DAV PUBLIC SCHOOL
TTPP ASOPUR TANDA

Class- IX

Session 2025-26

Summer Holiday Homework

Dear Parents,

"School stops for summer, learning never stops."

Summer holiday homework is a way to keep your child connected to learning during this long break. It is an excellent opportunity to encourage children to work on their own and develop self discipline. The holiday homework designed would not only help your child achieve the above but also help them grow as responsible individuals.

Here are a few suggestions that you may keep in mind

1. Holiday homework should be done under parental guidance but not by the parents.

2. The homework should be done as per the instructions given.

3. The last date of submission of the holiday homework is 5th July 2025. No homework will be accepted after the last date.

4. The holiday homework will be graded and is a part of Internal Assessment of Term -I Exam.

5. Converse with your child in English. Encourage your child to read books to enhance his/her language and comm. skills.

6. Help to keep the house clean, clear the toys, books or craft after you have finished playing with it.

7. Be polite while speaking and talk softly.

Plant a seed in the pot, decorate the pot. Take care of that plant for the whole month, when you will come back to school bring that pot to your school.

Q.1 Write the History of Pie(π) in brief.

Q.2 Without actual division show that x^2+5x+4 is a factor of $2x^4+9x^3-19x-12$.

Q.3 Performe an Activity on square Root Spiral.

Q.4 If both $(x-2)$ and $(x-\frac{1}{2})$ are factors of Px^2+5x+r, show that p=r.

Q.5 Locate $1+\frac{\sqrt{13}}{2}$ on the number line

Subject: SCIENCE

1) Prepare a portfolio file as per the given format

2) make a power point presentation on the given topics(atleast 8 pages)

CHEMISTRY

i) Properties of various matter.   (Roll- 1 to 5)

ii) Evaporation and its effects.   (Roll 6 to 10)

iii)Change in states of matter and factors responsible for it. (Roll- 11-15)

BIOLOGY

i) All about cell (general properties)   (Roll 16 to 20)

ii) Cell organelles their structure and functions. (Roll-21 to 25)

PHYSICS

i) Types of motion.   (Roll -26 to 30)

ii) Types of Energy. (Roll 31 to 35 onwards)

3) Complete yours notes and write NCERT exercise with internal question from book of tought Chapters.

4) learn chapter 1 from all the section

5) make a Concept maps of any one chapter from physics, Biology, Chemistry (2 concept maps in all)

Subject: SOCIAL SCIENCE

1.ACTIVITY – Find out the longitudinal and latitudinal of any five states.

2.How a subsistence crisis happen represents with diagram (page no. – 6).

3.Read the paragraph of page no – 7 (accounts of lined in the old regime ……………… get kidnapped all his sons throat is 'slit')

    a) What massage is young trying convey here?

    b) Whom does the mean when he speaks off 'slaves'.

    c) Who is he criticality what dangers does he sense in the situation of 1787?

4. On an outline map of French show the spread great fear on how bands of Pleasants spread from one paint two (1.2) another (page no – 9).

5.Explain the political system under the constitution of 1791(page no – 10) (classification)

6.Activity based ---- In your region talk to two labourers , choose either farm labourers, labourers working in construction sites or maid servant. 1. What wages do they get? 2. Are they paid in cash or kind? 3. Do they get work regularly? 4. Do they get holidays regularly? 5. DO they get facilities like pension, gratuity, medical allowances, accidental benefits, casual leave set c. 6. Are they in debt? Collect the report and write in A4 size paper.

7.Draw up a list of democratic rights ,we enjoy today .whose origins could be traced To the French revolution.

8. Art Integration : Refer page no. 12 and 13 of history textbook. Draw the digram with information on political system. (On chart paper ,use colours ,no photocopy)

9.Make a Concept map of the given Chapters

CH. 1. HISTORY: THE FRENCH REVOLUTION

CH. 1.GEOG: INDIA SIZE AND LOCATION

CH.1. DEMO. POLI:. WHAT IS DEMOCRACY?WHY DEMOCRACY? (FROM EACH CH. AT LEAST 5-6 CONCEPT MAP SHOULD BE THERE ,DO IT ON A4 SIZE PAPER,USE COLOURS TOO)

Subject HINDI

(1) कबीर दास जी द्वारा रचित किन्ही 10 दोहों (पुस्तक के अतिरिक्त) को A4 साइज शीट पर सुंदर लेख में लिखिए एवं हिंदी की फाइल में लगाइए तथा उन्हीं दोहो कंठस्थ कीजिए।

(2) आपने किसी स्थान की यात्रा अवश्य की होगी या करने वाले होंगे यात्रा के दौरान हुए अनुभवों को सुंदर लेख में लिखिए (हिंदी प्रोजेक्ट फाइल में a4 साइज सीट पर लिखिए)।

(3) पर्यावरण को बचाने के लिए आप कैसे योगदान दे सकते हैं इससे संबंधित एक सुंदर चित्र बनाकर हिंदी की प्रोजेक्ट फाइल में लगाइए।

(4) बिजली के संकट को लेकर दो व्यक्तियों की बातचीत लिखिए ।

(5)पत्र-लेखन आपकी पास बुक खो गई है। इसकी सूचना देते हुए बैंक अधिकारी को पत्र लिखिए।

Subject: ENGLISH

1) write the complete biograph of Ustad Bishmillah khan.

