#### INTERDISCIPLINARY PROJECT

**THEME:** International Year of Cooperatives, Glaciers' Preservation, and Quantum Science and Technology.

### **CLASS X**

The UN General assembly declared 2025 as the International Year of Cooperatives (IYC2025) to be celebrated under the theme "Cooperatives Build a Better World." The theme highlights the lasting global impact of cooperatives and emphasizes that the cooperative model is a crucial solution for addressing various global challenges. Glaciers are crucial for regulating the global climate and providing freshwater, essential for billions of people. However, due to climate change, driven mainly by human activities since the 1800s, these vital resources are rapidly melting. The United Nations has designated 2025 as the International Year of Glaciers' Preservation to highlight the importance of glaciers and ensure that those relying on them, and those affected by cryospheric processes, receive the necessary hydrological, meteorological, and climate services.

The United Nations proclaimed 2025 as the **International Year of Quantum Science and Technology (IYQ)**. According to the proclamation, this year-long, worldwide initiative will "be observed through activities at all levels aimed at increasing public awareness of the importance of quantum science and applications."

Keeping the above in mind, the spectrum of activities are designed to unify pedagogy and the quintessence of education, so that our learners are nurtured as compassionate and capable global leaders of tomorrow. We wish that our children collaborate their fun filled vacation experiences with learning and get a chance to paint their holidays with creative spirit and academic endeavor.

- This project comprises of 7 parts –A, B, C, D, E, F and G
- The class will be divided into groups comprising 5 members each on the basis of roll numbers i.e., 1-5, 6-10, etc. (8 groups per class)
- Each group is expected to do all the 5 tasks given under each part (One task per child for each part).

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Task 1 is for Roll Nos. 1, 6, 11, 16, 21, 26, 31, 36, 41
Task 2 is for Roll Nos. 2, 7, 12, 17, 22, 27, 32, 37, 42
Task 3 is for Roll Nos. 3, 8, 13, 18, 23, 28, 33, 38, 43
Task 4 is for Roll Nos. 4, 9, 14, 19, 24, 29, 34, 39, 43
Task 5 is for Roll Nos. 5, 10, 15, 20, 25, 30, 35, 40, 45
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- Each group will have a leader who will be coordinating with the group members, so that the work is completed and submitted on time
- Each group will collate and present their work in **one single file only**
- Make use of eco-friendly materials for preparing the models

> Part A

This year, our Holiday Homework revolves around the meaningful theme declared by the United Nations: International Year of Glacier's Preservation. Glaciers are silent storytellers of our planet's past and fragile guardians of its future. Through these creative tasks, you will explore their beauty, raise awareness about their rapid disappearance and express their voices for nature.

Let this holiday be a journey of imagination, learning and conscious creativity. Enjoy, recharge and return with renewed energy—both for learning and for the Earth!

#### Task 1: Picture-Based Creative Writing (Roll no. 1 to 8)

Choose a photo of a glacier or melting ice cap and on an A4 size sheet, write a 300-word creative piece: either a story, monologue, or scene from a dystopian future.

### Task 2: Poster Designing (Roll no. 9 to 16)

Design a visually compelling poster that gives glaciers a voice on an A3 size sheet. Use art, slogans, quotes and short impactful text to raise awareness about glacier preservation. Focus on rhyme, alliteration, or metaphor (e.g., "Melt Hearts, Not Ice").

### Task 3: Visual Vocabulary Journal (Roll no. 17 to 24)

Choose 10 glacier/ environment- related words (e.g., calving, crevasse, permafrost). For each:

- Draw a small illustration
- Use it in a meaningful sentence
- Give a synonym/antonym

Use A4 size coloured sheets (can be stapled or bound as a mini-journal).

## Task 4: Design a Newspaper Front Page (Roll no. 25 to 32)

Design the front page of a fictional newspaper titled "The Glacier Times" on an A3 size sheet. Include a main headline article, a short interview and glacier-related facts or a cartoon. Use creative layouts, catchy headlines and visuals to make it look like a real newspaper.

### Task 5: Recipe for Saving a Glacier: (Roll no. 33 and above)

On an A4 size sheet, create a fictional recipe card titled: Recipe to Save a Glacier.

## Include:

- Ingredients: (e.g., "1 cup of awareness", "2 spoons of action")
- Method: Step-by-step persuasive instructions
- Serving Tip: A strong closing slogan

Use literary devices like metaphors and alliteration. Decorate your recipe with drawings, doodles or collage elements.

