



# DAV PUBLIC SCHOOL SAHIBABAD

## Summer Break Assignment

Class - 12



Summer Vacation



“The Pessimist Sees Difficulty In Every Opportunity.  
The Optimist Sees Opportunity In Every Difficulty.”

– *Winston Churchill*





***"Knowledge stuck in books is like wings folded tight. Only by practically doing can we truly learn to fly."***

# English

Project-Portfolio/ Project Report (As per CBSE guidelines 2025-26)

The Project-Portfolio/Project Report is a compilation of the work that the students produce during the process of working on their ALS Project.

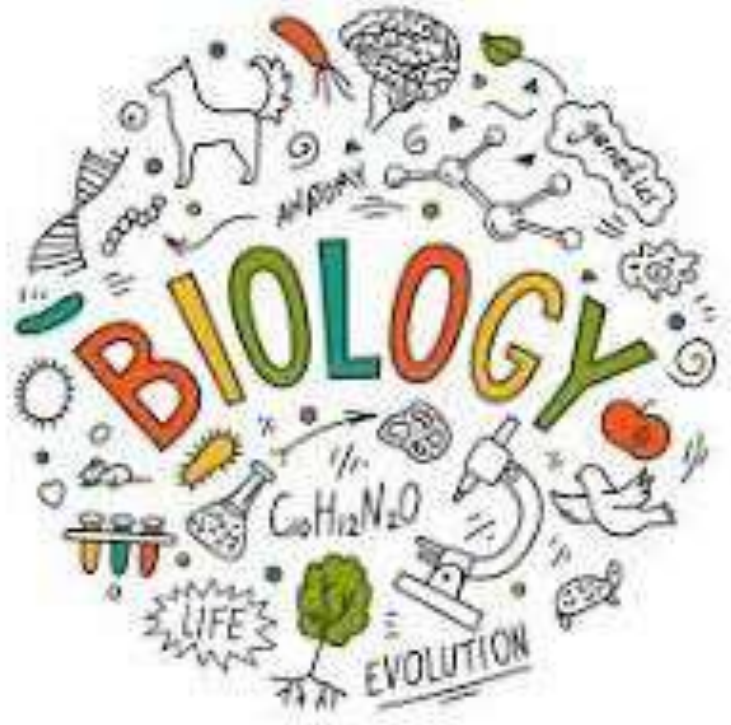
The Project-Portfolio may include the following:

- Cover page, with title of project, school details/details of students.
- Statement of purpose/objectives/goals
- Certificate of completion under the guidance of the teacher.
- Students Action Plan for the completion of assigned tasks.
- Materials such as scripts for the theatre/role play, questionnaires for interview, written assignments, essays, survey-reports and other material evidence of learning progress and academic accomplishment.
- The 800-1000 words essay/Script/Report.
- Student/group reflections.
- If possible, Photographs that capture the positive learning experiences of the student(s).
- List of resources/bibliography

# English

The following Rubrics will be kept for consideration while assessing the project portfolios:

- Quality of content of the project
- Accuracy of information
- Adherence to the specified timeline
- Content in respect of (spellings, grammar, punctuation) Clarity of thoughts and ideas
- Creativity
- Contributions by group members Knowledge and experience gained



# BIOLOGY

"Not the strongest of the species survives, nor the most intelligent, but the one most responsive to change."

# BIOLOGY

- 1.ACTIVITY-1:Prepare investigatory project work on the suggested 12th Biology topics
- 2.Do the mCQs of 1,2,3,4 chapters from NCERT exemplar and the file sent to you through Whatsapp
- 3.Prepare NCERT question answers for the completed topics
- 4.Complete the practical file for the topics done



# Physics

**“Energy** is liberated matter, matter is energy waiting to happen.” –

**Bill Bryson**

# Physics

1. Complete NCERT Questions of Chapter 4 and the assignment on Chapter: 1 to 4, posted in Physics group.
2. Complete all six activities (3 from Section A and 3 from Section B) in Activity File.
3. Prepare an experiment based or Model based Project as per the theme allotted roll number wise. (Posted in Physics Group).