2) write the 100 idioms cend Phrases and use proper sentences. its in proper sentences.

3) write the rules of tenses and two examples of each tenses and learn it.

Subject: COMPUTER

Prepare a descriptive report on any one of the following topics by giving various real time examples and using images: (Minimum 15 Pages)

1. Entrepreneurial skill

2.Green skills

3.Self-Management Skill

DAV PUBLIC SCHOOL
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Class- X

Session 2025-26

Summer Holiday Homework

Dear Parents,

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Here are a few suggestions that you may keep in mind

1. Holiday homework should be done under parental guidance but not by the parents.

2. The homework should be done as per the instructions given.

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5. Converse with your child in English. Encourage your child to read books to enhance his/her language and comm. skills.

6. Help to keep the house clean, clear the toys, books or craft after you have finished playing with it.

7. Be polite while speaking and talk softly.

Plant a seed in the pot, decorate the pot. Take care of that plant for the whole month, when you will come back to school bring that pot to your school.

Subject: MATHEMATICS

MULTIPLE CHOICE QUESTIONS –

1.Which of the following numbers is irrational?

A. 3.   B. √5.   C. 16.   D. 8

2. The zeroes of the polynomial x 2+8x +12 are:

A. -2 and -6.   B. −3 and −1.   C. 6 and 1.   D. 2 and 3

3.The pair of equations x + 2y = 5 and 4x + 8y = 13 has:

a) A unique solution.   b) No solution.   c) Infinitely many solutions.   d) Two solutions

4. A polynomial of degree 1 is called -

a) Constant.   b) Linear.   c) Quadratic.   d) Cubic

VERY SHORT ANSWER TYPE QUESTIONS –

5. Two numbers differ by 4 and their sum is 16. Find the numbers.

6.Find the zeroes of the polynomial x 2+5x+6, and find their sum and product.

SHORT ANSWER TYPE QUESTIONS –

 7. Prove that 7√5 is irrational.

8. Half the perimeter of a rectangular garden, whose length is 4 m more than its width, is 36 m. Find the dimensions of the garden.

LONG ANSWER TYPE QUESTIONS –

9. Solve the following pair of equations by substitution method:

7x − 15y = 2

X + 2y = 3

10. Find the zeroes of the quadratic polynomial t2 - 7 and verify the Relationship between the zeroes and the coefficients.

Subject: SCIENCE

I. Make a fortfolio file as per given instructions and format

II. Complete your notes and excercises of NCERT as per your tought topics

III. Make a PPT on the given topic.

Physics

1) Draw magnetic field lines- (roll 01- 05)

2) prepare electric circuit.   (Roll-6 - 10)

3) Verification of ohm's law (Roll 11-15)

Chemistry

1) show the various types of chemical reaction with equations. (Roll-16-20)

2) Application of oxidation/ Reduction reaction in ---our life show with examples (Roll 21 -25)

Biology:

1) with the help of PPT show the process of nutrition in plants (Roll-26-35)

9) Nutrition in human beings (Roll-31-35)

3) Aerobic Respiration in Human beings and mechanion of breathing.   (Roll-36-43)

IV. Write and learn the Previous Year Questions (PYQs) of board examination (in separate copy) last 5 years.

Make a Concept map from chapter of physics, Biology, Chemistry (3 Concept map)

विषय- हिंदी

1. "पर्यावरण संरक्षण" - निबंध।

2. संवाद छात्र और अध्यापक के बीच।

3. कविता "माँ" पर रचना।

4. आलोचनात्मक लेखन कोई फिल्म या पुस्तक।

5. पत्र लेखन संपादक को जनसमस्या पर।

6. कहानी लेखन "सच्चाई की जीत"

7. "डिजिटल भारत" पर अनुच्छेद।

8. तुलनात्मक लेखन - ग्राम जीवन और नगर जीवन।

9. भाषण "समय का सदुपयोग"

Subject: SOCIAL SCIENCE

1.Activity- Do the plantation either in the pot Or on the ground near to your home. While doing the plantation, photos should be colour print with the students name.

- ✔ The plantation should be done in school uniform only.

- ✔ You have to plant any fruit Or tree sapling.

- ✔ Prepare a small charts with the slogans related Van Mahotsav Or Environment Day.

2.Compare India and Sri Lanka on the basis of indicators of Human Development Index for 2004.

3. Explain any five different categories of existing plants and animal species based on the International Union for Conservation of Nature and

Natural Resources with examples.

4. "The changing status of Women in 20 th century-causes and effects" Write an article on the above-mentioned topic illustrating with suitable Source examples,The article should cover examples from both Indian and world history. You have been provided with examples of the sources.

5. Find out more about nationalist symbols in countries outside Europe. For one or two countries, collect examples of pictures, posters, poems, stories or music that are the symbol of nationalism and paste / scrap book.

6.Prepare an extensive Comparison Table of Energy Resources used in India. (Include conventional, non conventional, potential and stock resources)

7.Write an article about Effects of Pandemic on Migrant Labourers Throughout India in about 500 words. (In your article describe any two case studies where government or non government organisations have extended any help to them.)

