ مضمون ہے اس سبق کے ذریعے طلباء کو بتانا کہ چچا چھکّن بظاہر ایک معمولی کردار ہے لیکن امتیاز علی تاج نے مضحکہ خیز حرکات اور دلچسپ گفتگو سے اس کردار کو بہت ہی دلچسپ بنا دیا ہے۔	سابقہ معلومات، تمہیدی گفتگو، اعلانِ سبق، معلّمہ کی معیاری بلند خوانی، مشکل الفاظ کی تشریح، طلباء کی تقلیدی بلند خوانی، اصلاحِ تلفّظ، تفہیمی سوالات، اعادۂ سبق، گھر کا کام	چچا اور چچی کے مابین دلچسپ مکالموں کو اپنے الفاظ میں لکھیے۔	محاوروں اور کہاوت کو جملوں میں استعمال کرانا۔
7	ذرا فون کر لوں	یہ سبق بہت ہی دلچسپ اور نصیحت آمیز ہے۔ اس سبق کے ذریعے طلباء کو بتانا کہ کسی بھی چیز کا بے جا استعمال نہ صرف اپنے لیے بلکہ دوسروں کے لیے بھی تکلیف کا باعث بن جاتا ہے جس طرح فون یقیناً سائنس کی اہم اور کارآمد ایجاد ہے لیکن ایک بیمار شخص اور اسکے گھر والوں کے لیے فون کس طرح پریشان کن بن گیا کس طرح لوگ آتے ہیں اپنی غرض سے اور بہانہ ہوتا ہے عیادت کا۔	سابقہ معلومات، تمہیدی گفتگو، اعلانِ سبق، معلّمہ کی معیاری بلند خوانی، مشکل الفاظ کی تشریح، طلباء کی تقلیدی بلند خوانی، اصلاحِ تلفّظ، تفہیمی سوالات، اعادۂ سبق، گھر کا کام	سبق سے جملے دے کر انکی وضاحت کرانا کہ یہ جملے کب کس نے کہے۔	'فون رحمت یا زحمت' عنوان پر مضمون لکھوانا۔
	حصّہ نظم				
1	رباعیاں (رواں)	طلباء کو رباعی کی تعریف اور اسکی خصوصیات سے واقف کرانا اور ان کو بتانا کہ رواں کی رباعیوں میں فکر و فن کا گہرا امتزاج ملتا ہے۔ معیاری زبان و اسلوب لطیف تشبیہات و استعارات اور موثر اندازِ بیان انکی رباعیوں کی مخصوص پہچان ہے۔	سابقہ معلومات، تمہیدی گفتگو، اعلانِ سبق، معلّمہ کی معیاری بلند خوانی، مشکل الفاظ کی تشریح، طلباء کی تقلیدی بلند خوانی، اصلاحِ تلفّظ، تشریحی سوالات، اعادۂ سبق، گھر کا کام	طلباء سے زبانی رباعیات سننا۔	رباعیات کی تشریح کرانا۔
2	نظم پھول مالا (چکبست)	نظم کی تعریف اور اسکی قسموں سے طلباء کو روشناس کرانا اور ان کو بتانا کہ اس نظم میں چکبست نے عورتوں کو یہ پیغام دیا ہے کہ ترقّی کے نام پر یورپ کی نقل کر کے ہم اپنی تہذیب اور ثقافت کو قائم نہیں رکھ سکتے۔ آنے والی نسلوں کے اخلاقی اقدار کے لیے ہمیں خود کو اپنی تہذیب میں ڈھالنا ہوگا	سابقہ معلومات، تمہیدی گفتگو، اعلانِ سبق، معلّمہ کی معیاری بلند خوانی، مشکل الفاظ کی تشریح، طلباء کی تقلیدی بلند خوانی، اصلاحِ تلفّظ، تشریحی سوالات، اعادۂ سبق، گھر کا کام	طلباء سے نظم میں موجود ضمیر اور اسکی قسموں کی نشان دہی کرانا۔	نظم کا مرکزی خیال لکھوانا۔
	قواعد				