Step 1. Perform an experiment or prepare a Model on allotted theme.

Step 2. Prepare a report file on the above Project in the following format:"

Certificate

Aim of the project

Apparatus required

Theory / Principle

Diagram

Observations

Calculations / Data Analysis (if any)

Conclusion

Bibliography

Step 3. Prepare a short video of maximum 5 minutes on the Project, create a link and submit it on the Google form provided in the Physics group.

# Chemistry



**“Chemistry is necessarily an experimental science: its conclusions are drawn from data, and its principles supported by evidence from facts.”**

*Michael Faraday*

# Chemistry

## Summer Holiday Homework:

Reading Homework: **Section-A** – Learning and Pre-reading homework.

Written Homework: **Section-B** – Chapter wise Revision assignment.

**Section-C** – Creative Project/ Working model/ Inquiry based project.

**Section-D** – Experiment based activity.

**Section-E** – Indian Scientists (Chemistry) and their contribution.

## Tools required for doing Homework:

1. NCERT Book, Pradeep book
2. Notebook
3. A4 Sheets
4. Resources as per activity

## **Section-A** – Pre reading homework: ·

Do the pre reading of chapter number – 09  
(Coordination compounds) · Write all the difficult  
words & their meanings of chapter -09 in Chemistry  
N.B.

**Section –B-** Do the given assignments and *Complete* the NCERT intext , exercise and exemplar questions of Chapter 1,2,3 and 4 in your Assignment Register and learn all the definitions and formulae.

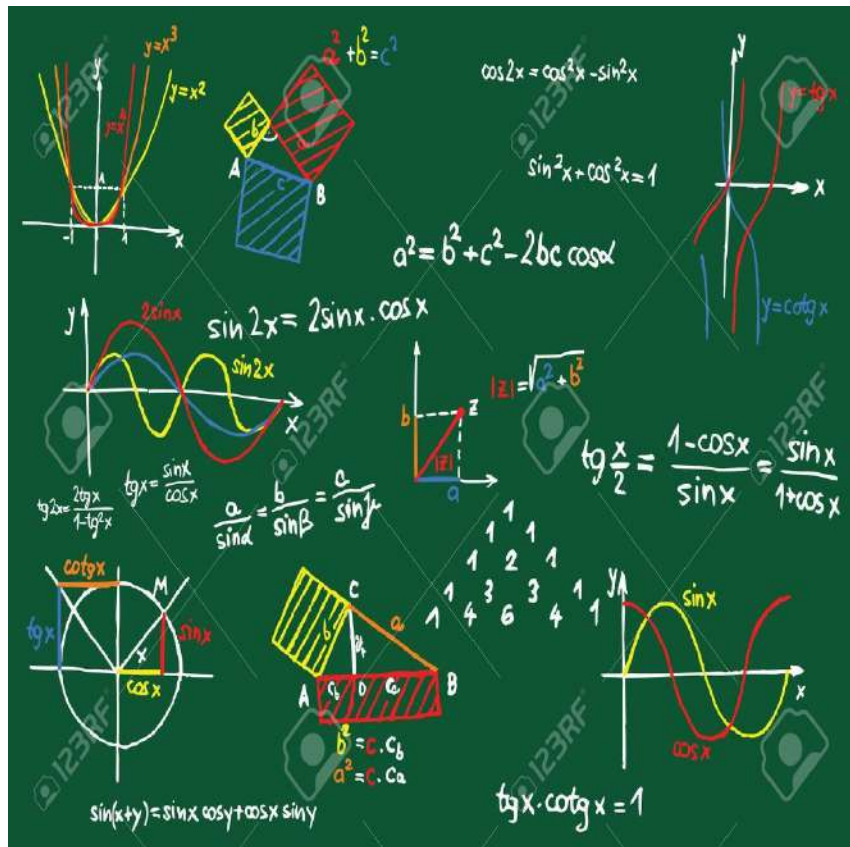
**Section-C-** Prepare one Investigatory project .Write

Aim of Investigatory project , it's preface , acknowledgement , introduction , theory , procedure , analysis/tests, observation table, conclusion , bibliography

**Section-D-** prepare *salt analysis scheme* for systematic analysis of cations and anions with at least one confirmatory test of each cation and anion.