Make an Atlas of political map label and use different symbols : (do it on scrap notebook)

LIST OF MAP ITEMS

History Nationalism in India

I.Congress sessions: 1920 Calcutta(1920 Nagpur(1927 Madras session

II. 3 Satyagraha movements: Kheda(Champaran(Ahmedabad mill workers

III.Jallianwala Bagh IV. Dandi March

Geography

Resources and Development Identify Major Soil Types Water Resources Locating and Labeling:

Salal ● Bhakra Nangal● Tehri● Rana Pratap Sagar ● Sardar Sarovar ● Hirakund ● Nagarjun Sagar ● Tuhgabhadra●

Agriculture Identify: Major areas of Rice and Wheat(Largest/Major producer states of Sugarcane, Tea, Coffee, Rubber, Cotton and(Jute

Minerals and Energy Resources Identify:

a. Iron Ore mines Mayurbhanj● Durg ●Bailadila ● Bellary ●Kudremukh ●

b. Coal Mines Raniganj ● Bokaro● Talcher ● Neyveli●

c. Oil Fields Digboi ● Naharkatia ●Mumbai High● Bassien● Kalol● Ankaleshwar●

Locate and label: Power Plants

a. Thermal Namrup● Singrauli● Ramagundam●

b. Nuclear Narora ● Kakrapara● Tarapur ● Kalpakkam●

Manufacturing Industries

I. Manufacturing Industries (Locating and labeling only) Cotton textile Industries: a. Mumbai, b. Indore, c. Surat, d. Kanpur, e.Coimbatore

II. Iron and Steel Plants: a. Durgapur, b. Bokaro, c. Jamshedpur, d. Bhilai, e. Vijayanagar, f. Salem

III. Software technology Parks: a. Noida, b. Gandhinagar, c. Mumbai, d. Pune,(e. Hyderabad, f. Bengaluru, g. Chennai, h. Thiruvananthapuram

Lifelines of National Economy Locating and Labeling:

a. Major Sea Ports Kandla● Mumbai ● Marmagao● New Mangalore● Kochi● Tuticorin● Chennai● Visakhapatnam● Paradip ● Haldia●

b. International Airports Amritsar (Raja Sansi-Sri Guru Ram Dasjee)● Delhi (Indira Gandhi)● Mumbai (Chhatrapati Shivaji)● Chennai (Meenam Bakkam)● Kolkata (Netaji Subhash Chandra Bose) ●Hyderabad (Rajiv

Gandhi)●

9. Make a Concept map of the given Chapters

CH. 1. HIST THE RISE OF NATIONALISM IN EUROPE

CH. 1. GEOG RESOURCE AND DEVELOPMENT   CH.1. ECO
DEVELOPMENT   CH.1. DEMO. POLI. POWER SHARING (FROM EACH
CH. AT LEAST 5-6 **CONCEPT MAP SHOULD BE THERE ,DO IT ON A4 SIZE
PAPER,USE COLOURS TOO)**

Subject : COMPUTER

Prepare a descriptive report on any one of the following topics by giving
various real time examples and using images: (Minimum 15 Pages)

I. Entrepreneurial skill

II. Green skills

III. Self-Management Skill.

Subject : ENGLISH

(i) Biography of Nelson Mandela. [400 words]

(ii) Write 100 idoms and phrases with en meaning and make
meaningful sentences

iii) Complete the note Book in all respect. Nothing should be left.

DAV PUBLIC SCHOOL
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Class- XI

Session 2025-26

Summer Holiday Homework

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Class XI (A/B/C)

Subject: English

Theme: " Theme: *Memory, Identity, and Reflection*"

Chapter: *The Portrait of a Lady* (by Khushwant Singh)
Creative Task: "Memory Box"
Objective: Engage with the themes of nostalgia, family, and the passage of time, similar to the memories in *The Portrait of a Lady*.
Instructions:
Create a "Memory Box" to honor an important person in your life (such as a grandparent, teacher, or parent) who has shaped you.
Decorate the box with personal touches (photos, drawings, quotes) related to this person.
Fill the box with symbolic items that represent this person or the relationship (e.g., a letter, memento, poem, or even a small object).
Write a letter (150-200 words) to the person whose memory you've captured, explaining why they are important to you and how they've influenced your life.
Reflection: How did this exercise make you reflect on your relationships, similar to how the author cherishes his grandmother's memories?

2. Chapter: *Photograph* (by Shirley Toulson)
Creative Task: "A Living Photograph"
Objective: Focus on the themes of loss, nostalgia, and the passage of time explored in the poem *Photograph*.
Instructions:
Choose a photograph from your childhood or an old family picture that holds sentimental value.
Recreate the scene from the photograph by either acting it out or capturing a similar moment using props or clothing.
Write a short narrative (150-200 words) describing the photograph and how time has changed you, or how you've changed the perspective of the photograph.
Bonus Creative Element:
You can create a collage of photographs from different times in your life (childhood, adolescence, and current day) with brief reflections on each one.

