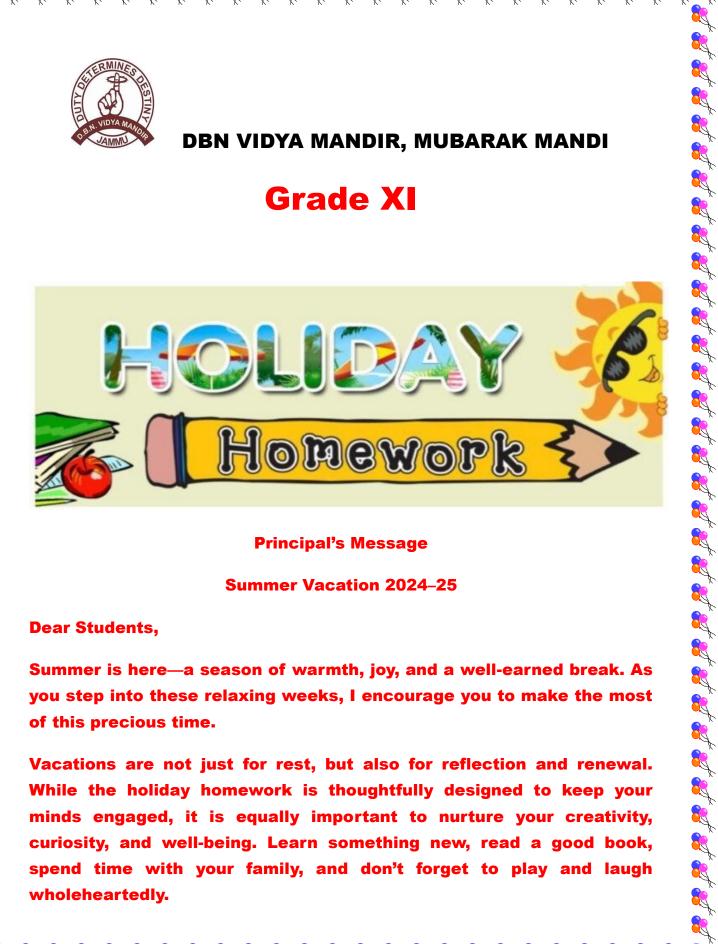


DBN VIDYA MANDIR, MUBARAK MANDI

Grade XI



Principal's Message

Summer Vacation 2024–25

Dear Students,

Summer is here—a season of warmth, joy, and a well-earned break. As you step into these relaxing weeks, I encourage you to make the most of this precious time.

Vacations are not just for rest, but also for reflection and renewal. While the holiday homework is thoughtfully designed to keep your minds engaged, it is equally important to nurture your creativity, curiosity, and well-being. Learn something new, read a good book, spend time with your family, and don't forget to play and laugh wholeheartedly.

To our youngest learners—use this time to explore through play, colour your world, and listen to stories that feed your imagination.

To our senior students—balance relaxation with reflection. Use this time to revisit goals, sharpen your skills, and return with greater focus and energy.

Remember, learning never stops—it simply takes different forms. Stay active, stay safe, and take care of your health. Let's return after the break, refreshed and ready to grow even more—together.

Wishing you and your families a happy, healthy, and fulfilling summer break.

Warm regards,

Priya Singh

Principal

DBN Vidya Mandir, Mubarak Mandi

Dear Students,

"Learn everything you can, anytime you can, from anyone you can; there always will come a time when you will be grateful you did."

Sarah Caldwell

Vacation is the time that we all eagerly wait for. We all make plans to enjoy, relax and empower ourselves during these days. This summer vacation the Holidays Homework has been designed with the motto.

Have Fun as you Learn.

TO DOs

* Prepare a Schedule and follow it during holidays. It will help you become a good time manager.