**Cation :**  $\text{Pb}^{2+}$ ,  $\text{Cu}^{2+}$ ,  $\text{As}^{3+}$ ,  $\text{Al}^{3+}$ ,  $\text{Fe}^{3+}$ ,  $\text{Mn}^{2+}$ ,  $\text{Zn}^{2+}$ ,  $\text{Cu}^{2+}$ ,  $\text{Ni}^{2+}$ ,  $\text{Ca}^{2+}$ ,  $\text{Sr}^{2+}$ ,  $\text{Ba}^{2+}$ ,  $\text{Mg}^{2+}$ ,  $\text{NH}_4^+$   
**Anions:**  $(\text{CO}_3)^{2-}$  ,  $\text{S}^{2-}$  ,  $(\text{SO}_3)^{2-}$  ,  $(\text{NO}_2)^-$  ,  $(\text{SO}_4)^{2-}$  ,  $\text{Cl}^-$  ,  $\text{Br}^-$  ,  $\text{I}^-$  ,  $\text{PO}_3^{3-}$  ,  $(\text{C}_2\text{O}_4)^{2-}$  ,  $\text{CH}_3\text{COO}^-$  ,  $\text{NO}_3^-$

**Section-E-** Research on any one scientist (Chemistry) & prepare a project on A4 size sheet and a collage by using their pictures. Point to be enquired - (i) Birth (ii) Education (iii) Branch in which they worked (iv) Achievements



# Mathematics

Without mathematics, there's nothing you can do.  
Everything around you is mathematics. Everything  
around you is numbers.

— Shakuntala Devi, Indian writer and mental calculator

# Mathematics

## **Reading Homework:**

**Section - A: Pre-Reading Homework**

## **Written Homework:**

**Section-B: Chapter-wise Revision Assignment**

**Section-C: Lab Practical Notebook Work**

**Section-D: Creative Project/ Model**

## **Material Required:**

1. NCERT TEXTBOOK
2. ASSIGNMENT NOTEBOOK
3. A-4 SHEETS
4. GRAPH COPY
5. LAB PRACTICAL NOTEBOOK
6. CHART PAPER, GLUE ETC.

# Mathematics

## Instruction/Guidelines for Reading Homework:

### **Section – A: Pre-Reading Homework**

- Do the Pre-Reading of Chapter No.5 Continuity & Differentiability and Ch-6

Application of Derivatives.

Do the reading of Appendix-1 and 2 given at the end of NCERT Textbook

- Write all the difficult words & their meanings of above chapters and appendix in Maths

Notebook.

## Instruction/Guidelines for Written Homework:

**Section-B: Do the given Assignments in the below given link on separate Assignment N.B.**

[https://docs.google.com/document/d/1ktYS7qpo4qpCBrKn8MUTsGLoXLhiEjNtynZAGB\\_7u2E/edit?usp=sharing](https://docs.google.com/document/d/1ktYS7qpo4qpCBrKn8MUTsGLoXLhiEjNtynZAGB_7u2E/edit?usp=sharing)

# Mathematics

**Section-C: Do Lab Practical Activities in the below given link in Practical N.B with proper index and figures.**

<https://docs.google.com/document/d/1v12dc03ZEnVn8VBLWvGnPp2fstxZKhTZTS7RPgWPc2A/edit?usp=sharing>

## **Section – D: Creative Project/ Models**

- To Create a visual diary of graphs showcasing various trigonometric functions to further determine each functions domain and range.

$$1. f(x) = \sin^{-1} x$$

$$2. f(x) = \cos^{-1} x$$

$$3. f(x) = \tan^{-1} x$$

# Mathematics

$$4. f(x) = \operatorname{cosec}^{-1} x$$

$$5. f(x) = \sec^{-1} x$$

$$6. f(x) = \cot^{-1} x$$

## Important Note:

All students must submit their vacation Homework for Assessment on 1st July 2025 .