3. Chapter: *Summer of the Beautiful White Horse* (by William Saroyan)
Creative Task: "The Horse's Journey"
Objective: Analyze the themes of innocence, trust, and childhood adventures, and explore how these concepts can be reimagined today.
Instructions:
Imagine the white horse from the story embarking on a journey in modern times. What if the horse had a mission, or if it belonged to a different world (for example, a futuristic world or a magical realm)?
Create a short story (200-250 words) in which the horse is on an adventure with two young protagonists (like the characters in the story). The journey can be symbolic or adventurous—let your imagination run wild.
Create a visual representation (drawing, digital art, or collage) of the horse on its journey in the modern world or magical realm.
Reflect on the concept of trust, innocence, and friendship: How do these themes still play out in today's world?

4. Poster Making: "Summer Dreams"
Creative Task: "Poster of the Future"
Objective: Use visual storytelling to explore the concepts of summer, dreams, and adventure in the context of the themes explored in the chapters.
Instructions:
Create a poster titled "Summer Dreams" that illustrates the essence of summer, based on the themes from the three chapters:
Summer as a time for memories (like *The Portrait of a Lady*).
Summer as a time for reflection (like *Photograph*).
Summer as a time for adventure and innocence (like *Summer of the Beautiful White Horse*).
Design Tips: The poster should incorporate:
Bright, warm colors (yellow, orange, sky blue) to represent summer.
Imagery of nature, travel, or adventure.
A motivational or reflective quote related to summer or growth.
Use different materials like markers, paints, photographs, or digital tools to design your poster.
Include a tagline or message that connects the theme of the poster to the idea of pursuing dreams and memories in summer.

Subject: HINDI

→ 'बढ़ती आबादी और सिमटते साधन' पर रचनात्मक लेखन कीजिए। (120 शब्दो में)

→ आरोह पाठ 1, 2, 3, 4 का अध्ययन करे और प्रश्नोत्तर याद करें

→ आरोह (पद्य खंड) 'कबीर के पद' का अध्ययन करें, कठिन शब्दार्थ और प्रत्येक पंक्ति का भावार्थ लिखे।

→ वितान- पाठ-1 'भारतीय गायिकाओं में बेजोड़ लता मंगेशकर' के कठिन शब्दार्थ ढूँढे, कहानी के मुख्य बिंदु लिखे।

→ परियोजना कार्य:

★ लक्षद्वीप के प्राकृतिक सौदर्य का वर्णन कीजिए।

* लक्षद्वीप में कौन कौन सी जनजातियाँ पाई जाती है और यहाँ कौन सी भाषाएँ बोली जाती है?

★ लक्षद्वीप की ऐतिहासिक पृष्ठभूमि का वर्णन कीजिए।

* लक्षद्वीप के मुख्य पर्यटक स्थलो का वर्णन कीजिए।

नोट: परियोजना कार्य ए-4 साईज शीट पर करना है तथा पृष्ठों को फाइल में लगाकर दें। रचनात्मक लेखन ए-4 साईज़ शीट पर करना है।

Subject : PHYSICAL EDUCATION

Make a project File using punch sheet of the following topic.

Practical-1

Pictorial presentation of any five Asanas for improving concentration.

Meaning & Importance of Yoga

Elements of Yoga

Introduction - Asanas, Pranayam, Meditation & Yogic Kriyas

Yoga for concentration & related Asanas (Sukhasana; Tadasana; Padmasana &

Shashankasana, Naukasana, Vrikshasana (Tree pose), Garudasana (Eagle pose)

Relaxation Techniques for improving concentration - Yog-nidra

Practical-2

Labelled diagram of field & equipment of any one game of your choice out of the above list

Athletics, Archery, Badminton, Boxing, Chess, Judo, Shooting, Skating, Swimming, Taekwondo, Tennis, Aerobics, Gymastics, Rope-Skipping, Yoga, Bocce & Unified Basketball [CWSN (Children With special needs)]

Subject: Mathematics

MULTIPLE CHOICE QUESTIONS –

1. If $\cot\theta$ = 1 then θ is:

A) 30°   B) 45°   C) 60°   D) 90°

2. The conjugate of 4 - 6i is:

A) 5+2i.   B) −5+2i C) 4+6i.   D) −5−2i

3. The value of tan(180° − θ) is:

a) cosec θ.   b) −sec θ.   c) sin θ.   d) −tan θ

4. Which of the following is not a real number?

a) √5.   b) 0.   c) 2i.   d) 7

VERY SHORT ANSWER TYPE QUESTIONS –

5. Find the values of Sin 150.

6. Express the following in the form a + ib is i-100

SHORT ANSWER TYPE QUESTIONS –

7. Find the real numbers x and y if x + iy = 4 + 6i.

8. A wheel makes 360 revolutions in one minute. Through how many radians does It turn in one second?

LONG ANSWER TYPE QUESTIONS –

9. Find the values of other five trigonometric functions in Cot x = ¾ , x lies in Third quadrant.

10. If x + iy = a + ib /a - ib , prove that x2 + y2 = 1.

Subject : ACCOUNTANCY

1 Prepare a project file on 'different type of vouchers' that is used in accounting.

  Note: (Use practical file)

2 Learn and write 5 accounting principle or concepts

3 Explain GAAP, IFRS and Ind-AS

4 solve 3 Illustration of journal entry.