- Give time to pursue your hobby as we all need 'Me Time'.
- **❖ Limit the use of gadgets and use the time saved in reading Newspaper/ Books.**
- ❖ Give prime importance to your Health. Eat lots of fruits and vegetables.
- * Don't forget to exercise and practice yoga to improve your stamina.
- Pledge to "Eat Right (Less Sugar, Loss Oil, Less Salt and Less Outside Food)
- * Put in efforts to improve your vocabulary. Add one word per day to your vocabulary.

ENGLISH

1. Choose a poem from your syllabus and analyze its themes, imagery and poetic devices.

Where to do: English Notebook.

Parameters for Assessment: Relevance to content, creativity.

- 2. Read any one chapter of your choice and write the review.
- a) The Address
- b) We're Not afraid to Die....

How to do:- The review is to be written in 250-300 words keeping in mind the given aspects.

- √ About the writer
- **√** Summary
- √ Favourite character
- √ Analysis

Where to do: In English Notebook.

Parameters: Content, Language and accuracy.

3. Write a short story inspired by the poem (A Photograph), exploring the complexities of family relationships and the challenges of aging

Where to do :- In English

Biology

Chapters: The Living World | Biological Classification | Plant Kingdom

Based on: Art-Integrated Learning, Subject Enrichment, Research
Based Projects, Activity-Based Work

1. Art-Integrated Activity

Theme: "Tree of Life" – Diversity of Living Organisms

Instructions:

- Draw a large Tree of Life showing various groups of organisms from Bacteria to Plantae.
- Use different colors, patterns, and labels to show:
 - Domains and Kingdoms (Archaea, Bacteria, Eukarya)
 - Major Plant Divisions (Algae, Bryophytes, Pteridophytes, Gymnosperms, Angiosperms)

- Include scientific names and key features in a creative way (calligraphy, leaf art, etc.)

- Use waste/recycled materials if possible (integration of eco-awareness)

Submission: On chart paper (A2 size)

2. Research-Based Project

- Topic Options:
 - The Impact of Microorganisms in Human Life
 - Role of Algae in Climate Regulation and Food Chain
 - Medicinal Importance of Bryophytes and Pteridophytes
 - Evolutionary Significance of Fungi in Plant-Animal Interactions

Instructions:

- Choose any one topic.
- Prepare a detailed report (6–8 pages) with:
 - Introduction
 - Research Content
 - Diagrams/Pictures
 - Real-Life Applications
 - Conclusion
 - References

Submission Format: Handwritten or printed file.

3. Daily Learning Activity - Alphabet Journal

Activity Name: "A to Z of the Living World"

Instructions:

- For each alphabet (A–Z), write one term from the chapters (e.g., A – Algae, B – Bacteria, C – Classification...).

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- - Write:
 - Full form/definition
 - Importance in biological context
 - Related image (drawn/pasted)

Submission: Spiral-bound booklet or scrapbook.

4. Subject Enrichment Worksheet

- Prepare a worksheet covering:
 - - MCQs (10) from all 3 chapters
 - - Short Answer Questions (5)
 - Match the Following (5)
- Labelled Diagrams of:
 - Spirogyra

- Rhizopus
- Fern Leaf
- Moss Capsule

Submission: Neatly handwritten in the Biology notebook.

Instructions for Submission After Vacation:

- Submit all tasks on the first day of class after summer vacation.
- Top 3 creative entries will be displayed on the Biology Bulletin Board.

- Marks will be added as Internal Assessment.

PHYSICS

TOPIC - VECTORS

Assignment 1: Conceptual Questions

- 1. Define a vector quantity. Give three examples of vector and scalar quantities.
- 2. Explain the triangle law and parallelogram law of vector addition with diagrams.
- 3. What is the difference between a position vector and a displacement vector?
- 4. Define dot product and cross product of vectors. Write their mathematical expressions.

