St. XAVIER'S HIGH SCHOOL
EDUCATION FOR ALL
BANKURA, WB
Affiliation No.: 2430130
Affiliated to CBSE (New Delhi) 10+2 level
School Code: 15720

SUMMER VACATION ASSIGNMENT (2025-2026)

Class-XI-Science

Subject: English

A. Prepare a Project of the same topic according to the assigned Roll no. (Part of your ASL internal exam)

Information regarding the project:

1. The project should be in handwritten form in practical sheets. No Printed Project is accepted.

2. Project must contain pictures (Mandatory).

3. The project must contain the following points:
a) Cover Page (School name, school logo, name of topic, students name, class, subject, session, roll number, guided by in
printed form only.
b) Certificate
c) Index
d) Introduction to the topic.
e) Main content (Meaning, Definition if any, Writer's life, Importance of the text, Work's Influence on us, role in our life, etc.)
f) Conclusion.
g) Bibliography/References

4. Submit the project report in a lace file with appropriate cover.

TOPIC. ASSIGNED	ROLL NO.
1. Emotional and Physical Displacement in *The Portrait of a Lady* by Khuswant Singh.	:-01 to 10
2. Memory and Grief in Shirley Toulson's *A Photograph*: A Reflection on Enduring Loss through Imagery.	:- 11 to *20*
3. The Silk Road: Research the historical significance and cultural impact of the Silk Road.	:- 21 to 30
4. The Role of Women in Literature: Examine how women are portrayed in the play *Mother's Day.*	:- 31 to 40
5. The Impact of Social Media on Language: Explore how social media has influenced language usage and the emergence of new slang and meme languages.	:- 41 to the rest.

Subject: Physics

SUBJECT: PHYSICS

INSTRUCTIONS:

1. ***There will be two practical notebook- one for ACTIVITY, another for EXPERIMENT.***
2. ***Activities should be written in activity notebook and Experiments should be written in experiment notebook.***
3. ***Sample writings will be sent in class group shortly.***
4. ***Observation table should leave vacant. Values should be written after doing the practical.***

A.Write the following activities in activity notebook:

Activity No.1- To make a paper scale of given least count, e.g., 0.2cm, 0.5 cm.

Activity no.2- To determine mass of a given body using a metre scale by principle of moments.

B. Write the following experiments in experiment notebook:

Experiment No.1- (a) To measure diameter of a small spherical body and (b) to measure internal diameter and depth of a given beaker using Vernier Callipers and hence find its volume.

Experiment No. 2- To measure diameter of a given wire and thickness of a given sheet using screw gauge.

Experiment No. 3- To determine radius of curvature of a given spherical surface by a spherometer.

Subject: Mathematics

1. Write which of the following statements is true? Justify your answer.

(i) The set of all integers is contained in the set of all rational numbers.
(ii) The set of all crows is contained in the set of all birds.
(iii) The set of all rectangles is contained in the set of all squares.
(iv) The set of all rectangles is contained in the set of all squares.
(v) The sets P = {a} and B = {{a}} are equal.
(vi) The sets A={x: x is a letter of word "LITTLE"} AND, b = {x: x is a letter of the word "TITLE"} are equal.

2. Let A = {ϕ, {ϕ}, 1, {1, ϕ}, 2}. Which of the following is true?

(i) $\phi \in A$

(ii) $\{\phi\} \in A$

(iii) $\{1\} \in A$

(iv) $\{2, \phi\} \subset A$

(v) $2 \subset A$

(vi) $\{2, \{1\}\} \not\subset A$

(vii) $\{\{2\}, \{1\}\} \not\subset A$

(viii) $\{\phi, \{\phi\}, \{1, \phi\}\} \subset A$

(ix) $\{\{\phi\}\} \subset A$

3. Let $A = \{x: x \in N\}$, $B = \{x: x = 2n, n \in N\}$, $C = \{x: x = 2n - 1, n \in N\}$ and, $D = \{x: x$ is a prime natural number$\}$ Find:

(i) $A \cap B$

(ii) $A \cap C$

(iii) $A \cap D$

(iv) $B \cap C$

(v) $B \cap D$

(vi) $C \cap D$

4. In a group of 950 persons, 750 can speak Hindi and 460 can speak English. Find:
(i) How many can speak both Hindi and English?
(ii) How many can speak Hindi only?
(iii) How many can speak English only?

5. A relation R is defined from a set A = {2, 3, 4, 5} to a set B = {3, 6, 7, 10} as follows: (x, y) is in R if x is relatively prime to y. Express R as a set of ordered pairs and determine its domain and range.