Subject: BUSINESS STUDIES

1 Write & Explain the steps of formation of company

2 Prepare a project file on Forms of business organization (any one).

3 Solve at least 5 case based questions of chapter 1 and 2.

Subject: ECONOMICS

1. Prepare an ideal Questionnaire of BPL families in your locality on the basis of sources of income and expenditure and give minimum 20 questions

2. Collect data using prepared questionnaire by you any 5 BPL families related Income and Expenditure.

3. Collect price rates of some goods like fruits, vegetables, clothes and breads in the months of June and after it against this price rates what amount of quantity will you buy.

4. Make a list of 10 substitution and 10 complimentary goods which we use in daily life.

5. Draw the shifting/rotation of Production Possibility Curve

6. Solve all numerical questions of chapter -2

7. Make two pictures on small chart paper showing use of Labour Intensive Technology and other picture use of Capital Intensive Technology.

8. Compare USA PPC and India'PPC through diagrams

9. Collect data related to Employment and Inflation using secondary sources of data.

Subject: PHYSICS

Important Instructions

➢ The homework has to write in separate '**A4 rule pages**' and the front page must be decorated. Please don't write it in your note **book**.

➢ No stick file is required. It should be stapled only.

➢ The class work must be completed in your class note book.

S.No	HOMEWORK
1	The acceleration of a particle moving in straight line is given as: $a = 8t - 5t^2$. What is the velocity and displacement of the body at $t=3s$?
2	A particle moves along a straight line such that its displacement 's' at any time 't' is given by $s = (t^3 - 6t^2 + 3t + 4)$ m. Find the velocity and acceleration at $t = 2s$.
3	The displacement of a particle along x-axis is given by $x = 4 + 8t + 14t^2$. Obtain its velocity and acceleration.
4	A body starting from rest has an acceleration of 20 m/s^2. Calculate the distance travelled by it in 10th second.
5	State and prove parallelogram law of vector addition.
6	State triangle law of vector addition. Give any two real life examples.
7	State the number of significant figures in the following: (a) 0.007 m^2 (b) 2.64 x 10^4 kg (c) 0.2370 g cm^{-3} (d) 6.320 J (e) 6.032 N m^{-2} (f) 0.0006032 m^2
8	'The length, breadth and thickness of a rectangular sheet of metal are 4.234 m, 1.005 m and 2.01 cm respectively. Give the area and volume of the sheet to correct significant figures.
9	Draw the Y vs X graphs : (a) $y = Ax^2$ (b) $y = Ax + B$ (c) $x = y^2$ (d) $y = Ax$ (e) $y = A \sin(5x^4)$ (f) $y = A \cos(3x)$
10	A car moving along a straight highway with speed of 126 km h^{-1} is brought to a stop within a distance of 200 m. What is the retardation of the car (assumed uniform), and how long does it take for the car to stop?
11	A ball is dropped from a height of 90 m on a floor. At each collision with the floor, the ball loses one tenth of its speed. Plot the speed-time graph of its motion between $t = 0$ to 12 s.
12	Find the **differentiation** of following functions : (a) $y = 2x^5$ (b) $y = 5x^{-7}$ (c) $y = 3x^5 + 7x^{-8}$ (d) $y = e^x . e^{-x}$

(e) $y = \cos(x) \cdot \sin(x)$ (e) $y = 9e^{2x} - 11 e^{-3x}$

13	Find the **integration** of following functions : (a) $I = \int x^3 \, dx$ (b) $I = \int x^{-5} \, dx$ (c) $I = \int \sin(3x) \, dx$ (d) $I = \int e^{2x} \, dx$ (e) $I = \int \cos(5x) \, dx$
14	Derive the dimensional formula of the following physical quantities: (a) Time period (T) of a simple pendulum having length (l) moving under gravity with acceleration (g). (b) Gravitational Force (F) acting between two masses separated by a distance R.
15	If A = 3i +6j + 9k ; B =6i -2j-7k ; C = 4i+5j-7k ; Than find the following : (a) A + B (b) A - B (c) A.B (d) A x B (e) A.(B x C)
16	If a vector A = 2i-4j +5k is given. (a) Find the magnitude of A. (b) Find the Unit vector of A. (c) Also find the unit vector of a vector parallel to A vector.
17	Derive the three equations of motion with the help of graphical method.
18.	If $(P + a/V^2)(V - b)$ = Constant ; find the dimension of 'a' and 'b'. Also write their S.I units.
19	Check LHS and RHS ; whether they are dimensionally equal or not: (a) $F.s = \tfrac{1}{2} m(V_f^2 - V_i^2)$ (b) $v^2 - u^2 = 2aS$ (c) $mg = Gm_1 m_2/r^2$
20	Write down the five difference between Dot product and Cross product.

Subject: BIOLOGY

Q.1.<u>Brassica</u> <u>campestris</u> <u>Linn</u>

a.Give the common name of the plant.

b What do the first two parts of the name denote?

c.Why are they written in italics?

d. What is the meaning of Linn written at the end of the name?

Q.2.Do you consider a person in coma-living or dead?

