# St. XAVIER'S HIGH SCHOOL

EDUCATION FOR ALI

### BANKURA, WB Affiliation No.: 2430130

Affiliated to CBSE (New Delhi) 10+2 level School Code: 15720

# SUMMER VACATION ASSIGNMENT (2025-2026) Class-X

**Subject: English** 

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

1.Robert Lee Frost's significant poetical works and their influence on Modern man. (any four poems) :- Roll 01 to 10

2. Importance of Diary Writing- a tribute to Anne Frank. :-Roll 11 to 20

3.A critical study of Sci-fi through the works of H.G. Wells with special mention to *The Invisible Man*.:-Roll 21 to 30

4. The lens of Eco-Feminism through the poems of Adrienne Rich, like "Trees" and "Aunt Jennifer's Tigers":-Roll 31 to 40.

5. Teachings of The Buddha through *Jataka tales* with special mention to the "Sermon at Benares": -Roll 41 and rest.

Subject: Bengali

- ১. তোমাদের পাঠ্য সম্পূর্ণ "পোস্টমাস্টার" গল্পটি সাধু ভাষা থেকে চলিত ভাষায় লেখ|
- ২. তোমার ইংরাজি পাঠ্য বই থেকে "NELSON MANDELA- Long Walk to Freedom" গল্পটি সম্পূর্ণ বাংলায় অনবাদ করে নিজের ভাষায় লেখা
- ৩. নিচের তিনটি বিষয় নিয়ে নিজের ভাষায় অনুচ্ছেদ রচনা লেখ। (১৫০-২০০ শব্দের মধ্যে)
- ক) তোমার জীবনে শিক্ষক-শিক্ষিকাদের ভূমিকা।
- খ) একজন মাধ্যমিক পরীক্ষার্থী হিসেবে তোমার পরিকল্পনা
- গ) তোমার প্রিয় ব্যক্তি/গুরুজন/মনীষী
- ৪. তোমাদের পাঠ্য "সাহিত্য সঞ্চয়ন" -এর পাঠদান হয়ে যাওয়া যে প্রশ্নোত্তরগুলো লিখতে দেওয়া হয়েছে,

সেগুলো সব ক্লাসওয়ার্ক খাতায় লিখবে I (On Class Work Copy)

## **Subject: Hindi**

प्रश्न 1.गोपियों दवारा उद्धव को भाग्यवान कहने के पीछे जो व्यंग्य निहित है, लिखिए।

प्रश्न 2.गोपियों ने किन -किन उदाहरणों के माध्यम से उदधव को उलाहने दिए हैं?

प्रश्न 3.सुरदास के प्रथम पद का अर्थ अपने शब्दों में लिखिए।

प्रश्न 4.पानवाले का एक रेखाचित्र प्रस्तृत कीजिए।

प्रश्न 5.हालदार साहब किस बात पर और क्यों भावक हो गए थे

प्रश्न 6.भोलानाथ का समय आपके समय से किस प्रकार से भिन्न है

प्रश्न 7. माता का अंचल पाठ में कौन -सा हिस्सा आपको अच्छा लगा और क्यों?

प्रश्न 8.रचना के आधार पर वाक्य के कितने भेद होते हैं? परिभाषा और उदाहरण दीजिए।

प्रश्न 9. उददेश्य और विधेय किसे कहते है? उदाहरण के साथ समझाइए।

प्रश्न 10.सम्च्चयबोधक अवयय का उदाहरण दीजिए।

प्रश्न 11.मोहन परिश्रम करता तो अवश्य सफल होता ।यह कौन-सा वाक्य है?

प्रश्न 12.ऊपर दिए गए वाक्य को सरल वाक्य में बदलिए ।

### **Subject: Mathematics**

Prepare any ten project/ activity work out of these topics

Activity must contain topic name, objectives, pre requisite knowledge, observation, results, conclusion

- 1. To develop Heron's formulae for area of a triangle.
- 2. Story of  $\pi$ .
- 3. Development of Number Systems with their needs.

- 4. Chronology of Indian Mathematicians with their contributions.
- 5. Chronological development of solution of a quadratic equations.
- 6. Development of Formula for the area of a cyclic quadrilateral.
- 7. Pythagoras Theorem-Proofs other than given in the present textbook.
- 8. Extensions of Pythagoras Theorem.
- 9. With rectangle of given perimeter finding the one with a maximum area and with rectangle of given area, finding the one with least perimeter.
- 10. Knowledge and classification of solid figures with respect to surface areas and volumes.
- 11. Sum of the exterior angles of a polygon taken in an order.
- 12. Generation of Pythagorean triplets.
- 13. Magic squares.
- 14. With cuboids of given surface area, finding the one with maximum volume and with cuboids of given volumes finding one with least surface area.
- 15. Mathematical designs and patterns.
- 16. Indian Mathematicians and their contibutions.
- 17. To prepare a list of quotations on mathematics.
- 18. Ramanujan number (1729)
- 19. Mathematical Crosswords
- 20. Application of Geometry in day-to-day life
- 21. Application of Algebra in day-to-day life.
- 22. Application of Mensuration in day-to-day life.