1	مضمون نگاری	طلباء کو مضمون لکھنے کا طریقہ سمجھانا اور اسکی اہمیت سے واقف کرانا۔	استدلالی طریقہ	طلباء کا 'موبائل کے فائدے اور نقصانات' عنوان پر اظہارِ خیال کرانا۔	چند موضوعات دے کر طلباء سے مضمون لکھوانا۔

2	خط/درخواست	طلباءکوخط اور درخواست کی تعریف اور اسکی قسموں سے روشناس کرانا۔	استدلالی طریقہ	طبیعت کی ناسازگی کی وجہ سے طلباء سے دو دن کی چھٹّی کے لیے درخواست لکھوانا۔	کسی بھی مضمون پر طلباء سے خط لکھوانا۔
3	عبارت کو چھوٹا کر ک لکھوانا	طلباءکو بتانا کہ خلاصہ کس طرح کیا جاتا ہے۔	طلباءکو مثال دے کر خلاصہ کرنا سکھانا۔	ایک عبارت دے کر طلباء سے اسے چھوٹا کرانا۔	اس عبارت کے سوالات کرانا۔ؤ
4	محاورے اور کہاوت	محاورے اور کہاوت کی تعریف سے طلباء کو واقف کرانا۔	استدلالی طریقہ	طلباء سے محاوروں اور جملوں کا فرق معلوم کرنا۔	طلباء سے محاوروں اور کہاوتوں کے ذریعے جملے بنوانا۔

S.NO	اسباق کے نام	تدریسی نتائج/ آموزشی ماحصل	تدریسی طریقہ	دیگر سرگرمیاں/ شریکی تعلیم	تفویض
	حصّہ نثر				
1	خط (مکتوب نگاری)	طلباء کو غالبؔ کی خطوط نگاری سے واقف کرانا اور بتانا کہ غالبؔ نے مراسلے کو مکالمہ بنا دیا تھا۔ غالبؔ کا اسلوب مکالماتی اور ڈرامائی کے ساتھ ہے۔	سابقہ معلومات، تمہیدی گفتگو، اعلانِ سبق، معلّمہ کی معیاری بلند خوانی، مشکل الفاظ کی تشریح، طلباء کی تقلیدی بلند خوانی، اصلاحِ تلفّظ، تفہیمی سوالات، اعادۂ سبق، گھر کا کام	غالبؔ کے انداز میں اپنے دوست کے نام ایک خط تحریر کیجیے جس میں اپنی موجودہ مصروفیات کا ذکر ہو۔	غالبؔ کے کچھ خطوں کا مطالعہ کیجیے۔
2	بڑے بول کا سر نیچا (افسانہ)	طلباء کو افسانے کی تعریف سمجھانا اور بتانا کہ غرور کا انجام ہمیشہ بے عزّتی ہوتا ہے اور اس سبق سے یہ پیغام ملتا ہے کہ آپ کا سچّا دوست وہی ہے جو مصیبت میں ساتھ دے۔	سابقہ معلومات، تمہیدی گفتگو، اعلانِ سبق، معلّمہ کی معیاری بلند خوانی، مشکل الفاظ کی تشریح، طلباء کی تقلیدی بلند خوانی، اصلاحِ تلفّظ، تفہیمی سوالات، اعادۂ سبق، گھر کا کام	اس کہانی کا مرکزی خیال اپنے الفاظ میں لکھیے۔	تفہیمی سوالات کرانا اور محاوروں کو جملوں میں استعمال کرانا۔
3	پھول والوں کی سیر (مضمون)	طلباء کو بتانا کہ پھول والوں کی سیر کا میلہ دلّی کا مشہور میلہ ہے یہ میلہ ہماری گنگا جمنی تہذیب کا نمونہ ہے۔ یہ روایت آج تک زندہ ہے۔ ہر سال پھول والوں کی سیر کا اہتمام کیا جاتا ہے۔ ہماری تہذیبی روایت کا یہ تسلسل ہمیں قومی بھائی چارہ اور مساوات کا پیغام دیتا ہے۔	سابقہ معلومات، تمہیدی گفتگو، اعلانِ سبق، معلّمہ کی معیاری بلند خوانی، مشکل الفاظ کی تشریح، طلباء کی تقلیدی بلند خوانی، اصلاحِ تلفّظ، تفہیمی سوالات، اعادۂ سبق، گھر کا کام	طلباء سے سبق سے لیے گئے جملوں کی وضاحت کرانا۔	موجودہ دور میں پھول والوں کی سیر کی کیا اہمیت ہے۔ اس پر ایک مضمون لکھوانا۔