# Accountancy

Accounting does not make corporate earnings or balance sheets more volatile. Accounting just increases the transparency of volatility in earnings.

*Diane Garnick*

# Accountancy

***Holiday Homework will have Three parts:***

- 1 Problem solving exercises***
- 2. Experiential Learning***
- 3. Creative Learning***

***Part -1 Problem solving exercises.***

- 1. You are required solve a worksheet containing a set of different typology of questions.***
- 2. Prepare Revaluation Account from given Balance Sheet and adjustments .***

**Click the link given below to find the WorkSheet:**

**<https://docs.google.com/document/d/1BAQmPnHXx4c-eOTRinulvTt-09FmDq1Thz7AlJEfZvU/edit?usp=sharing>**

## **Experiential Learning:**

Show shareholders funds and Non- Current Assets of three different companies, for instance you can take companies like Dabur India, Nestle India, Himalaya, Pepsi co. or any other Company of your choice.

Instructions:

Use Financial Statements (Balance Sheet and Notes to Accounts).

You will show above data in a tabular form.

Source: Main website of specific company and other websites like Moneycontrol and Equitymaster etc.

## **Creative Learning:**

Make a Crossword Puzzle from Chapter 1 Fundamentals of partnership. Visit following site for finding for idea and practice:

<https://crosswordlabs.com/view/accounting-for-partnership-firms-fundamentals-6>

# Business Studies



**“Business has only two functions – marketing and innovation.” – Peter Drucker**

# Business Studies

Click on the following link to view HOLIDAY HOME WORK. Attempt any one of the given projects.

<https://docs.google.com/document/d/12J8SOls8dzC-txurzewqafOv8ssUZFEo/e/dit?usp=sharing&oid=107257033275857533172&rtpof=true&sd=true>.



# Economics

"If there's any part of the economy that's delivered for all the citizens, it's got to be the work that we and our partners in our industry have done,"

# Economics

1. Write a report on visit to a bank. Observe different services they offer. Research how banks contribute to economic growth by providing credit, enabling financial transactions, and promoting investment. Check the rubrics while preparing report-

- a. Relevance of the topic
- b. Knowledge Content/Research Work
- c. Presentation technique

2. Do the assignments posted in your Economics group

# Geography



*Geologists have a saying - rocks remember.*

- Neil Armstrong

# Geography

- Prepare one scrap file for the locations given (as per cbse curriculum 2025-26) from both the book .

## Instructions:

- Locations of one chapter should be marked on one map.
- For labelling use pencil or black pen only.

## Map Work

Book: Fundamentals of Human Geography

(Map work on identification of features based on units I to III on the outline physical/political map of the World)

Chapter	Map item (Map present on official website of Govt. of India should be used)
Chapter 1-Human Geography	Nil
Chapter 2 The World Population Density Distribution and Growth	Nil
Chapter 3 Human Development	Nil
Chapter 4 Primary Activities	Areas of subsistence gathering (Fig 4.2) Major areas of nomadic herding of the world (Fig 4.4) Major areas of commercial livestock rearing (Fig 4.6) Major areas of extensive commercial grain farming (Fig 4.12) Major areas of mixed farming of the World (Fig 4.14)
Chapter 5-Secondary Activities	Nil

