

Tibetan Homes School, Mussoorie

Class XII- Winter Assignment (New Batch) Year 2026

1. ENGLISH

Book: Flamingo & Vistas

Academic Session: 2025–26

Chapters: 1. The Enemy (Vistas)

2. Poets and Pancakes (Flamingo)
3. The Interview (Flamingo)

Instructions:

1. Read all the chapters carefully.
2. Maintain proper presentation and spray diagram of the above mentioned chapters.
3. Complete the assignment during the winter vacation and submit it on the reopening day.

2. TIBETAN

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3. HISTORY

Chapters Covered: Chapter 5 – Through the Eyes of Travellers

1. Reading Task

- Read the chapter thoroughly from the NCERT textbook.
- Pay special attention to:
- The background of each traveller
- Their purpose of visit
- What they observed about Indian society, religion, economy and culture

2. Assignment Work

Q1. Answer the following questions (in 120–150 words each):

1. Who was Al-Biruni? What challenges did he face while understanding Indian society?
2. Describe Ibn Battuta's observations about Indian cities and social life.
3. How did François Bernier compare Indian society with European society?
4. Why are the accounts of foreign travellers considered important historical sources?

Q2. Source-Based Question (Compulsory):

Read the following statement and answer the questions:

“Al-Biruni tried to explain Indian social practices in a comparative framework.”

- a) What does this statement suggest about Al-Biruni's approach?
- b) Mention two examples where he compared Indian society with other societies.

3. Note-Making (For Revision)

Prepare neat and well-organised notes on the following topics:

- Al-Biruni: Background, writings and observations
- Ibn Battuta: Travel account and social descriptions
- François Bernier: Views on economy and society
- Importance and limitations of traveller accounts

Use headings, subheadings and bullet points.

4. POLITICAL SCIENCE (028)

A) Make a 20-page (including back and front) project on any one of the following political leaders:

- B) Jawaharlal Nehru
- C) Sardar Vallabhbhai Patel
- D) Lal Bahadur Shastri
- E) Rajiv Gandhi
- F) Indira Gandhi

B) Movie review on Political Themes (10 marks)

Objective: To understand key political concepts and events by analyzing a movie's themes, historical accuracy and relevance to the CBSE syllabus.

-Watch the movies listed below (available on YouTube and OTT platforms) and prepare a reflective note on any two movies:

a. Gandhi, 1982	d. Jogi
b. Parmanu	e. Partition of India
c. Emergency 1975	

Guidelines for Movie review/reflective note:

- a. Introduction: Mention the movie's name, release year, director and lead actor's name, followed by brief summary of the movie.
- b. Key themes: Identify and explain the major political themes depicted in the movie.
- c. Highlight any key scenes that helped you understand the topic better.
- d. Discuss the role of key characters and their significance in the political Context.
- e. Conclude by reflecting on how the movie deepened your understanding of the topic and provide your overall opinion and a rating out of 5 stars.

*Individual/group sharing session will be conducted for both the assignments at the beginning of the new academic session.

5. CHEMISTRY (028)

Chemistry practical project: -

Prepare a project work on the topics allotted for your Roll no.

(Based on class 11C and 11D Roll no)

- Study of the presence of oxalate ions in Guava fruit at different stages of ripening. **(Roll no. 1,9)**
- Study of quantity of casein present in different samples of milk. **(Roll no. 2,10)**
- Preparation of soybean milk and its comparison with the natural milk with respect to curd formation, effect of temperature, etc. **(Roll no. 3,11)**
- Study of the effect of potassium bisulphate as food preservative under various conditions (temperature, concentration, time etc) **(Roll no. 4, 12)**
- Study of digestion of starch by salivary amylase and effect of pH and temperature on it. **(Roll no. 5,13)**
- Comparative study of the rate of fermentation of following materials: wheat flour, gram flour, potato juice, carrot juice, etc. **(Roll no. 6,14)**
- Extraction of essential oils present in aniseed, carum, illaichi. **(Roll no. 7,15)**
- Study of common food adulterants in fat, oil, butter, sugar, turmeric powder, chilli powder and pepper. **(Roll no. 8)**

6. ECONOMICS

PART ONE

Indian economic development

Book consist of three different unit

Unit 1: development strategy adopted by Indian government from 1947 to 1990 and new economic policy based on NEP

You are advised to study the development strategy and make a project on it

Prepared a complete note on any one

Unit 3: development experience of India, Pakistan, and China

Complete report on the development strategy on India with its neighbours

7. BUSSINESS

Prepare the project work on the topic allotted;

