SACRED HEART SCHOOL

Moga, Punjab
Session: 2025-26

Holidays Homework for Academic Year 2025-26

STD: XI

Subject	Topics
Eng I	(i) As a President of the Social Service League of your school, you have been given the responsibility of organizing a 'Bake Sale' to raise funds to purchase stationery items for the underprivileged children of the slum. Write a proposal in not more than 150 words stating the steps you would take to successfully organize this sale. (ii) Read a novel or any book and write a review of it (in 400 words) in the prescribed format for book review. **Note:** Attempt both of the given questions. **Instructions:** • Students will write the given project on the assignment sheets. • The work should be neat and legible. There must be an introduction and conclusion of the given assignment(s). • The project must have a face sheet (front page) with the name of the school, title, students' details and name of the subject teacher. • It must contain an acknowledgement sheet (just after the front page) and a bibliography sheet (in the last). • Both of the assignments (English I & English II) must be given in separate transparent files.
Eng II	Q1. What is Poetry? What are the different types of poems? • Write down at least five types of poetry with definition and examples of each type. • Word limit 400-450 Q2. "Literary devices are perhaps the greatest tools that writers have in literature." What do you understand by the term 'Literary Devices'? List some of the most common literary devices used in literature. • Define at least twenty literary devices by providing the example of their usage in literature. • Word Limit 400-450 ***(BOTH OF THE QUESTIONS ARE COMPULSORY.)***
Maths	Instructions □ Select any two projects out of these mentioned topics. □ Each project should be of 12 – 15 pages. □ Projects should be self-made and should not be copied directly from any website or another student, otherwise that student have to recreate the project. □ Student have to prepare the soft copy of their projects and will send via email to their respective subject teachers. □ Students will keep their project safely with them because after vacations, presentation will be done by each student in the class. □ Final marks will be assigned by the teacher on the basis of student's presentation in the class.

Projects

1. Identify distinction between a relation and a function with suitable examples and illustrate graphically

2. Draw the graph of quadratic function From the graph find maximum/minimum value of the function. Also determine the sign of the expression.

3. Construct a Pascal's triangle to write a binomial expansion for a given positive integral exponent.

4. Construct different types of conics by PowerPoint Presentation, or by making a model, using the concept of double cone and a plane.

5. Write geometrical significance of X coordinate, Y coordinate, and Z coordinate in space. Using the above, find the distance of the point in space from x-axis/y- axis/z-axis. Explain the above using a three-dimensional model/ power point presentation.

6. Using Venn diagram, verify the distributive law for three given non-empty sets A, B and C.

Phy

Important Guidelines-

1. The student should do only the project Allotted to them
2. Marks will be awarded based on how creatively and effectively you explain your topic by adding animations.
3. Students have to do complete research on the topic.
4. Direct copying of content from the internet sources is strictly prohibited.
5. Later on Students have to give a proper seminar on the related topic.
6. Project work should be hand written.
7. Following are the topics of the project work according to the roll no. of the students.

HOLIDAY HOMEWORK	11^{TH}
SUBJECT	PHYSICS
TIME TO BE SPENT	1 HOUR PER DAY FOR 10 DAYS
WORK SPECIFICATIONS STUDENT MAY OPT FOR ANY ONE OF THESE 3 MENTIONED PROJECT WORKS	1.THEORY BASED PROJECT WORK OR 2.MODEL BASED PROJECT OR 3.INVESTIGATIVE PROJECT(EXPERIMENTAL PROJECT)
MATERIAL REQUIRED	Colorful printed sheets , text book of physics, writing and drawing material, reference books , newsprint , Photographs , Graphs where applicable.
No . of minimum sheets to be used	Between 15 to 20 for theoretical project Between 5 to 10 for model based project Between 10 to 15 in experimental project
GUIDELINES/ INSTRUCTION TO BE FOLLOWED	1. You are required to prepare a technical report formally written, including an abstract, some theoretical discussion, experimental set up , principle , observation, data collection, analysis and discussion of the result , conclusion. You can take daily life examples , 2. The content should be original, it should not be copy paste from internet or your books , you can take ideas but formulate them in your own words ideas and present them in your project work. 3. It should be well structured, simple and neat and clean.
EVALUATION	You will be assessed on 1. Conceptual understanding/ clarity 2. Computation if any 3. Your own ideas in that project 4. Presentation.
VIDEO PRESENTATION	STUDENTS Which ever topic has been given to you for the project (theoretical) you all have to make a video lecture of that topic of atleat 15 minutes. In this you have to explain what is your topic all about , what work you have done , your own innovations related to that topic , how that is helpful or harmful for the society.
Sequence of pages	1. School format 2. Certificate 3. Acknowledgement 4. Abstract (what includes in our topic or