## **Subject: Science**

#### PHYSICS/BIOLOGY/CHEMISTRY

#### PRACTICAL:

- 1. Determination of the focal length of: a) Concave mirror b) Convex lens by obtaining the image of a distant object.
- 2. Tracing the path of a ray of light passing through a rectangular glass slab for different angles of incidence. Measure the angle of incidence, angle of refraction, angle of emergence and interpret the result.
- 3. To prepare temporary mount of a leaf peel to show stomata.

#### 4. pH of Solutions

Exp.1: To find the pH of the following samples by by using pH paper or universal indicator.

- (a) Dilute hydrochloric acid (HCl)
- (b) Dilute sodium hydroxide (NaOH) solution
- (c) Dilute ethanoic acid (CH3COOH) solution
- (d) Lemon juice
- (e) Water(H<sub>2</sub>O)
- (f) Dilute sodium bicarbonate /sodium hydrogen carbonate (NaHCO<sub>3</sub>) solution

Prepare the project/ portfolio in A4 sheet and compile in a channel file, according to the assigned Roll no.

Sequence of roll number is provided below:

- \*Information regarding the project\*
- 1. The project should be in handwritten form in A4 sheet, No printed project is accepted.
- 2. Project must contain pictures (Mandatory), statistical representation (if any).
- 3. The project must contain the following points:
- 1. Coverpage (School name, school logo, name of topics, students name, class, subject, subject code(086), session, roll number, guided by) in printed form only.
- 2. Certificate with place for Teacher signature, Principal signature, in printed form only.
- 3. Acknowledgement
- 4. Index
- 5. Introduction/Abstract about the topic provided.
- 6. Main content (Definition, meaning, importance, advantage, disadvantages etc.)
- 7. Future aspects
- 8. Conclusion
- 9. Bibliography

TOPIC:

- 1. Investigate the properties of light and practical applications of each. (Roll No. 1-8)
- 2. Investigate how varying pH levels in soil affect the growth and health of plants. (Roll No. 9-16)
- 3. Ecosystem and its conservation (Roll No. 17-23)
- 4. Use China rose extraction or red cabbage extraction as a natural indicator to test the pH of various household substances.(Roll No. 24-30)
- 5. To study working of a DC motor. (Roll No. 31-38)
- 6. Methods of contraception. (Roll No. 39-45)

# **Subject: Social Science**

#### A. Prepare the project/ portfolio according to the assigned Roll no.

#### Information regarding the project.

- 1. The project should be in handwritten form in A4 sheets. No Printed Project is accepted.
- 2. Project must contain pictures (Mandatory), statistical representation(if any).
- 3. The project must contain the following points:
- a. Cover Page (School name, school logo, name of topics, students name, class, subject, subject code(087), session, roll number, guided by in printed form only.
- b. Certificate with place for teacher signature, Principal signature, in printed form only.
- c. Acknowledgement
- d. Index
- e. Introduction
- f. Main content (Definition, meaning, importance, advantage, disadvantages, Mitigation measures, Case study,

Meetings, Summit etc.)

g. Conclusion h. Bibliography		
TOPIC.	ROLL NO. ASSIGNED	
1. Consumer Awareness	:- 1,6,11,16,21,26,31,36,41	
2. Sustainable Development	:- 2,7,12,17,22,27,32,37,42	
3. Social Issue (Poverty).	:- 3,8,13,18,23,28,33,38,43	
4. Social Issue (Racism).	:- 4,9,14,19,24,29,34,39,44	
5. Social Issue ( Illiteracy).	:- 5,10,15,20,25,30,35,40,45	

### Subject: AI

# \*\*\* All the python code must be written (Hand Written) in A4 size page with proper front page and submit in a channel file.

- (i) Write a python program to print the multiplication table for the given number.
- (ii) Write a python program to check whether the given number is prime or not?
- (iii) Write a python program to find factorial of the given number?
- iv) Python Program to Check Prime Number
- v) Python Program to Check Armstrong Number
- vi) Python Program to Print the Fibonacci sequence
- Vii) Python Program to Check if a Number is Positive, Negative or 0
- viii) Python Program to Find ASCII Value of Character
- ix) Python Program to Convert Decimal to Binary Using Recursion
- x) Python Program to Check Whether a String is Palindrome or Not

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