Assignment 2: Numerical Problems

- 1. Two vectors $\vec{A}=3\hat{i}+4\hat{j}$ and $\vec{B}=5\hat{i}-2\hat{j}$ are given. Find:
 - $\vec{A} + \vec{B}$
 - $\vec{A} \vec{B}$
 - Magnitude of $ec{A}$ and $ec{B}$
- 2. If $\vec{F}=2\hat{i}+3\hat{j}-\hat{k}$ and $\vec{Q}=\hat{i}-2\hat{j}+3\hat{k}$, calculate:
 - Dot product $\vec{F} \cdot \vec{Q}$
 - Cross product $ec{F} imes ec{Q}$
- A particle moves from point (1, 2) to (4, 6). Find the displacement vector and its magnitude.
- 4. Two forces of magnitude 5 N and 12 N act at a point. If the angle between them is 90°, find the magnitude and direction of the resultant force.
- 5. Prove that the vectors $\vec{A} = 2\hat{i} 3\hat{j} + \hat{k}$ and $\vec{B} = -4\hat{i} + 6\hat{j} 2\hat{k}$ are parallel.

Chemistry

Topic: Some Basic Concepts of Chemistry

Instructions:

Complete the following short tasks in your chemistry notebook or a plain sheet. Keep your work neat and colorful!

1. Write Definitions (in your own words):

- Atom)
- Molecule)
- Mole)

- Atomic Mass)
- Molecular Mass)

2. Fill in the Blanks:

- a) 1 mole = _____ particles (atoms/molecules)
- b) The SI unit of mass is _____.
- c) Avogadro's number is _____.
- d) The molecular mass of water (H_2O) is _____ g/mol.
- e) Law of conservation of mass states that _____

3. Match the Following:

A	В	
H ₂ O	18 g/mol	
1 mole of NaCl	6.022 × 10 ²³ molecules	
SI unit of amount	Mole	
CO ₂	Carbon dioxide	
Na	Sodium	

4. Draw and Label:

- An atom (circle for nucleus and electrons)
- A water molecule (H₂O)

5. Short Question (3-4 lines):

Why do we need to study 'Some Basic Concepts of Chemistry' before learning chemical reactions?

③ Bonus (Optional):

Make a small colorful flashcard showing the formula of 5 common compounds:

- Water H₂O
- Carbon dioxide CO₂
- Salt NaCl
- Ammonia NH₃
- Methane CH₄

Practical Work

Experiment No 1:- To Prepare the crystals of Potash alum

Experiment No 2:- To Prepare the crystals of Copper Sulphate

Mathematics

Chapters: Sets, Relations, and Functions

A. Sets

- 1. Solve the following problems:
- a) If A = {1, 2, 3, 4}, B = {3, 4, 5, 6}, find:
- i) A ∪ B
- ii) A ∩ B
- iii) A B
- iv) **B A**
- b) Prove: A ∪ (B ∩ C) = (A ∪ B) ∩ (A ∪ C)
- c) If U = {1 to 10}, A = {2, 4, 6, 8}, B = {1, 2, 3, 4}, find:

- i) A'
- ii) A ∩ B
- iii) A'∪ B
- 2. Venn Diagrams:
- **Draw Venn diagrams for the following:**
- a) (A ∪ B)'
- **b) A'** ∩ **B'**
- **c) A** ∪ (**B** ∩ **C**)

B. Relations

- 1. Let $A = \{1, 2, 3\}$, $B = \{4, 5\}$. List all possible relations from A to B.
- 2. If A = {1, 2}, find the total number of relations from A to A.

C. Functions

- 1. Define function and it's types.
- 2. Find the domain and range of f(x) = |x-1|
- 3. Find the range of the following function
- A) f(x) = 2-3x, x is a real number x>0
- B) f(x) = x, x is a real number

Project Work (Optional)

- Create a colorful chart showing types of sets, with examples.
- Make a mini project on real-life applications of functions (e.g., currency conversion, temperature scale).