6. Write the following relations as sets of ordered pairs:

(i) A relation R from the set {2, 3, 4, 5, 6} to the set {1, 2, 3} defined by x = 2y.

(ii) A relation R on the set {1, 2, 3, 4, 5, 6, 7} defined by $(x, y) \in R \Leftrightarrow x$ is relatively prime to y.

(iii) A relation R on the set {0, 1, 2,…,10} defined by 2x + 3y = 12.

(iv) A relation R form a set A = {5, 6, 7, 8} to the set B = {10, 12, 15, 16, 18} defined by (x, y) R x divides y.

7. Determine the domain and range of the following relations:

(i) $R = \{a, b): a \in N, a < 5, b = 4\}$

(ii) $S= \{a, b): b = |a-1|, a \in Z \text{ and } |a| \leq 3\}$

8. In a paper write definitions and one examples of important concepts of chapter Sets and Relations. (eg. Set, Empty set, Subset, Union, Intersection etc)

9. In a paper write down all the trigonometric formulas.

Subject: Chemistry

To prepare Investigatory project for SSCE, 2025-26 for CHEMISTRY (043)
Following points should be followed properly:
1. The project should be in A4 white sheet in Handwritten form. No printed projects are accepted.
2. The project must contain:
a) Cover page (Printed) with school name, school logo, Topic name, any cover picture related to provided topics, submitted by(Student name), Class, Board roll no.(Leave as blank space), session, subject (CHEMISTRY (043), Guided by (Subject Teacher name).
b) Certificate (Printed, Format will be provided)
c) Acknowledgement (Printed, Format will be Provided)
d) Index (Handwritten)
e) Content ((Handwritten)
f) Conclusion (Handwritten)
g) Bibliography (Handwritten)
3. The content must contain Introduction, Topic description, Advantages, Disadvantage, application etc.
4. Project must contain Picture representation and statistical representation (if any).
5.Compile all pages in a channel file.

The Investigatory project topics are given below. You have to do any one of them.

1. Study of the presence of oxalate ions in guava fruit at different stages of ripening
2. Study of quantity of casein present in different samples of milk.
3. Study of common food adulterants in fat, oil, butter, sugar, turmeric power, chilli powder and pepper.
4. Extraction of essential oils present in Saunf (aniseed), Ajwain (carom), Illaichi (cardamom).
5. Preparation of soybean milk and its comparison with the natural milk with respect to curd formation, effect of temperature, etc.

Subject: Biology

A. Prepare a project in A4 sheet on any one of the provided topics:

1. SYSTEMS OF CLASSIFICATION.
2. CLASSES OF FUNGI.
3. CLASSES OF ALGAE.
4. SUBPHYLUM VERTEBRATA.

Instructions for the assignment:
a) Project should be in handwritten format in A4 sheet.
b) It should include printed pictures and diagram.

c) Cover page, Acknowledgement, Certificate should be in printed form. d) The project must include Index, Content, Conclusion and Bibliography.
B. Write the following experiments in practical notebook: Experiment No. 1-To study the structure and working of a compound microscope. Experiment No. 2-To study one flowering plant (Tomato) belonging to Solanaceae family. Experiment No. 3-To study osmosis by potato osmometer. Experiment No. 4-To study plasmolysis in epidermal leaf of Rheo leaf. Experiment No. 5-To prepare a temporary mount of onion root tip to study mitosis.

Subject: Computer Science

Q1) Write a python code to accept two integers and print their sum.
Q2) Write a program that accepts the radius of a circle and prints its area.
Q3) Write a program that accepts base and height and calculate the area of a triangle.
Q4) Write a program that inputs a student's marks in three subjects (out of 100) and prints the percentage marks.
Q5) Write a program to compute the area of square.
Q6) Write a program to read two numbers and print their quotient and reminder.
Q7) Write a program to calculate simple interest.
Q8) Write a program that accepts weight in Kg and height in meters and calculate the BMI.
***** All the above python code must be written (Hand Written) in A4 size page with proper front page and submit in a channel file.**

Subject: Dance (Kathak)

1. Analyze The types of Indian dances with pictures.
2. Write theka of Jhaptal and Teental.
3. Write about Kathak dance costumes and Make - up.

Subject: PHYSICAL EDUCATION

1. What is physical education?
2. Draw the diagrams of a volleyball court and a kabaddi court, including accurate labels for all dimensions and key areas.

ALL THE ASSIGNMENT SHOULD BE DONE IN THE RESPECTIVE SUBJECT COPIES.

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