**>** Part B

#### **SINDHI**

H.H.W given in brief : पर्यावरण जी रक्षा

वर्ग-1. पर्यावरण या उन सां वास्तो रखंदड़ शयुनि (जीअं :- ग्लेशियर, पेड़-पोघे , पहाड़ , नदी , झरना , धरती, पाणी वगैरह ) ते हिकु कोलाज़ ठाहियो | उन ते पर्यावरण ते सिंधीअ में संदेश लिखी | (ए - 3 आकार का कट आउट |)

वर्ग-2. पर्यावरण या उन सां वास्तो रखंदइ शयुनि (जीअं :- ग्लेशियर, पेइ-पोधे , पहाइ , नदी , झरना , धरती, पाणी वगैरह ) खे चित्र सहित बु पोस्टर ते ठाहे सिन्धीअ में नारों लिखो । (ए - 3 आकार का कट आउट)

वर्ग-3. पर्यावरण मुताबिक (Ecofriendly) हिकु थैलो ठाहियो | हुन ते पर्यावरण या उन सां वास्तो रखंदइ शयुनि (जीअं :- ग्लेशियर, पेइ-पोधे , पहाइ , नदी , झरना , धरती, पाणी वगैरह ) ते सिंधीअ में चित्र सुमत स्लोगन लिखो | (सामान्य आकार लगभग 10 इंच लंबाई एवं 8 इंच चौड़ाई)

वर्ग-4. पर्यावरण मुताबिक (Ecofriendly) हिकु लिफाफ़ो ठाहियो | हुन ते पर्यावरण या उन सां वास्तो रखंदड शयुनि (जीअं :- ग्लेशियर, पेड-पोधे , पहाड़ , नदी , झरना , धरती, पाणी वगैरह ) जा सिंधीअ में चित्र सुमत स्लोगन लिखो | (सामान्य आकार लगभग 8 इंच x 4 इंच आयताकार )

#### **HINDI**

H.H.W given in brief : पंच तत्व (पृथ्वी, जल , अग्नि, आकाश, वायु) ही प्राण तत्व :-विषय के आधार पर निर्देशानुसार कार्य कीजिए |

वर्ग 1. पंच तत्वों का संरक्षण कितना आवश्यक और संरक्षण के उपायों से निर्मित तीन पृष्ठों की एक आकर्षक ज्ञानवर्धक पत्रिका बनाइए तथा उसे एक आकर्षक -सा शीर्षक भी दीजिए | (ए-3 आकार के कागज पर)

वर्ग 2. पंच तत्वों के प्रत्येक अवयवों पर आधारित एक - एक नारा लिखते हुए आकर्षक सा पोस्टर बनाएँ | (ए-3 आकार के कागज पर)

वर्ग 3. पंच तत्वों के कट आउट अथवा माडल पर उनके संरक्षण के उपाय प्रदर्शित कीजिए | (सामान्य आकार का कट - आउट लगभग 12 X 12 इंच )

वर्ग 4. आकर्षक - सा सचित्र विज्ञापन तैयार कीजिए जिसमें पंच तत्वों में से किन्हीं दो स्वचयनित तत्वों के संरक्षण की प्रस्तुति हो | (ए-3 आकार के कागज पर)

वर्ग 5. पंच तत्वों अथवा उनसे जुड़ी वस्तुओं (जैसे :- पहाड़ , नदी , झरना , पृथ्वी , नल से टपकती बूँद , बादल आदि) के कट आउट पर अथवा स्वेच्छित कट - आउट पर पर्यावरण बचाओ या पंच तत्वों में से किंही दो तत्वों पर आधारित दोहा लिखिए |

(ए - 3 आकार का कट आउट | )