PROJCET A: MARKETING MANAGEMENT

On the basis of the work done by the students the project report should include the follows;

1. Why have you selected this product / services?
2. Find out '5' competitive brands that exist in the market.
3. What permission and licenses would be required to make the product?
4. What are your competitors unique selling proposition (U.S.P)?
5. Does your product have any range, give details?
6. What is your name of your product and its features?
7. Draw the 'label' of your product.
8. Draw a logo for your product.
9. What is the selling price of your competitor's product?
10. How will be your product packed and which channel of distribution are used.
11. List 5 ways of promoting your product.
12. Draft any social message for your label.

At this stage the students will realize the importance of the concept of marketing mix and the necessary decision regarding the four P's of marketing: product, price, place and promotions.

- Make the project file which includes all the topics.

8. ACOUNTANCY

Chapter: Financial statements of sole proprietorship

Q1. Explain the meaning of financial statements. Discuss their objectives and importance for a sole proprietor.

Q2. Solved any four comprehensive numerical questions on Final Accounts of a Sole Proprietorship covering Trading Account, Profit & Loss Account, and Balance Sheet.

9. PHYSICS

A. Make a project from the suggested investigatory projects listed below.

Kindly select the projects according to the roll number allotted.

Suggested Investigatory Projects

1. To study various factors on which the internal resistance/EMF of a cell depends.
2. To study the variations in current flowing in a circuit containing an LDR because of a variation in
 - (a) the power of the incandescent lamp, used to 'illuminate' the LDR (keeping all the lamps at a fixed distance).
 - (b) the distance of an incandescent lamp (of fixed power) used to 'illuminate' the LDR.
3. To find the refractive indices of (a) water (b) oil (transparent) using a plane mirror, an equiconvex lens (made from a glass of known refractive index) and an adjustable object needle.
4. To investigate the relation between the ratio of (i) output and input voltage and (ii) number of turns in the secondary coil and primary coil of a self-designed transformer.
5. To investigate the dependence of the angle of deviation on the angle of incidence using a hollow prism filled one by one, with different transparent fluids.
6. To estimate the charge induced on each one of the two identical Styrofoam (or pith) balls suspended in a vertical plane by making use of Coulomb's law.
7. To study the factor on which the self-inductance of a coil depends by observing the effect of this coil, when put in series with a resistor/(bulb) in a circuit fed up by an A.C. source of adjustable frequency.
8. To study the earth's magnetic field using a compass needle -bar magnet by plotting magnetic field lines and tangent galvanometer.

B. Device a planning project for the following Sub-Themes for an Exhibit for the National Level Science Exhibition 2026

Sub-Themes:

1. Sustainable Agriculture
2. Waste Management and Alternatives to Plastics
3. Green Energy
4. Emerging Technologies
5. Recreational Mathematical Modelling
6. Health and Hygiene
7. Water Conservation and Management

10. COMPUTER SCIENCE

Write One simple Program in python with output on below :

(Don't copy from internet use real life examples)

1. String functions: (For 1st Jan to 20th Jan)

a. len()	j. title()	s. isspace()
b. capitalize()	k. count()	t. istitle()
c. split()	l. lower()	u. join()
d. replace()	m. islower()	v. swapcase()
e. find()	n. upper()	w. partition()
f. index()	o. isupper()	x. endswith()
g. isalpha()	p. lstrip()	y. startswith()
h. isalnum()	q. rstrip()	z. ord(), chr()
i. isdigit()	r. strip()	

2. List functions: (For 21st Jan to 31st Jan)

a. append()	f. len()	k. max()
b. extend()	g. sort() / sorted()	l. pop()
c. insert()	h. clear()	m. del
d. reverse()	i. count()	n. remove()
e. index()	j. min()	

3. Tuple functions: (For 1st Feb to 10th Feb)

a. len()	d. min()	g. sorted()
b. count()	e. max()	h. index()
c. any()	f. sum()	

4. Dictionary functions: (For 11th Feb to 20th Feb)

a. del	f. items()	k. popitem()
b. pop()	g. keys()	l. min()
c. len()	h. values()	m. max()
d. clear()	i. copy()	n. sorted()
e. get()	j. fromkeys()	