Chapter 6 Tertiary and Quaternary Activities	Nil
Chapter 7 Transport Communication and Trade	<b>Terminal Stations of Transcontinental Railways</b> Trans-Siberian, Trans Canadian, Trans-Australian Railways  <b>Major Sea Ports</b> <b>Europe:</b> North Cape, London, Hamburg <b>North America:</b> Vancouver, San Francisco, New Orleans <b>South America:</b> Rio De Janeiro, Colon, Valparaiso <b>Africa:</b> Suez and Cape Town <b>Asia:</b> Yokohama, Shanghai, Hong Kong, Aden, Karachi, Kolkata <b>Australia:</b> Perth, Sydney, Melbourne  <b>Major Airports:</b> <b>Asia:</b> Tokyo, Beijing, Mumbai, Jeddah, Aden <b>Africa:</b> Johannesburg & Nairobi <b>Europe:</b> Moscow, London, Paris, Berlin and Rome <b>North America:</b> Chicago, New Orleans, Mexico City <b>South America:</b> Buenos Aires, Santiago <b>Australia:</b> Darwin and Wellington  <b>Inland Waterways</b> Suez Canal, Panama Canal, Rhine waterways and St. Lawrence Seaways
Chapter 8 International Trade	Nil

## Map Work

Book: India People and Economy

(Map work on locating and labelling of features based on outline political/physical map of India.)

Chapter	Map item (Map present on official website of Govt. of India should be used)
<b>Chapter 1</b> -Population Distribution Density Growth and Composition	State with highest population density & state with lowest population density (2011)

<b>Chapter 2</b> -Human Settlement	Nil
<b>Chapter 3</b> -Land Resources and Agriculture	Leading producing states of the following crops: (a) Rice (b) Wheat (c) Cotton (d) Jute (e) Sugarcane (f) Tea and (g) Coffee
<b>Chapter 4</b> -Water Resources	Nil
<b>Chapter 5</b> -Mineral And Energy Resources	<b>Mines:</b> <ul style="list-style-type: none"><li>• <b>Iron-ore mines:</b> Mayurbhanj, Bailadila, Ratnagiri, Bellary</li><li>• <b>Manganese mines:</b> Balaghat, Shimoga</li><li>• <b>Copper mines:</b> Hazaribagh, Singhbhum, Khetari</li><li>• <b>Bauxite mines:</b> Katni, Bilaspur and Koraput</li><li>• <b>Coal mines:</b> Jharia, Bokaro, Raniganj, Neyveli</li><li>• <b>Oil Refineries:</b> Mathura, Jamnager, Barauni</li></ul>
<b>Chapter 6</b> -Planning and Sustainable Development in Indian Context	Nil
<b>Chapter 7</b> -Transport and Communication	Nil
<b>Chapter 8</b> -International Trade	<ul style="list-style-type: none"><li>• <b>Major Sea Ports:</b> Kandla, Mumbai, Marmagao, Kochi, Mangalore, Tuticorin, Chennai, Vishakhapatnam, Paradwip, Haldia</li><li>• <b>International Airports:</b> Ahmedabad, Mumbai, Bengaluru, Chennai, Kolkata, Guwahati, Delhi, Amritsar, Thiruvananthapuram &amp; Hyderabad.</li></ul>
<b>Chapter 9</b> -Geographical Perspective on selected issues and problems	Nil

# History



Study history, study history. In history lies all the secrets of statecraft.

Winston Churchill

# History

1. Complete all the notebook work of book 1 chapters (Ch-1 to 4)
2. Map work from Ch-1 to 15 as per the CBSE list circulated should be done in a separate scrapbook as map magazine.

Project Work: As per discussion in class

# History

1. Complete all the notebook work of book 1 chapters (Ch-1 to 4)
2. Map work from Ch-1 to 15 as per the CBSE list circulated should be done in a separate scrapbook as map magazine.

# Computer Science



**Part of the inhumanity of the computer is that, once it is competently programmed and working smoothly, it is completely honest.**

**Isaac Asimov**

# Computer Science

## Instructions for Project

### 1. Select and Finalize Your Project

- Decide the project topic early.
- Get it approved by your teacher if required.

### 2. Research and Plan

- Study similar projects online or from textbooks.
- Write a basic **plan** — what your project will do, and what features it will have.

### 3. Create Basic Designs

- Draw rough **flowcharts** or **algorithms**.
- If using a database (SQL), design your tables (name, fields, data types).