		summary of your project) 5. Introduction 6. Main content (principle of the topic, , construction, structure) 7. Conclusion 8. Bibliography.

HOLIDAY HOMEWORK Class 11th **Non medical /supermedical /medical**

1. Properties of fluids
2. Direct and indirect methods of measurement.
3. Dimensional analysis
4. Vectors(types of vectors, properties of vectors, properties of scaler product and vector product, Analytical methods of vector addition both triangle law and parallelogram law)
5. Laws of motion
6. Friction
7. Properties of solids
8. Work , energy and power
9. Collision
10. Centre of mass
11. Equilibrium of rigid bodies
12. Gravitation
13. Moment of inertia
14. Rotational motion and moment of interia
15. Satellites (Geostationary and polar)
16. Fluid mechanics
17. Laws of Thermodynamics
18. .Pressure
19. .Oscillations and waves
20. .Heat
21. Oscillations and waves Circular motion
22. Centre of mass and centre of gravity
23. Viscosity of fluids
24. Kinetic theory of gases
25. Modulii of elasticity, significance
26. Dynamics of uniform circular motion
27. Surface tensions and its applications
28. Archimedes Principle
29. Doppler effect and its practical applications
30. Newton's law of cooling
31. Equilibrium of rigid bodies
32. Measurement including physical laws and fundamental force
33. Time period of simple pendulum, springs , u tube containing incompressible liquid.
34. Bernoulli theorem and its applications
35. Torque and angular momentum and their applications
36. Centre of mass and centre of gravity
37. Viscosity of fluids
38. Kinetic theory of gases
39. Modulii of elasticity, significance
40. Dynamics of uniform circular motion
41. Surface tensions and its applications
42. Bernoulli theorem and its applications
43. Torque and angular momentum and their applications
44. Centre of mass and center of gravity
45. Equilibrium of rigid bodies
46. Surface tensions and its applications
47. Oscillations and waves
48. Oscillations and waves
49. Collision
50. Properties of solids

Bernoulli theorem and its applications

Chem	**PROJECT WORK** **Students are required to complete the assigned project/s as per the following and submit the project file within 02 days of reopening of school after summer vacations. Power point presentation to be made to present (05 min).** **Project Work – 10 Marks** The project work will be assessed by a Visiting Examiner appointed locally and approved by the

Council. The candidate is to creatively execute **one** project as per allotment.

ALL THE STUDENTS TO MAINTAIN THE FOLLOWING IN THE PROJECT REPORT:
(i) COVER PAGE as per the format
(ii) INDEX
DETAILS OF THE PROJECT WITH PAGE NUMBER
(iii) Students acknowledgement
(iv) Certificate
(v) Abstract
Introduction / purpose / objective: (What do you aim to achieve with this project ?)
Scope: what are included and what are excluded in the project. Limitations of the project. What is the context?
(vii) Contents matter in detail

(viii) Analysis/ material aid (graph, data, structure, pie charts, histograms, diagrams, etc.)
(ix) Presentation and data analysis
(x) Conclusion
(xi) Bibliography/ references