Computer Science

Make a digital Presentation on Evolution of computer Time line

- Create a time line that showcases the evolution of computers from 1st Generation to the current Generation
- Add slides and transitions
- Can be made using Power point or a web tool like Canva
- 2. Explore basic algorithms and data structures (array, lists etc) in python.

Practical work

- WAP to display "HELLO WORLD"
- WAP to add two numbers.





Business studies

Topic of the Project – Visit to a departmental store / Mall

The students are required to observe the following:

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- A) Different departments and their layout
- B) Nature of products offered for sale
- C)Display of fresh arrivals
- D)Promotional campaigns
- E) Space and advertisement
- F) Assistance by sales personnel
- G) Billing counter at cash, credit/debit, swipe facility at the counter

- H) Additional facilities offered to customers
- I)Any other relevant aspect

Steps to make a project

- 1 Select any department or Mall.
- 2. History of the Business.
- 3. Autobiography of the owner with photo.
- 4. Pic's of their products or services
- 5. Detail case study of the business.
- 6. Bibliography
- 7. Use ball point & A4 size sheet.

Written Work

1: Cooperative Societies – Types , merits and limitations.

2: Choice of form of business organizations'.

- 3. Starting a business Basic factors.
- 4. Private sector and Public Sector.
- 5. Forms of business organising public Sector enterprises.

- 6. Departmental undertakings.
- 7. Statutory Corporation.
- 8. Government Company.
- 9. Changing role of Public Sector.
- 10. Global Enterprises.

Economics

Chapter 1: Introduction to Economics

Part A: Short Answer Questions (Write in your notebook)

Answer the following in 50-80 words:

- 1. Define economics in your own words.
- 2. Distinguish between microeconomics and macroeconomics.
- 3. What do you mean by scarcity? Why is it the central problem of economics?

- 4. What are economic activities? Give two examples.
- 5. Explain the concept of opportunity cost with an example.

Part B: Long Answer Questions

Answer the following in 150–200 words:

1. Explain the central problems of an economy.

• 2. Discuss the importance of studying economics in daily life.

• 3. Describe the various types of economies (capitalist, socialist, and mixed).

Part C: Project Work - Topic: "Why Economics Matters?"

Objective:

To understand the importance of economics in real life and how it helps individuals and nations make decisions.

Instructions:

Prepare a project report (6–8 pages handwritten or typed) on "Why Economics Matters?" covering:

- 1. Cover Page Title, Name, Class, Roll No.
- 2. Introduction What is economics and why it is important.
- 3. Everyday Applications How economics influences decisions (e.g., budgeting, choosing goods, resource allocation).
- 4. National Importance How governments use economics for policy-making, employment, inflation control.
- 5. A Case Study or Example E.g., how a family manages their monthly budget using economic concepts.
- 6. Conclusion Summary and what you learned.
- 7. Bibliography Sources of information (books, websites, etc.)

Optional: Include charts, graphs, or newspaper cuttings for better presentation.

Accountancy

Topic: Financial Statements

Type: Subject-Enriched and Project-Oriented

Objective:

To help students understand the preparation, analysis, and interpretation of financial statements, and apply concepts through a project-based assignment.

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Part A: Theory Assignment (Subject-Enriched)

Prepare handwritten notes (5-7 pages) on the following:

- Definition and Objectives of Financial Statements
- · Components of Financial Statements:
 - Trading Account
 - Profit and Loss Account
 - Balance Sheet

- Types of Accounts and their Treatment in Financial Statements
- Importance of Adjustments in the Preparation of Financial Statements

Differences between Capital and Revenue Items

Part B: Practical Questions

Solve the following practical problems in your accountancy notebook:

1. From the given trial balance and adjustments, prepare the Trading and Profit & Loss Account and Balance Sheet.

- 2. Include at least one question that involves:
- Depreciation
- · Accrued Income
- Outstanding Expenses
- Prepaid Expenses
- Bad Debts and Provision for Doubtful Debts

(You may refer to textbook examples or your teacher may provide a specific question.)