Q.3.Diatoms are also called as 'pearis of ocean', why? What is diatomaceous earth?

Q.4.Neurospora an ascomycetes fungus has been used as a biological tool to understand the mechanism of plant genetics much in the same way as Drosophila has been used to study animal genetics. What makes Neurospora so important as a genetic tool?

Q.5.Fungi are cosmopolitan. Write the role of fungi in your daily life.

Q.6.Biological classification is a dynamic and ever evolving phenomenon which keeps changing with our understanding of life forms. Justify the statement taking any two examples.

Q.7.Make a list of algae and fungi that have commercial value as source of food, chemicals, medicines and fodder.

Q.8.Make a model of

A. Bacteriophage virus

B. herbarium sheet (any one topic)

Subject : CHEMISTRY

1. How many moles of NaOH are contained in 27 ml of 0.15 M?

2. Calculate the number of atoms in each of the following:

a - 52 moles of He

b - 52 u of He

3. Calculate the molarity of of 1 L of solution of ethanol in water in which the mole fraction of ethanol is 0.040.

4. If ten volumes of dihydrogen gas reacts with five volumes of dioxygen gas, how many volumes of water vapour could be produced?

5. Calculate the molarity of NaOH in the solution prepared by dissolving its 4gms in enough water to form 250mL of the solution.

6. The density of 2 molal solution of NaOH is 1.10 g per ml. Calculate the molarity of the solution.

7. How many atoms and molecules of phosphorous are present in 124gms of phosphorous (P4)?

8. A 6.9M solution of KOH in water contains 20% by weight of KOH. Calculate the density of solution.

9. Calculate the molality and molarity of 1 L solution of 93% H2SO4(Wt. /Vol). The density of solution is 1.84g/ml.

10. Chlorophyll the green coloring matter of plants responsible for photosynthesis contains 2.68% of magnesium by weight. Calculate the number of magnesium atoms in 2.0 g of chlorophyll.

11. Calculate molality, Molarity and mole fraction of KI if the density of 20% aquoeus KI solution is 1.202 g/ml.

12. What volume of O_2 at N.T.P is needed to cause the complete combustion of 200 ml of acetylene? Also calculate the volume of CO_2 formed.

13. Butyric acid contains only C, H and O. A 4.24 mg sample of butyric acid is completely burned. It gives 8.45mg of CO_2 and 3.46 mg of H_2O.The molecular mass of butyric acid was determined by experiment to be 88amu.What is its molecular formula?

14. The density of water at room temperature is 1.0 g/ml. How many molecules are there in a drop of water if its volume is 0.05 ml?

15. Potassium Bromide contains 32.9% by mass of potassium. If 6.40 gm of bromine reacts with 3.60 gm of Potassium. Calculate the no. of moles of potassium which combines with bromine to form KBr.

DAV PUBLIC SCHOOL
TTPP ASOPUR TANDA

Class- 12th

Session 2025-26

Summer Holiday Homework

Dear Parents,

"School stops for summer, learning never stops."

Summer holiday homework is a way to keep your child connected to learning during this long break. It is an excellent opportunity to encourage children to work on their own and develop self discipline. The holiday homework designed would not only help your child achieve the above but also help them grow as responsible individuals.

Here are a few suggestions that you may keep in mind

1. Holiday homework should be done under parental guidance but not by the parents.

2. The homework should be done as per the instructions given.

3. The last date of submission of the holiday homework is 5th July 2025. No homework will be accepted after the last date.

4. The holiday homework will be graded and is a part of Internal Assessment of Term -I Exam.

5. Converse with your child in English. Encourage your child to read books to enhance his/her language and comm. skills.

6. Help to keep the house clean, clear the toys, books or craft after you have finished playing with it.

7. Be polite while speaking and talk softly.

***Plant a seed in the pot, decorate the pot. Take care of that plant for the whole month, when you will come back to school bring that pot to your school.**

CHEMISTRY

ASSIGNMENT

UNIT 1

1. If we place the blood cells in a solution containing less than 0.9% NaCl. It will ------------. Explain
2. The values of Van't Hoff factor 'i' for KNO_3, NaCl and K_2SO_4 will be ------, ----- and -----. Give reason
3. The value of Van't Hoff factor for ethanoic acid in benzene is -----------. Why?
4. Which out of 1M NaOH and 1M Na_2SO_4 will have a higher boiling point? Why?
5. In comparison to a 0.01 molar glucose, the depression in freezing point of 0.01M $MgCl_2$ will be ----------- times.
6. Why some solutions show abnormal molecular mass? Explain with the help of suitable examples.
7. The solute particles undergo ----------- when i = 0.3
8. How will you define molal elevation constant Kb and molal depression constant Kf?
9. A solution is prepared by dissolving 1.25 g of oil of winter green (methyl salicylate) in 99 g of benzene has a boiling point of $80.31°$ C. Determine the molar mass of this compound if the boiling point of pure benzene is $80.10°C$ and Kb for benzene is $2.53°K$ Kg mol^{-1}.
10. What type of mixture the rectified spirit is? Explain giving reason.
11. When will a liquid start boiling? Explain.
12. Why is osmotic pressure is considered to better than other colligative properties?