ALLOTTMENT OF PROJECTS **XI NON MED**

Roll No.	Name	Topic
1.	ALBIN JOJI	**Chemistry in Forensic Science**
2.	AMANAT KAUR GILL	**Green Chemistry for Pollution Reduction**
3.	AMREET KAUR BRAR	**Dyes: Types, Preparation and Characteristics**
4.	ANMOLPREET SINGH SIDHU	**Polymers: Types and Particular Uses, Examples and Applications**
5.	AVNEESH KAUR BRAR	**Hydrogen Economy and Future Fuels**
6.	BIRTI	**Rocket Propellants: Composition and Properties**
7.	DILJOT KAUR KALER	**Types of Chemical Bonding, Octet rule and Fajan rule**
8.	GURJOT SINGH BRAR	**Quantum Numbers with Significance & Electronic Configuration (1-30 elements)**
9.	GURMANJOT SINGH MANN	Geometry & Shapes of molecules (V.S.E.P.R) Theory
10.	HARSAHIB SINGH AULAKH	**Natural and Synthetic Adulteration (Preservatives)**
11.	JAISMEEN KAUR	**Drugs and Classification**
12.	JASKIRAT SINGH	**E-Waste Management**
13.	JIVESH	**Role of Coordination Compounds in Daily Life**
14.	JOBANDEEP SINGH	**Water Quality Contamination Study in Your Region**
15.	JOBANPREET SINGH	**Production of Personal Care Products**
16.	KAMALPREET SINGH	**Stubble Burning Solutions**
17.	MANVEER SINGH PLAHA	**Chemistry in Our Daily Life**
18.	MEHAKPREET KAUR	**Dyes: Types, Preparation, and Characteristics**: Study different dye classes (e.g., azo, anthraquinone). Understand dye synthesis and color properties.
19.	MEHARJEET SINGH NAGI	Water Quality Contamination Study in Your Region: Investigate pollutants, sources, and their impact on local water quality. Propose solutions for cleaner water.
20.	NAMANDEEP KAUR GILL	Surface Chemistry Applications in Real Life and Industries: Explore phenomena like adsorption, emulsions, and colloids. Understand how surface chemistry affects everyday products and processes.

21.	NEHARIKA	Role of Coordination Compounds in Daily Life: Study complex compounds and their applications. Discuss coordination chemistry in medicine, catalysis, and materials.
22.	PARNAM SINGH BRAR	Chemistry in Food Processing: Analyze chemical reactions during food production. Highlight safety, preservation, and flavor enhancement.
23.	RAJKANWAR SINGH TOOR	Nuclear Energy: Benefits and Limitations:
24.	RAVNEET KAUR BATTH	Organic Chemistry's Role in Pharmaceuticals: Explore drug synthesis, structure-activity relationships. Understand natural product chemistry.
25.	RUPINDERJEET KAUR	Nanoparticles: Scope in Industries and Daily Life: Study nanomaterials' properties and applications. Discuss nanotechnology's impact on medicine, electronics, and energy.
26.	SAHIBJOT SINGH MUNGRA	Chemistry's Role in Cancer Treatment: Investigate drug design, targeting, and delivery. Explore chemotherapy and immunotherapy.
27.	SAKHI	**Dyes: Types, Preparation, and Characteristics**: Study different dye classes (e.g., azo, anthraquinone). Understand dye synthesis and color properties.
28.	SIMAKSH GUPTA	**Plastics' Societal and Global Impact**: Examine how plastics have transformed daily life. Discuss environmental challenges posed by plastic waste.
29.	SIMRANJEET KAUR	**Ancient Indian Medicines and Medicinal Plants**: Research traditional herbal remedies. Explore the chemistry behind their effectiveness.
30.	SUKHMAN SINGH BRAR	**Green Fertilizers: Necessity and Benefits**: Investigate eco-friendly fertilizers. Discuss their role in sustainable agriculture.
31.	SUKHMANPREET SINGH DHALIWAL	**Chemistry in Forensic Science**: Explore chemical techniques used in crime scene investigation. Understand forensic analysis and evidence collection.
32.	TAJVEER SINGH	**Green Chemistry for Pollution Reduction**: Explore eco-friendly chemical processes and their impact on the environment. Investigate sustainable alternatives to traditional methods.
33.	TEJPAL SINGH DHALIWAL	**AI in Chemical Industries**: Explore artificial intelligence applications. Discuss optimization, process control, and safety.
34.	UDAY PRATAP SINGH SANDHU	**Understanding Carbon Footprints**: Analyze environmental impact and carbon emissions. Discuss strategies for reducing footprints.
35.	UPRAJ SINGH SIDHU	**Dyes: Types, Preparation, and Characteristics**: Study different dye classes (e.g., azo, anthraquinone). Understand dye synthesis and color properties.