### 4. Start Writing Code

- Begin coding the basic version of your project in Python.
- Make sure to:
  - Use proper variable names.
  - Break code into functions wherever possible.
  - Write comments to explain important parts.

# Computer Science

## Instructions for Project

### 5. Testing

- Test small parts as you build them.
- Correct errors immediately.

### 6. Maintain a Project Diary

- Every 2–3 days, note what work you did.
- Write briefly: what part was completed, any difficulties faced, and how you solved them.
- This diary will help you prepare the final project report.

### 7. Prepare Basic Documentation

During the holidays, complete these sections:

- Title Page
- Certificate (format will be shared by the teacher)
- Acknowledgment
- Introduction and Objective
- Tools Used
- System Design (basic flowchart, database tables)

# Artificial Intelligence



# Artificial Intelligence

**1.1 List important local issues faced by your school or community**

**1.2 Which issues matter to you and why?**

**1.3 Which issue will you focus on?**

**1.4 Write your problem statement in the format below.**

How can we help \_\_\_\_\_ [ a specific user or group of users] find a way to \_\_\_\_\_ [do what] so that they can \_\_\_\_\_ [ do something not done before that can be measured].

**1.5 Rate yourself \_\_\_\_\_**

**Problem Definition**

**1 point - A local problem is described**

**2 points - A local problem which has not been fully solved before is described.**

**3 points - A local problem which has not been fully solved before is explained in detail with supporting research.**

# Artificial Intelligence

**2.1 Who are the users and how are they affected by the problem?**

**2.2 What have you actually observed about the users and how the problem affects them?**

**2.3 Record your interview questions here as well as responses from users.**

## 2.4 Empathy Map

Map what the users say, think, do and feel about the problem in this table

**2.5 What are the usual steps that users currently take related to the problem and where are the difficulties?**

**2.6 Write your problem statement in the format below.**

\_\_\_\_\_ [a specific user or group of users]

are experiencing issues with \_\_\_\_\_ [problem] today

because of \_\_\_\_\_ [cause]

What our users are saying	What our users thinking
What our users are doing	How our users feel

# Physical Education



**“You don’t stop playing because you grow old; you grow old because you stop playing!!!”**

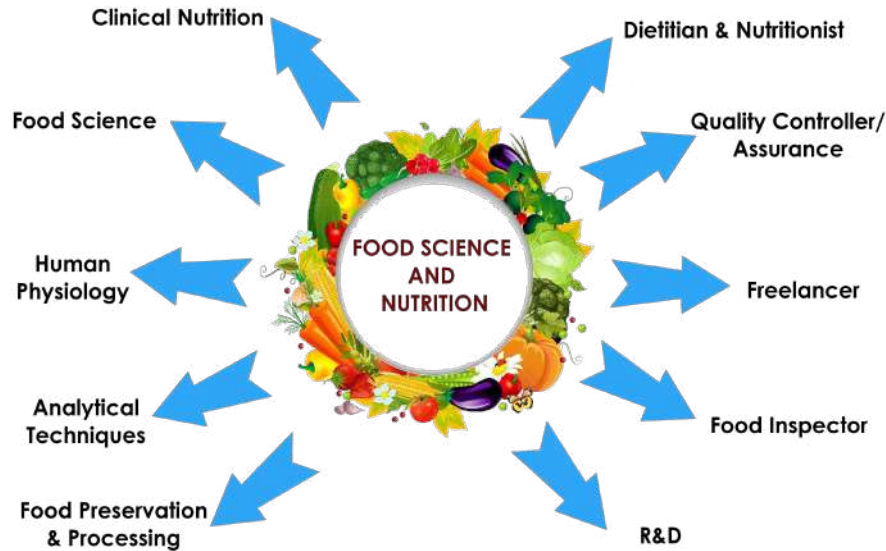
# Physical Education

## **PRACTICAL FILE**

- PRACTICAL 1: Fitness Test Administration (SAI Khelo India Test)  
For reference: <https://youtu.be/Be8h3ASTDw0?si=q6LtYRjB7Hf-MkFe>  
<https://youtu.be/itUWOjOI2Rc?si=WFqPubewQsOIM3mq>
- PRACTICAL 2: Procedure for Asanas, Benefits and Contraindications for any two asanas for each lifestyle diseases. (Stick diagram to be made)

## **CLASS NOTEBOOK**

- WORKSHEET : Perform three asanas of each lifestyle disease and paste your picture doing the asanas.