UNIT 2

1. The standard reduction/electrode potentials of some metals are as follows. Arrange them in their increasing order of reducing power. K= -2.93V, Ag= 0.80V, Hg= 0.79V, Cr=-0.74V
2. How much charge is required for reduction of (a) 1 mol of Al^{3+} (b) 1 mol of MnO_4^- to Mn^{2+}
3. What are the products when dil. H_2SO_4 is electrolyzed using Pt electrodes?
4. Find the products when an aqueous solution of $AgNO_3$ is electrolyzed using Ag electrodes.
5. When will an electrochemical cell behave like an electrolytic cell?
6. What should be the values of ΔG and E^0 for the spontaneity of the cell?
7. What is the effect of temperature on ionic conductance? Explain.
8. Using E^0 values predict which metal can be used to coat Fe for preventing rusting.
   Fe = -0.44V, X = - 2.36V, Y = -0.14 V
9. The conductivity of 0.20 M solution of KCl at 298 K is 0.025 S cm^{-1}. Calculate its λm.
10. The molar conductivity of 1.5 M solution is 138.9 S $cm^2 mol^{-1}$. Calculate its conductivity.
11. State the Kohlraush law of independent migration of ions.
12. Why does the conductivity or specific conductance of a solution decrease with dilution?
13. Calculate the degree of dissociation (α) of CH_3COOH if its molar conductivity is 39.05 S $cm^2 mol^{-1}$. The molar conductivity at infinite dilution for H^+ is 349.6 and for CH_3COO^- = 40.9.
14. Write the reactions taking place in the cell used in hearing aids.
15. The chemistry of corrosion is essentially an electrochemical phenomenon. Give reactions.
16. Calculate ΔG for the reaction at 298 K. $2Cr + 3Fe^{2+} \rightarrow 2Cr^{3+} + 3Fe$. Given E0cell = 0.30V.
17. What are the applications of Kohlraush law?
18. How does molar conductivity vary with increase in concentration of strong electrolytes?
19. State two advantages of H_2-O_2 type of fuel cell.
20. What type of metal is preferably used for cathodic protection of iron?
21. Which out of 0.1M HCl and 0.1M NaCl, do you expect to have greater λm at infinite dilution?
22. Which electrodes are used in fuel cell and why?
23. Why is the equilibrium constant K related to E^0cell and not Ecell?
24. Why does alkaline medium inhibits rusting of iron? Explain.
25. State Faraday's second law of electrolysis.
26. Which cell is generally used in inverters? Give the chemical reactions at anode and cathode?

Subject: PHYSICS

Important Instructions

- ✔ The homework has to write in separate 'A4 rule - pages' and the front page must be decorated.

- ✔ Please don't write it in your note book.

- ✔ No stick file is required. It should be stapled only.

- ✔ The class work must be completed in your class note BOOK.

1. State Coulomb's law of electrostatics. Also write its limitations.

2. Explain the properties of electric charge with examples.

3. (a) Define electric flux. Write its S.I unit.

  (b) State Gausses law of electrostatics. Does the charge given to a metallic sphere depend on whether it is hollow or solid? Give reason for your answer.

4. Define capacitance of a capacitor. Derive its expression for parallel plate capacitor without dielectric and with dielectric also.

5. (a) Define dipole moment of a dipole.

  (b) What are dielectrics?

  (c) Define electric polarization.

6. Write the properties of electric field lines. Why two field lines cannot intersect each other?

7. Define drift velocity. Derive the relation between drift velocity and electric current.

8. (a) State Ohm's law. Write its vector form.

  (b) What is mobility?

9. State Kirchhoff's law. Derive the expression of balance condition of a whetstone's bridge.

10. Derive the expression of E and V :

(a) At a distance r from a charged straight wire.

(b) At nearby point of a charged sheet.

(c) At outside, on the surface and inside a charged spherical metallic body.

11. If p = 2i +4j +5k and E = -5i +6j +2k then find the

(a) Torque acting on the dipole

(b) How much Potential energy is stored

12.A charge 'q' is placed at the centre of a cube of side l. What is the electric flux passing through each face of the cube?

13. Derive the expression of E and V at axial point and equatorial point of an electric dipole having charge -q and +q separated by a distance of 2a.

14. What is the direction of the electric field at the surface of a charged conductor having charge density $\sigma < 0$?

15. Two charges of magnitudes -3Q and + 2Q are located at points (a, 0) and (4a, 0) respectively. What is the electric flux due to these charges through a sphere of radius '5a' with its centre at the origin?

16 . Write the expression for the work done on an electric dipole of dipole moment p in turning it from its position of stable equilibrium to a position of unstable equilibrium in a uniform electric field E.

17. Show on a plot the nature of variation of the

(a)Electric field (E) and

(b) Potential (V), of a (small) electric dipole with the distance (r) of the field point from the centre of the dipole.

18. A charge q is enclosed by a spherical surface of radius R. If the radius is reduced to half, how would the electric flux through the surface change?

19. A spherical conducting shell of inner radius rx and outer radius r2 has a charge 'Q'. A charge 'q' is placed at the centre of the shell.

(a) What is the surface charge density on the

 (i) inner surface.