ALLOTTMENT OF PROJECTS **XI MEDICAL**

Roll No.	Name	Topic
1.	AASMA	Water Quality Contamination Study in Your Region: Investigate pollutants, sources, and their impact on local water quality. Propose solutions for cleaner water.
2.	AASTHA	Surface Chemistry Applications in Real Life and Industries: Explore phenomena like adsorption, emulsions, and colloids. Understand how surface chemistry affects everyday products and processes.
3.	ANGEL	Role of Coordination Compounds in Daily Life: Study complex compounds and their applications. Discuss coordination chemistry in medicine, catalysis, and materials.
4.	ARMAANJOT SINGH	Chemistry in Food Processing: Analyze chemical reactions during food production. Highlight safety, preservation, and flavor enhancement.
5.	ARSHIA JOSEPH	Nuclear Energy: Benefits and Limitations:
6.	BEERKAMAL KAUR GILL	Organic Chemistry's Role in Pharmaceuticals: Explore drug synthesis, structure-activity relationships. Understand natural product chemistry.
7.	DILPREET KAUR	Nanoparticles: Scope in Industries and Daily Life: Study nanomaterials' properties and applications. Discuss nanotechnology's impact on medicine, electronics, and energy.

8.	DILPREET KAUR	Chemistry's Role in Cancer Treatment: Investigate drug design, targeting, and delivery. Explore chemotherapy and immunotherapy.
9.	GURASEES KAUR DHILLON	Soft Drinks' Impact on School Students: Analyze health effects, ingredients, and alternatives. Consider sugar content and additives.
10.	GURBAJ SINGH AULAKH	Discuss nuclear reactions, power generation, and safety. Evaluate pros and cons of nuclear energy.
11.	GURLEEN KAUR GILL	**Mineral Water Components and Their Significance**: Analyze the composition of mineral water. Highlight the importance of minerals for health.
12.	GURNAAZ KAUR	**Decoding Plastic Recycling Codes**: Investigate the meaning and significance of plastic recycling symbols. Explore the impact of recycling on the environment.
13.	HARJOTSAROOP KAUR	**Polymers: Types, Examples, and Applications**: Study different polymer classifications (e.g., addition, condensation). Discuss real-world applications of polymers (e.g., plastics, fibers).
14.	HARLEEN KAUR BHULLAR	**Rocket Propellants: Composition and Properties**: Investigate propellant chemistry. Analyze factors affecting rocket performance.
15.	HARSIMRAN KAUR	**Catalysts in Commercial Chemical Reactions**: Explore catalyst types (e.g., homogeneous, heterogeneous). Discuss their role in industrial processes.
16.	HARSIMRAN KAUR BHULLAR	**Dyes: Types, Preparation, and Characteristics**: Study different dye classes (e.g., azo, anthraquinone). Understand dye synthesis and color properties.
17.	INDERJOT KAUR	**Plastics' Societal and Global Impact**: Examine how plastics have transformed daily life. Discuss environmental challenges posed by plastic waste.
18.	IQVANSHPREET KAUR	**Ancient Indian Medicines and Medicinal Plants**: Research traditional herbal remedies. Explore the chemistry behind their effectiveness.
19.	JAGROOP SINGH DHALIWAL	**Green Fertilizers: Necessity and Benefits**: Investigate eco-friendly fertilizers. Discuss their role in sustainable agriculture.
20.	JASDEV SINGH GILL	**Chemistry in Forensic Science**: Explore chemical techniques used in crime scene investigation. Understand forensic analysis and evidence collection.
21.	JASLEEN KAUR DHALIWAL	**Green Chemistry for Pollution Reduction**: Explore eco-friendly chemical processes and their impact on the environment. Investigate sustainable alternatives to traditional methods.
22.	JASMEEN KAUR	**AI in Chemical Industries**: Explore artificial intelligence applications. Discuss optimization, process control, and safety.
23.	JASMEET KAUR	**Understanding Carbon Footprints**: Analyze environmental impact and carbon emissions. Discuss strategies for reducing footprints.
24.	JASMEET SINGH GILL	**Waste-to-Income Conversion Methods**: Find innovative ways to utilize municipal waste. Consider recycling, upcycling, or energy generation.
25.	JASNOOR SINGH	**Biotechnology's Significance**: Explore genetic engineering, bioprocessing, and applications. Understand biotechnological advancements.
26.	JOBANPREET KAUR	**Hydrogen Economy Exploration**: Investigate hydrogen as a clean energy carrier. Discuss its applications and challenges.
27.	KAMALPREET KAUR GILL	**Stubble Burning Solutions**: Address agricultural residue burning. Explore alternatives to reduce air pollution during crop residue disposal.
28.	KARAMJEET KAUR KALSI	**E-Waste Management Strategies**: Study electronic waste disposal and recycling. Propose efficient methods for handling e-waste.
29.	KHUSHNOOR KAUR	**Innovative Air Pollution Monitoring**: Develop novel technologies to measure air quality. Consider sensor-based solutions and data analysis.
30.	KOMALPREET KAUR	**Production of Personal Care Products**: Create soap, nail polish, boot polish, varnish, nail polish remover, shampoo, and