# Home Science

**“My interest in the sciences started with mathematics in the very beginning, and later with chemistry in early high school and the proverbial home chemistry set.”**

**Rudolph A. Marcus**

# Home Science

1. Develop a leaflet / Pamphlet for Consumer education and protection on any of the Following:-

- a..Consumer protection Act (CPA) / b.Consumer responsibilities c.Consumer organization d.Consumer Problems

Material required- A4 sheet , coloured pens , scale ,pencil etc.

2. Market survey any five processed foods with their packaging and label information.

1. Collect information on any five processed foods available in the market 2. Note the various packaging material for the same product . 3. Note the information given on their labels and compare costs of different packaging of same product and discuss merits and demerits of these packaging materials.

3. Preparation of any one educational toy for the children (age appropriate) using locally available and indigenous material .

4. Do given assignment posted in Google Classroom.

**“शब्द ही जीवन को ,अर्थ दे जाते हैं, और, शब्द ही जीवन में,अनर्थ कर जाते हैं.”**

# हिन्दी

1. पढ़ाया गया पाठ्यक्रम कंठस्थ करें तथा लिखकर अभ्यास करें।

( अभिव्यक्ति और माध्यम के पाठ 1 से 2 तक प्रतिदिन याद करें)

2.. निम्नलिखित विषयों में से किसी एक पर परियोजना- कार्य तैयार करें।

(क) डा.हरिवंशराय बच्चन और हालावाद

(ख) महादेवी वर्मा और उनके पथ के साथी

(ग) हमारी पहचान : हमारी लोक कलाएँ

(घ) हिंदी साहित्य में देश-प्रेम

(ङ) हिंदी कविता में प्रकृति चित्रण

(च) जल संरक्षण : आज की आवश्यकता

(छ) पत्रकारिता के विविध आयाम

# हिन्दी

ज) पत्रकार की भूमिका

(झ) तुलसी के राम

(ञ) भारतीय ग्रामीण का जीवन

3. निम्न विषयों पर रचनात्मक लेखन का अभ्यास करें-

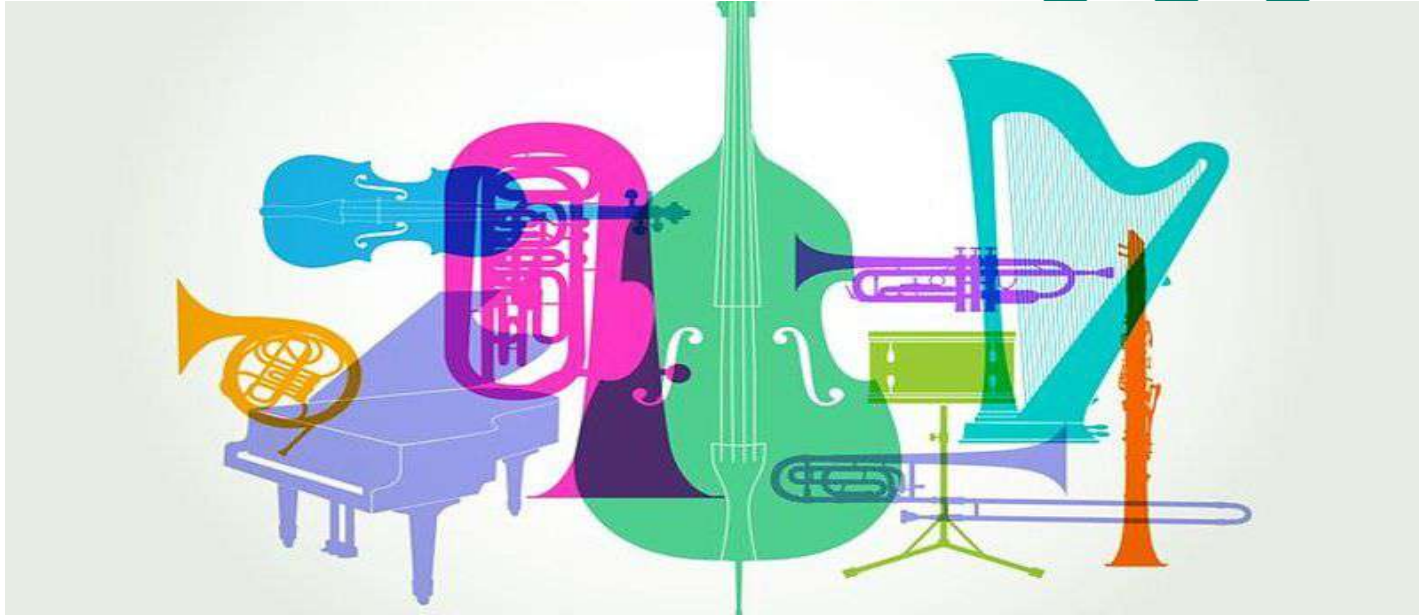
- युवा भारत

- आजादी का अमृत महोत्सव :गुमनाम शहीदों को स्मृति-प्रसूनों की पुष्पांजलि

4. भक्तिन पाठ को पढ़ें एवं पाठ के आधार पर भक्तिन का चरित्र-चित्रण कीजिए ।

5 प्रतिदिन हिंदी समाचार पत्र पढ़ें एवं सामयिक लेखों का संकलन करें।

# Hindustani



“When words leave off, Music begins.”