5. Random module functions: (For 21st Feb to 23rd Feb)

a. random()	b. randint()	c. randrange()
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6. Math module functions: (For 24th Feb to 26th Feb)

a. pi	c. floor()	e. sqrt()
b. ceil()	d. pow()	f. fabs()

7. Statistics module functions: (For 27th Feb to 28th Feb)

a. mean()	b. median()	c. mode()
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11. WEB APPLICATION

Write One simple Program in Javascript with output on below :

(Don't copy from internet use real life examples)

Work For 1st Jan to 20th Jan:

1. Arithmetic operators: + - * / %
2. Relational operators: < <= > >= == === !=
3. Logical operators: && || !
4. Bitwise Logical operator: & |
5. Bitwise Shift operator: << >>
6. Unary operators: ++ --
7. Ternary operator: ? :
8. Compound operator: += -= *= /= %=

Work For 21st Jan to 31st Jan:

1. If else (write 3 programs)
2. Nested if else (write 3 programs)
3. Switch (write 3 programs)

Work For 1st Feb to 15th Feb:

1. One dimensional loop (write 3 programs)
2. Two dimensional loop (write 3 programs)
3. Conversion from while to for (write 3 programs)
4. Conversion from for to while (write 2 programs)
5. Conversion from if else to switch (write 2 programs)
6. Conversion from switch to if else (write 2 programs)
7. Conversion from if else to ternary operator (write 1 programs)

Work For 16th Feb to 28th Feb:

1. To add two numbers by button click where both number entered by user.
2. Display any number table by button click.
3. Display greatest number between two numbers by button click where both number entered by user.
4. Display smallest number between two numbers by button click where both number entered by user.

12. MATHS

1. Evaluate: $\lim_{x \rightarrow 0} (\sin 3x / x)$.
2. Find $\lim_{x \rightarrow 0} ((1 - \cos 5x) / x^2)$.
3. Evaluate: $\lim_{x \rightarrow 0} ((e^x - 1) / x)$.
4. Find $\lim_{x \rightarrow 0} ((\tan 2x - \sin 2x) / x^3)$.
5. Evaluate: $\lim_{x \rightarrow 0} ((a^x - 1) / x)$, $a > 0$.
6. Find $\lim_{x \rightarrow 0} ((\sqrt{1+x} - 1) / x)$.
7. Evaluate: $\lim_{x \rightarrow 0} ((\sin x + \tan x) / x)$.
8. Find $\lim_{x \rightarrow 0} ((1/x) - (1/\sin x))$.
9. Evaluate: $\lim_{x \rightarrow 0} ((\cos x - \cos 2x) / x^2)$.
10. Find $\lim_{x \rightarrow 0} ((x - \sin x) / x^3)$.
11. Evaluate: $\lim_{x \rightarrow 0} ((\tan x - x) / x^3)$.
12. Find $\lim_{x \rightarrow 0} ((\sec x - 1) / x^2)$.
13. Evaluate: $\lim_{x \rightarrow 0} ((\sin^2 x) / x^2)$.
14. Find $\lim_{x \rightarrow 0} ((e^{2x} - 1) / x)$.
15. Evaluate: $\lim_{x \rightarrow 0} ((a^x - b^x) / x)$.
16. Find $\lim_{x \rightarrow 0} ((\log(1+x)) / x)$.