		scents. Understand the chemistry behind each product.
31.	LAKHWINDER SINGH GILL	**Chemistry in Forensic Science**
32.	MANINDER KAUR	**Green Chemistry for Pollution Reduction**
33.	MANVEER KAUR	**Dyes: Types, Preparation and Characteristics**
34.	MANVINDER KAUR	**Polymers: Types and Particular Uses, Examples and Applications**
35.	MANVIR SINGH	**Hydrogen Economy and Future Fuels**
36.	NAVJOT KAUR	**Rocket Propellants: Composition and Properties**
37.	NIMRAT KAUR GILL	**Types of Chemical Bonding, Octet rule and Fajan rule**
38.	NIYAM ARORA	**Quantum Numbers with Significance & Electronic Configuration (1-30 elements)**
39.	PARNEET KAUR	Geometry & Shapes of molecules (V.S.E.P.R) Theory
40.	PRANJAL	**Natural and Synthetic Adulteration (Preservatives)**
41.	RAJPREET SINGH GILL	**Drugs and Classification**
42.	RAMANPREET KAUR BAMBRAH	**E-Waste Management**
43.	RAMANPREET KAUR BRAR	**Role of Coordination Compounds in Daily Life**
44.	RIYA NAGAR	**Water Quality Contamination Study in Your Region**
45.	RUKMANI	**Production of Personal Care Products**
46.	SHANVEER SINGH GILL	**Stubble Burning Solutions**
47.	SHUBHNOOR KAUR	**Chemistry in Our Daily Life**
48.	TAQDEER BHULLAR	1. **Municipal Waste Conversion**: **2.** Find ways to turn waste into income-generating resources.
49.	UNIQUE	**Green Chemistry for Pollution Reduction**
50.	VANSH	**Carbon Footprints**: Analyze environmental impact and reduce carbon emissions.
51.	VARLEEN KAUR	**Green Chemistry**: Focuses on designing environmentally friendly chemical processes. Aims to reduce pollution, minimize waste, and use sustainable resources.