Part C: Project Work (Project-Oriented)

Title: Preparation and Analysis of Financial Statements for a Small Business

Instructions:

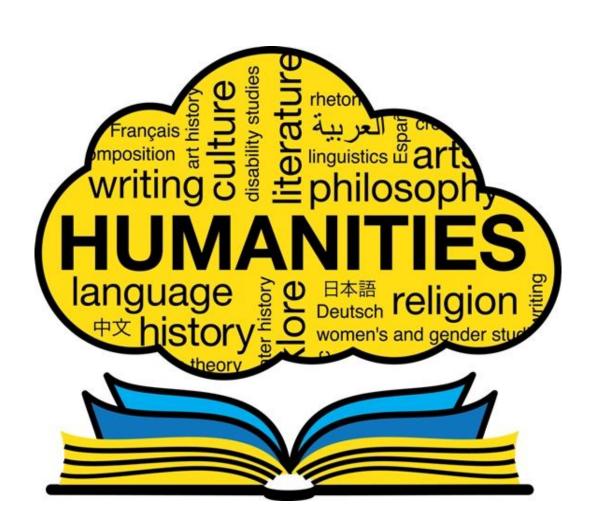
- Choose any small local business (e.g., grocery store, stationery shop, or your family's business).
- · Create assumed data such as:
 - Opening Stock, Purchases, Sales, Expenses, Assets, Liabilities
- · Prepare:

- Trading Account
- Profit and Loss Account
- Balance Sheet
- Include at least 5 appropriate adjustments.
- Present your project in a file with:
 - Introduction of the business
 - Assumptions
 - Journal Entries (optional)
 - Ledger and Trial Balance (optional)
 - Final Accounts with Adjustments
 - Analysis: What does the net profit/loss indicate? What can be improved?

Submission Date:

Submit homework after summer vacation





SOCIOLOGY

- *PROJECT WORK*
- *PROJECT MUST INCLUDE* 🖺 🕮
- (a) Cover page
- (b) Certificate
- (c) Acknowledgement
- (d) Introduction

- (e) Subtopics with explanation
- (f) Methodology
- (g) Questionnaire
- (h) Conclusion
- (i) Bibliography.
- *Prepare one project report from given topics.* \P

- 1. Child Labour
- 2. Male Domination
- 3. Gender Socialisation/Gender Bias

Final Tip:

Make sure:

Your methodology is clear and includes the tools you used (e.g., interviews, surveys)

Your questionnaire has relevant and thought-provoking questions

You include limitations of your research method.

Prepare all the syllabus covered in the class.

Read chapter 5

History (Part 1)

Chapter: An Empire Across Three Continents

Submission: After Summer Vacation

Theme: Integration of Art and Regional Elements

Project Title: The Roman Empire: A Cross-Continental Civilization

Instructions:

- Make a scrapbook or model showing the spread of the Roman Empire across Europe, Asia, and Africa.
- Use maps, drawings, miniature monuments (e.g., Colosseum, aqueducts).

- Highlight trade routes, military bases, and important emperors.

- Write a short description in English describing the impact of Roman art, culture, and administration.

-Art Integration: Make a Roman-style mosaic art or clay model of Roman architecture. - Regional Connection: Compare any Indian empire (e.g., Mauryan or Gupta) with the Roman Empire in terms of administration or trade.

Geography (Part 2)

Chapter 1: Geography as a Discipline

Activity:

- Make a chart or PPT showing branches of Geography – Physical, Human, and Environmental.

- Add examples of how local geography in your state/region affects the lifestyle, occupations, and climate.
- Include local paintings, tribal art, or photos to make it artistic.

Geography (Chapter: Origin and Evolution of the Earth)

Project Title: Our Earth's Journey: From Nebula to Blue Planet

Instructions:

- Make a timeline chart or model to show major stages:
- Big Bang Theory

- Formation of galaxies
- Solar System evolution
- Earth's origin
- Create 3D models with clay, waste material, or cardboard.