# Hindustani Vocal

- 1. Find out the khyal/Tarana/Dhamar vocalist (singer) of present era and write an essay in 200 words on his/her singing style and contribution to indian music.**
- 2. Answer the questions given in the questionnaire topicwise. (questionnaire will be shared in the official class whatsapp group )**

# PAINTING

THEORY i) Write two paintings of pahadi School in Note-book ii) Write MUGHAL AND DECCAN MINIATURE PAINTING

Title 1. Krishna with gopies 2. Nand Yashodha and krishna with kingsman going to Vrindavan

Practical Work: 6 object drawing, 6 landscape and 2 folk art (warli/Mandala/madhubani) on half

imperial Cartridge sheet or ivory sheet( which was provided on practical day)  
NATURE ,

OBJECT STUDY & 2 FOLK ART( MADHUBANI, VARLI AND MANDALA ART

# Phe (502)

## 1. Fitness Activity Log

- Maintain a fitness diary for 15 days. (Note your body weight and height)
- Include activities like running, yoga, strength training, or cycling.
- Mention duration, intensity (light/medium/high), and personal remarks daily.

## 2. Yoga Practice

- Learn and practice 5 asanas beneficial for students (e.g., Tadasana, Vrikshasana, Bhujangasana, Trikonasana, Sukhasana).
- Write about their benefits, precautions, and the correct method.

### **\*Important Instructions:\***

**All work must be handwritten and made in scrap file.**

**Decorate your project neatly and paste your own pictures (Both doing fitness activities and yoga asanas)**

# Work Ed (500)

Submit a file on any one of the following topics:

1. E Commerce
2. Artificial Intelligence
3. Cyber safety
4. Changes in trend and skills of Jobs in 2025

# General Studies(503)

Prepare a project file on any one of the following changing dynamics of society.

1. Science and society
2. Contemporary problems of Indian society
3. Career pathways
4. Social responsibility
5. Human rights

Check the rubrics while preparing the project file

- a. Relevance of the topic
- b. Knowledge Content/Research Work
- c. Presentation technique