#### **SANSKRIT**

H.H.W given in brief: पंचतत्व ( क्षिति, जल , पावक , गगन, समीरा ) - प्राणतत्व एव :- विषय के आधार पर निर्देशानुसार कार्य कीजिए | वर्ग 1. पंच तत्वों का संरक्षण कितना आवश्यक और संरक्षण के उपायों से निर्मित तीन पृष्ठों की एक आकर्षक सचित्र एवं ज्ञानवर्धक पत्रिका बनाइए तथा उसे एक आकर्षक -सा शीर्षक भी दीजिए | (ए-3 आकार के कागज पर) वर्ग 2. पंच तत्वों के प्रत्येक अवयवों पर आधारित एक - एक सूक्ति लिखते हुए आकर्षक सा सचित्र पोस्टर बनाएँ | (ए-3 आकार के कागज पर) वर्ग 3. पंच तत्वों के कट आउट अथवा माइल पर उनके संरक्षण के उपाय प्रदर्शित कीजिए | (सामान्य आकार का कट - आउट लगभग 12 X 12 इंच ) वर्ग 4. दो अलग -अलग पतंगे लेकर अथवा स्वनिर्माण कर पंच तत्वों का सचित्र वाक्य निर्माण कीजिए | (सामान्य आकार की पतंग लगभग 12 X 12 इंच ) वर्ग 5. पंच तत्वों अथवा उनसे जुड़े अवयवों (जैसे :- पहाइ , नदी , झरना , पृथ्वी , नल से टपकती बूँद , बादल आदि) के कट आउट पर अथवा स्वेच्छित कट - आउट पर प्रत्येक तत्वों पर आधारित श्लोक लिखिए | (ए - 3 आकार का कट आउट ।)

#### **FRENCH**

Task-1 Write a short conversation in French between a glacier and a human visitor. The glacier shares its feelings, experiences, and warnings. The human responds with questions, concern, or ideas for help.Raise awareness about climate change in a creative way. Create a visually appealing display with speech bubbles or illustrated characters on a full chart paper with shades of blue, silver and white giving it frosty effect.

Task-2 Design two banners with a message to spread awareness about glaciers — their beauty, importance, and the threats they face from climate change. The banners should be made vertical as of size 24"x12". Spray snow paint or stick small pieces of cotton at the bottom or around the edges for a snow-like feel.

Task -3 Create a visually engaging travel advertisement promoting glaciers as an exotic holiday destination. Use colourful images and catchy headline to make it appealing and encouraging people to visit while also learning the current threats due to climate change. (size-A3)



### **MATHEMATICS**

The UN General Assembly declared 2025 as the International Year of Cooperatives to be celebrated under the theme "Cooperatives Build a Better World." The theme highlights the lasting global impact of cooperatives and emphasizes that the cooperative model is a crucial solution for addressing various global challenges. India has a vast network of cooperative societies. Handloom Textile & Weavers Cooperatives is one of the cooperatives which plays a crucial role in empowering weavers, particularly those in rural areas, by helping them overcome dependence on merchants and access better income opportunities.

https://ruralhandmade.com/blog/the-handloom-heritage-of-india

Keeping the theme "Weaving Stories: Exploring India's Handloom Heritage" in mind, Choose any one Indian handloom tradition (e.g., Banarasi, Kanjeevaram, Pochampally, Chanderi, Ikat, etc.) and create a brochure on Indian Handloom traditions (on A4 sheets).

**Task 1**: Design a traditional yet creative cover page of the brochure.

**Task 2:** Highlight the pattern and cultural significance of the handloom tradition chosen. (2 A4 sheets)

**Task 3:** Make a Miniature Textile Sample using the handloom tradition chosen using bright colours on A4 sheet.

**Task 4:** Curate a sketch of an evening gown/a traditional outfit for yourself using the handloom tradition chosen and any mathematical concept learnt during the formative years of schooling on A4 sheet.

**Task 5:** List down the initiatives taken by Government of India or NGO to support and sustain our Indian Handloom heritage (not more than 2 A4 sheets).

Use the link shared above to collect and present the information in the brochure.

> Part D

### **SCIENCE**

The United Nations General Assembly declared 2025 as the International Year of Quantum Science and Technology to promote global collaboration in Quantum Science and Technology. The word "quantum" originates from the idea that physical properties, such as energy, are not continuous rather exist in quantized amounts. A quantum is the smallest possible unit of a physical property. For example, a photon is a quantum of light. The principles of quantum mechanics are used in developing new technologies with potential applications in computing, communication, and sensing.

# **Task 1:** Experiential learning

# Roll numbers 1, 6, 11, 16, 21, 26, 31, 36.

Light which is an electromagnetic radiation finds various applications in daily life. One such application is optical fibre communication where basic concepts such as total internal reflection (TIR), refraction, and Snell's law are used. Design a prototype or a 3 D model on **optical fibres.** 

**Web source**: https://www.youtube.com/watch?v=mqoGZy8yEtQ

## Task 2: Graphic novel

# Roll numbers 2, 7, 12, 17,22, 27,32, 37.

In our daily life, we are surrounded with radiations. Design a graphic novel (5-10 pages) describing conversation between science and non-science student describing seven regions of electromagnetic spectrum highlighting their key features (wavelength, useful and harmful effects).