ALLOTTMENT OF PROJECTS **XI SUP MEDICAL**

Roll No.	Name	Topic
1.	AAHNA	**Chemistry in Forensic Science**
2.	ABERAJ SINGH	**Green Chemistry for Pollution Reduction**
3.	AISHVEER KAUR	**Dyes: Types, Preparation and Characteristics**
4.	ANGEL	**Polymers: Types and Particular Uses, Examples and Applications**
5.	ANSHIKA	**Hydrogen Economy and Future Fuels**
6.	ANUREET KAUR BRAR	**Rocket Propellants: Composition and Properties**
7.	ARMAAN SINGH SIDHU	**Types of Chemical Bonding, Octet rule and Fajan rule**
8.	ASHMEET KAUR SIDHU	**Quantum Numbers with Significance & Electronic Configuration (1-30 elements)**
9.	ASHNA PRUTHI	Geometry & Shapes of molecules (V.S.E.P.R) Theory
10.	AVINEET KAUR	**Natural and Synthetic Adulteration (Preservatives)**
11.	AYUSH ARORA	**Drugs and Classification**
12.	BLESSON SAMUEL J	**E-Waste Management**
13.	DHARAMVEER KAUR	**Role of Coordination Compounds in Daily Life**
14.	DIVJOT SINGH	**Water Quality Contamination Study in Your Region**
15.	DIVYANGANA	**Production of Personal Care Products**
16.	EKJOT SINGH MUHAR	**Stubble Burning Solutions**
17.	EKNOOR SINGH	**Chemistry in Our Daily Life**
18.	GURMIT KAUR	**Ancient Indian Medicines and Medicinal Plants**: Research traditional herbal remedies. Explore the chemistry behind their effectiveness.
19.	GURSHAAN SINGH	**Green Fertilizers: Necessity and Benefits**: Investigate eco-friendly fertilizers. Discuss their role in sustainable agriculture.
20.	GURSHARAN SINGH MALHI	**Chemistry in Forensic Science**: Explore chemical techniques used in crime scene investigation. Understand forensic analysis and evidence collection.