4	آگرہ بازار (ڈرامہ)	طلباء کو ڈرامہ کی تعریف سے واقف کرانا اور بتانا کہ اس ڈرامہ کے ذریعے نظیرؔ اکبر آبادی نے آگرہ کے بازار کی منظر کشی کی ہے اس سے ایک خاص دور کی تہذیبی، تاریخی، اور معاشرتی منظر کشی کی گئی ہے۔	سابقہ معلومات، تمہیدی گفتگو، اعلانِ سبق، معلّمہ کی معیاری بلند خوانی، مشکل الفاظ کی تشریح، طلباء کی تقلیدی بلند خوانی، اصلاحِ تلفّظ، تفہیمی سوالات، اعادۂ سبق، گھر کا کام	ڈرامے میں پتنگ کی جو مختلف قسمیں بتائی گئی ہیں ان کے نام لکھیے۔	مرکّب الفاظ سے جملے بنوانا اور الفاظ معنی یاد کرانا۔

5	ایک گدھے کی سرگزشت (ناول)	طلباءکو ناول کی تعریف سے روشناس کرانا اور بتانا کہ یہ ایک تمثیلی ناول ہے اس میں گدھا دراصل عام آدمی کی تمثیل ہے۔اس کے ذریعے مصنّف نے آج کے مطلب پرست افسروں، چھوٹے موٹے رہنماؤں اور سماجی خرابیوں پر طنز کیا ہے۔	سابقہ معلومات، تمہیدی گفتگو، اعلانِ سبق، معلّمہ کی معیاری بلند خوانی، مشکل الفاظ کی تشریح، طلباء کی تقلیدی بلند خوانی، اصلاحِ تلفّظ، تفہیمی سوالات، اعادۂ سبق، گھر کا کام	دیے گئے جملوں میں مصنّف کے طنز و مزاح کی نشان دہی کرانا۔	اس کہانی کا خلاصہ لکھوانا۔
	حصّہ نظم				
1	پرچھائیاں (طویل نظم)	طلباءکو طویل نظم کے بارے میں سمجھانا اور بتانا کہ شاعر نے اس نظم کے ذریعے یہ پیغام دیا ہے کہ انگریزوں کی آمد کے بعد ہندوستانی تہذیب کا آہستہ آہستہ مٹتے چلے جانا ہندوستانیوں کے لئے قابلِ قبول بات نہیں تھی اور صرف ایک آزاد قوم ہی اپنی تہذیب اور ثقافت کا تحفّظ کر سکتی ہے۔	سابقہ معلومات، تمہیدی گفتگو، اعلانِ سبق، معلّمہ کی معیاری بلند خوانی، مشکل الفاظ کی تشریح، طلباء کی تقلیدی بلند خوانی، اصلاحِ تلفّظ، تشریحی سوالات، اعادۂ سبق، گھر کا کام	نظم میں شاعر نے جن تشبیہات کا استعمال کیا ہے انھیں اپنی کاپی میں لکھیے۔	نظم کا مرکزی خیال اور خلاصہ کرانا۔
2	اپنے گھر کا حال (مثنوی)	طلباءکو مثنوی کی تعریف سمجھانا اور بتانا کہ میرؔ کی یہ ایک نہایت دلچسپ مثنوی ہے۔میرؔ نے اس مثنوی میں اپنے گھر کی بدحالی کو ایک خاص انداز سے بیان کیا ہے۔اور اس میں ہر شعر کے الفاظ ایک دوسرے سے کوئی نہ کوئی مناسبت رکھتے ہیں۔	سابقہ معلومات، تمہیدی گفتگو، اعلانِ سبق، معلّمہ کی معیاری بلند خوانی، مشکل الفاظ کی تشریح، طلباء کی تقلیدی بلند خوانی، اصلاحِ تلفّظ، تشریحی سوالات، اعادۂ سبق، گھر کا کام	طلباء سے مصرعے مکمّل کرانا اور قافیہ کی نشاندہی کرانا۔	مثنوی کا خلاصہ اور تفہیمی سوالات کرانا۔