Web source: https://www.nrc.gov/about-nrc/radiation/around-us/uses-radiation.html

## Task 3: Role play

## Roll numbers 3, 8, 13, 18,23, 28,33, 38.

Design a skit on the topic "**History of light**" describing its evolution on the basis of human understanding of it as a ray to later as a particle and wave. Also include key scientific theories and experiments performed by prominent scientists.

Web source: https://www.youtube.com/watch?v=YY-dmu4YpBU&t=2327s

# Task 4: Designing an experiment

# Roll numbers 4, 9, 14, 19,24, 29,34, 39.

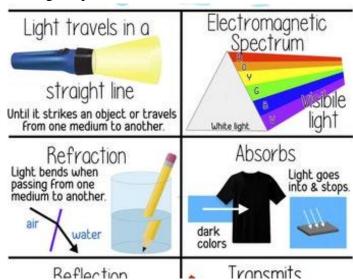
Design an experiment/activity or working model in which any scientific phenomenon is involved.

Web source: https://www.youtube.com/watch?v=s87FhnwMcD0&t=78s

## Task 5: Poster making.

## Roll numbers 5, 10, 15, 20, 25, 30, 35, 40. 41

Make a poster on topic "optics". The poster should be on A3 sheet in landscape format. Use Google search engine to get images illustrating the various applications and basic concepts of light where reflection, refractions, dispersion, and scattering are used. You can refer to the below image while making the poster.



# For compiling data, the following groups can be formed:

Group A- roll no 1-5

Group B -roll no 6 -10

Group C -roll no 11-15

Group D -roll no 16-20

Group E- roll no 21 - 25

Group F- roll no 26-30

Group G- roll no 31-35

Group H -roll no 36-41

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Part E

<u>Class:</u> X <u>Main Topic</u>: Consumer Awareness

Term: I and II Session: 2025-26

**Subject:** Social Science (Economics) **Chapter/Topic:** Consumer Rights

## **Skill to be assessed:**

- Understanding
- ➤ Analyzing
- > Evaluating
- > Expressing
- Presenting ideas
- > Time management

## Project should be developed and presented in this order in a file / folder (A4 size sheet)

- ➤ Cover page showing project title ,schools name, student's name, class and section and academic session (year)
- List of contents with page number (approx...15 pages)
- Acknowledgements: Acknowledging institution, offices and libraries visited and people who have helped.

- > Project Overview: Purpose ,aim, methodology and experience while doing the project
- > Chapters with relevant headings.
- Summary and conclusions based on findings.
- ➤ Bibliography should have the title, pages referred ,author, publisher ,year of publication and if a website, the name of the website with a specific link which have been used.
- > Teachers evaluation report

**NOTE:** Only eco-friendly material to be used

## PROJECT EVALUATION PROFORMA

The Proforma should be attached on the last page of the project.

School's Name

Address

Student's Name

Roll. No

Class

Section

Teacher Assessment

- 1. Content accuracy and originality
- 2. Presentation and creativity
- 3. Process of project competition
- 4. Viva –voce
- 5. Overall remarks:
- 6. Teacher signature: Date:
- 7. School stamp:

# **Topics and themes for project work on Consumer Awareness**

"Cooperatives for Consumer Welfare: A Winning Combination".

In today's fast-paced consumerist world, individuals often find themselves at the mercy of market forces, struggling to make informed choices and assert their rights. However, there is a powerful tool that can help consumers regain control and create positive change: cooperative societies.

By coming together and pooling their resources, consumers can harness the collective power of cooperation to promote

their welfare and shape a better future. The concept of "Cooperatives for Consumer Welfare - A Winning Combination" embodies this idea, highlighting the potential of cooperative societies to drive consumer- centric innovation, improve

product quality, and foster community development. As we explore the intersection of cooperatives and consumer welfare, we uncover a wealth of opportunities for individuals, communities, and society as a whole to thrive.