21.	HARMANJOT KAUR SIDHU	**Green Chemistry for Pollution Reduction**: Explore eco-friendly chemical processes and their impact on the environment. Investigate sustainable alternatives to traditional methods.
22.	HARSIMRAN KAUR	**AI in Chemical Industries**: Explore artificial intelligence applications. Discuss optimization, process control, and safety.
23.	HARSIMRAN SINGH	**Understanding Carbon Footprints**: Analyze environmental impact and carbon emissions. Discuss strategies for reducing footprints.
24.	HASANDEEP KAUR	**Waste-to-Income Conversion Methods**: Find innovative ways to utilize municipal waste. Consider recycling, upcycling, or energy generation.
25.	JAGRAJ SINGH	**Biotechnology's Significance**: Explore genetic engineering, bioprocessing, and applications. Understand biotechnological advancements.
26.	JAISMEEN KAUR BHULLAR	**Hydrogen Economy Exploration**: Investigate hydrogen as a clean energy carrier. Discuss its applications and challenges.
27.	JASMANJOT SINGH DHALIWAL	**Stubble Burning Solutions**: Address agricultural residue burning. Explore alternatives to reduce air pollution during crop residue disposal.
28.	JASMINE KAUR	**E-Waste Management Strategies**: Study electronic waste disposal and recycling. Propose efficient methods for handling e-waste.
29.	JASNANDAN KAUR SIDHU	**Innovative Air Pollution Monitoring**: Develop novel technologies to measure air quality. Consider sensor-based solutions and data analysis.
30.	JASNOOR SINGH	**Production of Personal Care Products**: Create soap, nail polish, boot polish, varnish, nail polish remover, shampoo, and scents. Understand the chemistry behind each product.
31.	JATIN DHAND	**Chemistry in Forensic Science**
32.	KAMALPREET KAUR	**Green Chemistry for Pollution Reduction**
33.	KARANPREET SINGH DHALIWAL	**Dyes: Types, Preparation and Characteristics**
34.	KARANVEER SINGH	**Polymers: Types and Particular Uses, Examples and Applications**
35.	KOMALPREET KAUR	**Hydrogen Economy and Future Fuels**
36.	KRITIKA JINDAL	**Rocket Propellants: Composition and Properties**
37.	MANIK GUPTA	**Types of Chemical Bonding, Octet rule and Fajan rule**
38.	MANREET KAUR BRAR	**Quantum Numbers with Significance & Electronic Configuration (1-30 elements)**
39.	MANREET KAUR GILL	Geometry & Shapes of molecules (V.S.E.P.R) Theory
40.	MANVIR SINGH	**Natural and Synthetic Adulteration (Preservatives)**
41.	MAYANK TANEJA	**Drugs and Classification**
42.	NISHANDEEP SINGH HEAR	**E-Waste Management**
43.	PRABHLEEN KAUR DHALIWAL	**Role of Coordination Compounds in Daily Life**
44.	PRABHNOOR KAUR GILL	**Water Quality Contamination Study in Your Region**
45.	PUNEET KAUR BHULLAR	**Production of Personal Care Products**
46.	RADHIKA	**Stubble Burning Solutions**
47.	SAVREEN KAUR BHULLAR	**Chemistry in Our Daily Life**
48.	SEJAL	6. **Municipal Waste Conversion**: **7.** Find ways to turn waste into income-generating resources.
49.	SHAMVI SHARMA	**Green Chemistry for Pollution Reduction**
50.	SOFIA SIKRI	**Carbon Footprints**: Analyze environmental impact and reduce carbon emissions.
51.	SUKHMANPREET KAUR TOOR	**Green Chemistry**: Focuses on designing environmentally friendly chemical processes. Aims to reduce pollution, minimize waste, and use sustainable resources.
52.	TANVEER KAUR	**Hydrogen Economy and Future Fuels**
53.	TARANJOT KAUR	**Rocket Propellants: Composition and Properties**
54.	UPKEERAT KAUR	**Types of Chemical Bonding, Octet rule and Fajan rule**

Bio

The candidates are asked to make investigatory project with their own handwriting. The written content should 20 to 25 pages with following standard format.

Format of Project

1.	Front Page
2.	Certificate
3.	Acknowledgement
4.	Introduction
5.	**Methodology:** Presentation (graphs, tables, charts, newspaper, cuttings, diagrams, photographs, statistical analysis if relevant)
6.	Result & Discussion
7.	Summary & Conclusion
8.	Bibliography / References
9.	Recommendations (If applicable)

Biology Std: XI Med

Complete the following Investigatory projects as per given instructions.

S.No	Roll No	Topic
1.	1 to 9	Herbarium
2.	10 to 18	Hydroponics
3.	19 to 27	Germination of Seeds
4.	28 to 35	Plantgrowth and Phototropism
5.	36 to 44	Diabetes Mellitus
6.	45 to 51	Absorption

Biology Std: XI S Med

Complete the following Investigatory projects as per given instructions.

S.No	Roll No	Topic
1.	1 to 9	Herbarium
2.	10 to 18	Hydroponics
3.	19 to 27	Germination of Seeds
4.	28 to 36	Plantgrowth and Phototropism
5.	37 to 45	Diabetes Mellitus
6.	46 to 54	Absorption

Comp

Question 1 Write a menu driven program and enable the following task

1. Armstrong Number
2. Perfect Number
3. Duck Number
4. Neon Number
5. Niven Number
6. Tech Number
7. Binary to decimal
8. Decimal to binary
9. Prime and Composite
10. Disarium number
11. Special Number
12. Automorphic Number
13. Xylem Number
14. Happy Number
15. Magic Number
16. Evil Number