- Label with captions and add regional myths or folk stories related to creation (optional). - Art Integration: Draw or paint your interpretation of earth's evolution using traditional art styles (e.g., Madhubani, Warli).

Submission Tips

- Keep all content neat, creative, and well-labeled.
- Use A4 sheets or scrapbooks, decorate using eco-friendly material.
- Be ready to explain your project briefly in class.

Political Science

Chapter 1: Constitution: Why and How?

- 1. What is a constitution and why do societies need one?
- 2. Explain the significance of the Constituent Assembly in the making of the Indian Constitution.
- 3. List and explain any five key features of the Indian Constitution.
- 4. Why is the Preamble considered the soul of the Indian Constitution?
- 5. Discuss the relevance of constitutional amendments in a democracy.

Chapter 2: Rights in the Indian Constitution

- 1. Define the term 'Fundamental Rights' as given in the Indian Constitution.
- 2. Describe the Right to Equality and its various components.

- 3. Explain the importance of the Right to Constitutional Remedies.
- 4. How do Fundamental Rights protect citizens from state power?
- 5. Distinguish between Fundamental Rights and Directive Principles of State Policy.

Chapter 3: Election and Representation

- 1. What is the role of elections in a democracy?
- 2. Define Universal Adult Franchise and its importance in India.
- 3. Describe the major features of the electoral system in India.
- 4. What is the difference between the First Past the Post system and Proportional Representation?
- 5. Explain how elections ensure accountability of the government.

Pro	ject	Wo	rk
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Topic: Constitution: Why and How?

Instructions:

- Project must be handwritten in a file of 8–10 pages.
- Use proper headings, bullet points, and subheadings.
- Add images, diagrams, or newspaper clippings if available.
- Mention sources or references at the end.

Suggested Format:

Cover Page

- Title of the Project
- Name, Class, Roll Number
- Subject: Political Science
- School Name

Index

Introduction

- What is a Constitution?
- Importance of a Constitution in society

Need for the Indian Constitution

- Historical background
- Objectives

Making of the Indian Constitution

- Role of the Constituent Assembly
- Drafting Committee and key contributors

Salient Features of the Indian Constitution

Importance of the Preamble

Conclusion

Bibliography/References

Education

Syllabus: Chapters 1 to 3 (Book: Foundations of Education)

Board: JKBOSE

Chapter 1: Concept and Meaning of Education

Define the term 'Education'. What are its major objectives?

Differentiate between formal, informal, and non-formal education.

Explain the importance of education in individual and social life.

Describe education as a lifelong process.

Why is education considered both a process and a product?

Chapter 2: Aims of Education

What do you mean by the aims of education?

Discuss the individual and social aims of education.

Explain the cultural and moral aims of education.

What is the role of vocational aim in modern education?

How do aims of education vary with time and society?

Chapter 3: Functions of Education

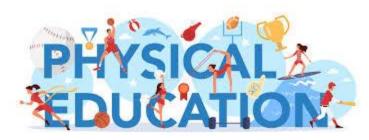
What are the main functions of education in society?

Describe how education contributes to social change.

Explain the role of education in promoting national integration.

How does education help in the development of personality?

Discuss the political and economic functions of education.



1. What is muscular system. What are the effects of exercise on muscular system?

- 2. Define Circulatory system. What are the effects of exercise on circulatory system.
 - 3. Draw a well labelled diagram of human heart and respiratory system.

TO BE DONE IN PE NOTEBOOK

Practical work

4. Diagram of kho-kho field with its measurement. Write history, fundamental skills and techniques of the game.

5. Project work
All details regarding badminton.

History, fundamental skills, techniques, measurements. Badminton player names Indian as well as international.

Attach pictures of badminton field, racket, shuttle cock, badminton net with dimensions.