17. Evaluate: $\lim_{x \rightarrow 0} ((\cos 3x - 1) / x^2)$.

18. Find $\lim_{x \rightarrow 0} ((\sqrt{1 + 2x} - 1) / x)$.

19. Evaluate: $\lim_{x \rightarrow 0} ((\sin 5x) / (\sin 2x))$.

20. Find $\lim_{x \rightarrow 0} ((1 - e^{-x}) / x)$.

21. Find the derivative of $y = \sin x \cos x$ with respect to x .

22. Differentiate $y = x^3 + 5x^2 - 7x + 4$.

23. Find dy/dx if $y = e^x \sin x$.

24. Differentiate $y = \log(\sin x)$.

25. Find the derivative of $y = \tan^2 x$.

26. Differentiate $y = x^2 e^x$.

27. Find dy/dx if $y = \sin^2 x$.

28. Differentiate $y = \ln(x^2 + 1)$.

29. Find the derivative of $y = \sec x + \tan x$.

30. Differentiate $y = (x^2 + 1)/(x)$.

31. Find dy/dx if $y = e^{2x}$.

32. Differentiate $y = \sqrt{1 + x^2}$.

33. Find the derivative of $y = \cos x / \sin x$.

34. Differentiate $y = x \sin x$.

35. Find dy/dx if $y = (\sin x)^3$.

36. Prove: $(\sin x / (1 + \cos x)) + ((1 + \cos x) / \sin x) = 2 \operatorname{cosec} x$.

37. Prove: $(\tan x / (\sec x - 1)) - ((\sec x - 1) / \tan x) = 2$.

38. Prove: $(\sin \theta / (1 - \cos \theta)) - ((1 - \cos \theta) / \sin \theta) = 2 \cot \theta$.

39. Simplify: $(1 - \tan^2 x) / (1 + \tan^2 x)$.

40. Prove: $(1 + \sin x) / \cos x + \cos x / (1 + \sin x) = 2 \sec x$.

41. Evaluate $\sin 75^\circ$ using trigonometric identities.

42. Prove: $(\sec x - \tan x)(\sec x + \tan x) = 1$.

43. Simplify: $\sin x / (1 - \cos x) + (1 - \cos x) / \sin x$.

44. Prove: $(1 - \sin x) / \cos x = \cos x / (1 + \sin x)$.

45. Find the value of $\tan 15^\circ$ using identities.

46. Prove: $(1 + \tan^2 x) / (1 + \sec^2 x) = \cos^2 x$.

47. Simplify: $(\sin 2x) / (1 + \cos 2x)$.

48. Prove: $\sin^3 x + \cos^3 x = (\sin x + \cos x)(1 - \sin x \cos x)$.

49. Evaluate $\cos 75^\circ$ using trigonometric identities.

50. Prove: $(\tan x + \cot x)^2 = \sec^2 x + \operatorname{cosec}^2 x$.

13. BIOLOGY

1. Buy this copy {**Speed Writing In Improved Handwriting - Cursive writing - Book B (For Age 9+ Years) - Cursive handwriting practice book**} from **Amazon website** and Practice and complete it and bring it back to school.
2. Make an assignment on any topic from class 12 biology syllabus aligned with the **Scientific Method**.
3. Make an **Herbarium record file** collecting 10 plant specimens from your locality.

14. ART

SUBJECT: GEOGRAPHY (029)

Instructions:

- i. This assignment is to be completed during the winter holiday.
- ii. Take the help of a world map and India map. (Refer to the official NCERT textbook available online)
- iii. Neatly locate and label the following features and learn them properly.
- iv. Use separate maps for each topic.

v. Submit your assignment on the first day after the winter break.

Book I: Fundamentals of Human Geography

I. Map items for identification on outline political map of the world:

Chapter Name	Transport, Communication and Trade
	<p>Major seaports:</p> <ul style="list-style-type: none"> i. Europe: -North Cape, London, Hamburg ii. North America: -Vancouver, San Francisco, New Orleans iii. South America: -Rio De Janeiro, Colon, Valparaiso iv. Africa: -Suez and Cape Town iv. Asia:-Yokohama, Shanghai, Hongkong, Aden, Karachi, Kolkata v. Australia: Perth, Sydney and Melbourne <p>Major Airports:</p> <ul style="list-style-type: none"> i. Asia: Tokyo, Beijing, Mumbai, Jeddah, Aden ii. Africa: -Johannesburg and Nairobi iii. Europe: -Moscow, London, Paris, Berlin and Rome iv. North America: -Buenos Aires and Santiago v. Australia: - Darwin and Wellington <p>Inland Waterways:</p> <p>Suez Canal, Panama Canal, Rhine waterways and St Lawrence Seaways</p>

Book II: India People and Economy

II. Map items for locating and labelling on political outline map of India:

Chapter Name	
Population	<ul style="list-style-type: none"> • State with highest population density and state with lowest population density (2011)
Land resources and Agriculture	<ul style="list-style-type: none"> • Leading producing states of the following crops: <ul style="list-style-type: none"> a) Rice b) Wheat c) Cotton d) Jute e) Sugarcane f) Tea g) Coffee
International Trade	<ul style="list-style-type: none"> • International Airports: <p>Ahmedabad, Mumbai, Bengaluru, Chennai, Kolkata, Guwahati, Delhi, Amritsar, Thiruvananthapuram and Hyderabad.</p>

III. Read chapter number 12(**GEOGRAPHICAL PERSPECTIVES ON SELECTED ISSUES AND PROBLEMS**) from book II and note down the causes, consequences and effects of the different types of environmental pollution.

- a) Air pollution
- b) Water pollution
- c) Noise pollution