17. Emip Number
18. Adam Number
19. Fibonacci series
20. Twisted Prime
21. Twin Prime
22. Equivalent Number
23. Palprime Number
24.
```
                1
            2       2
        3   3   3
    4   4   4   4
```
25.
```
        *
      *   *
    *   *   *
  *   *   *   *
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Creative Video Making

Objective:
Create a short, engaging and ,meaningful video which imparts a moral value on a topic of your choice or from the provided list. This project is designed to help you build creativity, confidence and communication skills.

Instructions:

1. **Choose Your Topic**
   – Select a topic from the suggested list or think of your own idea and get it approved by your teacher/parent.
2. **Plan Your Video**
   – Write a short script or outline of what you will say or show.
   – Decide if you need any props, costumes, drawings, or family help.
3. **Video Duration**
   – Keep the video between 1 to 3 minutes long.
4. **Be Creative!**
   – You can act, narrate, draw, sing, make a news show, do an experiment, or even make a mini movie!
5. **Speak Clearly**
   – Use English or your native language (as instructed by your teacher). Make sure your voice is clear and loud enough.
6. **Stay Safe & Respectful**
   – Always ask for permission before recording others. Don't include personal or private information. Use safe and positive content only.
7. **Submission Guidelines**
   – Submit your video in MP4 format (or any format as told by the teacher).
   – Name your file like this: YourName_Class_Topic.mp4
   – Submit via email, Google Drive link, pen drive, or the school portal (as instructed).

Tips for Success:

- Practice before recording.
- Keep the camera steady (use a stand or a helper).
- Record in a quiet and well-lit place.
- Watch your video before submitting to make sure everything is okay.

List of Topics

1. **A Day in the Life of a Historical Figure**
   – Dress up and act as a famous personality (like Gandhi, Einstein, or Kalpana Chawla).
2. **Science Magic Tricks**

– Simple experiments explained with scientific reasoning.

3. **Math in Real Life**
   – Show how math is used in shopping, cooking, sports, etc.
4. **How I Recycle at Home**
   – Demonstrate eco-friendly practices.
5. **Book Review with a Twist**
   – Act out a scene from your favorite book.
6. **Stop-Motion Animation**
   – Use toys or paper cut-outs to create a mini-story.
7. **Homemade News Show**
   – Present school or local news as a news anchor.
8. **"If I Were…" Series**
   – If I were the Prime Minister, a teacher, a superhero, etc.
9. **My Dream Vacation (Imaginary)**
   – Use props or drawings to describe a dream place.
10. **Time Capsule Message to My Future Self**
11. **Say No to Plastic – Here's How**
    – Demonstrate alternatives to plastic at home.
12. **Be Kind Campaign**
    – Share small acts of kindness students did or suggest.
13. **Why Voting Matters (For Older Students)**
    – A simplified explanation of elections and democracy.
14. **My Talent Show**
    – Dance, sing, draw, code – whatever they're proud of.
15. **My Mini Startup Idea**
    – Pitch a fun product or service as a "young entrepreneur".
16. **My Biggest Lesson This Year**
    – Share a personal experience or challenge and what they learned from it.
17. **Gratitude Jar**
    – A video about things they're thankful for, with visuals or drawings.
18. **My Role Model and Why**
    – Talk about someone who inspires them (can be a family member, celebrity, or teacher).
19. **Invent a New Gadget**
    – Describe or sketch an imaginary invention to solve a real-world problem.
20. **Life on Another Planet**
    – Create a fictional story or news report from Mars, Jupiter, etc.
21. **If Animals Could Talk**
    – A fun skit imagining a conversation with a pet or wild animal.
22. **Local Heroes of My Area**
    – Feature a community helper like a shopkeeper, doctor, or sanitation worker.
23. **My Kitchen Chemistry**
    – Cooking something simple and explaining the science behind it.
24. **Recreate a Scene from a Movie or Book**
    – With costumes or props at home.
25. **How I Stay Safe Online**
    – Tips on digital responsibility for kids.

	Need Help? For any assistance or in case of difficulty, please contact your Subject Teacher

Prepared by **Approved bys**