Keeping the above statement in mind, prepare a project on Consumer Awareness as per the following guidelines:

**Task 1:** For the following products/ services discuss what safety rules should be observed by the producers?

- a) LPG cylinder
- b) Cinema theatre
- c) Circus

- d) Medicines
- e) Edible oil
- f) Marriage pandal
- g) A high-rise building

Find out any case of accident or negligence from people around you. In your opinion in which area does the responsibility lie with the producer? Discuss.

Compile your findings on A4 size sheet. (Roll No. 1-10)

**Task 2:** Prepare a Television advertisement with attractive jingles and relevant messages in Hindi/ Sindhi/ French/ Sanskrit on the topic **Jago Grahak Jago** A4 size sheet (refer **Page no.- 82** of your Economics book for catchy advertisements of product) (Roll No. 11-20)

**Task 3:** Prepare five pictorial flash cards of 10 X 8 inches denouncing various malpractices that exist in the market which lead to consumer exploitation. Behind each flash card explain the situation as well in 100-150 words. (Roll No. 21-30)

**Task 4:** Prepare a story board depicting a story of a consumer who was exploited in the market but finally got justice in the Consumer court. (refer examples given on **Page no. 79-83** of Economics book) (Roll No. 30-40)

**Task 5:** Conduct a survey in your locality by supplying the following questionnaire to people to get an idea as to how aware they are as consumers. (Roll No. 40-50)

## Make report based on your observations.

#### QUESTIONNAIRE FOR TASK 5

QUEDITO: WHILE I OK I MAKE			
For each question, tick one.	Always (A)	Sometimes (B)	Never (C)
When you buy some item, do you insist on a bill?	A	В	c
2. Do you keep the bill carefully?	A	В	С
3. If you realize that you have been tricked by the shopkeeper,	A	В	С
have you bothered to complain to him?			
4. Have you been able to convince him that you've been cheate	d? A	В	С
5. Do you simply grumble to yourself reconciling that it is your	7 A	В	c
fate that you are often being victimized so and it is nothing n	ew?		
6. Do you look for ISI mark, Expiry date, etc.?	A	В	С
7. If the expiry date mentioned is just a month or so away,	A	в	c
go you insist on a fresh packet?			
8. Do you weigh the new gas cylinder/ old newspapers yourself	A	В	C
before buying/selling?			
9. Do you raise an objection if a vegetables seller uses stones in	A	В	C
place of the exact weight?			
10. Do excessively bright coloured vegetables arouse your susp	icion? A	В	С
11. Are you brand-conscious?	A	В	С
12. Do you associate high price with good quality (to reassure	A	В	C
yourself that after all have not paid a higher price just like t	hat)?		
13. Do you compare the price paid by you with those of others?	A	В	c
14. Do you unhesitatingly respond to catchy offers?	A	В	С
15. Do you strongly believe that your shopkeeper never cheats	A	В	C
a regular customer like you?			
16. Do you favour 'home delivery' of provision items without	A	В	C
any doubt regarding weight etc.?			
17. Do you insist on 'paying by meter' when you travel by auto	? A	l B	С

> Part F

# **ARTIFICIAL INTELLIGENCE (417)**

**Task 1:** Create an innovative Infographic / Comic Strip - representing the theme "**Applications of Quantum Computing in Smart City Planning / How to be Cyber Smart**".

Or

Design a colourful brochure and share a minimum of "Five popular tools of Generative AI" using any open-source software.

## Task 2: <a href="https://research.google.com/semantris/">https://research.google.com/semantris/</a>

Use the link and **Play Arcade** to think and type fast and share your highest score achieved. Email on the following Id:

computerassignments@svisgdelhi.com with your name, class, and section in the subject line.

**NOTE-** Students need to perform both the tasks given.

> Part G

# **COMPUTER APPLICATION (165)**

Design a Travel webpage exploring any "City of World implementing Sustainable Development practices".

or

Design a Webpage representing the information about any "Five applications of Quantum Technology".

Email on the following Id: computerassignments@svisgdelhi.com with your name, class, and section in the subject line.

# **PAINTING (049)**

Make any 5 compositions for any topic, where 3 human figure are compulsory from any medium (paint, oil pastels etc.) which indicates the geometrical shapes, rhythms, proportional and balance.

## HINDUSTANI MUSIC MELODIC INSTRUMENTS (035)

Prepare a project on any one topic proposed here;

- 1. Music and religion
- 2. Music and science
- 3. Folk music
- 4. Film music

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