  (ii) outer surface of the shell

(b) Write the expression for the electric field at a point x > r2 from the centre of the shell.

20. Under a uniform electric field, find the electric flux of the field through a square of 5 cm on side whose plane is parallel to the Y-Z plane. What would be the flux through the same square if the plane makes a 30° angle with the x-axis?

Subject - Biology

1. Angiosperms bearing unisexual flowers are said to be either monoecious or dioecious. Explain with the help of one example each. (All India 2016)

2. Draw a diagram of a mature microspore of an angiosperm. Label its cellular components only

3. Give an example of a plant which came into India as a contaminant and is a cause of pollen allergy. (All India 2014)

4. .A bilobed, dithecous anther has 100 microspore mother cells per microsporangium.

5. How many male gametophytes this anther can produce? (Delhi 2010)7.An anther with malfunctioning tapetum often fails to produce viable male gametophytes. Give one reason. (Delhi 2018)

6. .A mature embryo sac in a flowering plant may possess 7-cells, but 8-nuclei. Explain with the help of a diagram only. (Delhi 2017)

7. Gynoecium of a flower may be apocarpous or syncarpous. Explain with the help of an example each. (Delhi 2020)

8. .Name all the haploid cells present in an unfertilised mature embryo sac of a flowering plant. Write the total number of cells in it. (All India 22)

9. Why does a breeder need to emasculate a bisexual flower? Mention a condition in a flower where emasculation is not necessary. (Delhi 20)

10. Make a list of any three outbreeding devices that flowering plants have developed and explain how they help to encourage cross-pollination. (All India 2014)

11. . The meiocyte of rice has 24 chromosomes. Write the number of chromosomes in its endosperm.

12.Banana is a true fruit but is also a parthenocarpic fruit. Give reason. (Foreign 2019)

- ## Project work

- Make a project file from any topic of the text book (15 pages)

- Comple your exercise Questions from ncert book in your class work copy

- Learn Chapter 2 (Human Reproduction) and draw the diagram of male and female reproductive system in your notebook.

SUBJECT- MATHEMATICS

MULTIPLE CHOICE QUESTIONS-

1. What is the value of $\sin^{-1}(1)$?

a) 180 b) 90. c) 0 d) 270

2. If a matrix A is skew symmetric, then:

a) A = AT b) A = -AT

c) A d) A has no inverse

3. The Value of $\sin^{-1} x + \cos^{-1} x$ =

A) $\pi/2$ b) $\pi/4$

c) $\pi/6$ d) $\pi/3$

4.Which of the following is not defined?

A) Addition of two 3×3 matrices

B) Multiplication of 2×3 and 3×2 matrices

C) Subtraction of 3×2 and 3×2 matrices

D) Multiplication of 2×3 and 2×4 matrices

VERY SHORT ANSWER TYPE QUESTIONS-

5. Find the Value of tan 780.

6 Find the Value of tan (tan^{-1} 3π/4).

SHORT ANSWER TYPE QUESTIONS-

7.Solve the following equation: 2tan-1(cos x) = tan-1 (2 cosec x).

8 . Draw the Graph of Cot^{-1}x.

 LONG ANSWER TYPE QUESTIONS-

9.Express the tan^{-1}(√1- cos x / $\sqrt{1+cosx}$), 0 < x < π in the Simplest form.

 10.Express the following matrices as the sum of a symmetric and a skew symmetric matrix:

2 3 4 , 5 4 8, 9 6 5.

Subject: PHYSICAL EDUCATION

 Project file on the following topics

1. Give the importance of yoga in modern times.

2. Explain obesity / Diabetes/asthma/ Hypertension . How it can be cured through yoga . Write the symptoms and causes to prevent disease .also write the contraction by asanas .(any two)

Subject : English

Class 12 – Creative Summer Vacation Homework (English Core)
Theme: "Explore, Express, and Imagine"

1. The Last Lesson – A Farewell to the Classroom

◆ Creative Task: Create a visual diary entry from Franz's point of view the night after the "last lesson."
Include sketches, emojis, or symbolic images (like a locked school door, a clock, a French flag, etc.)
Write 100–120 words expressing Franz's emotional transformation and realization.

2. The Third Level – Time Travel Scrapbook

◆ Creative Task: Make a mini scrapbook (digital or handmade) titled "Journey to the Third Level"
Include an imaginary ticket, a postcard written to a friend from 1894, a sketch of the third level station, and A short newspaper clipping announcing someone's mysterious arrival in the past.

3. My Mother at Sixty-Six – Poetic Expression

◆ Creative Task:Write a free verse poem (10–12 lines) expressing your thoughts about aging and the bond between parents and children.Give your poem a creative title.Optionally, illustrate it with a drawing or symbolic image (e.g., a road, wrinkled hands, sunlight through trees).

4. The Tiger King – Comic Strip or Satirical Poster

◆ Creative Task: Design a comic strip or satirical poster titled "The Tragedy of a Vain King."Highlight the absurdity of the king's actions using humor.
Include 4–6 frames or a poster with headings like "Royal Decisions Gone Wild!" or "Tiger Troubles: A Kingdom in Peril."

Ro. No.	Books name	Author	
1,11,21,31	India After Gandhi	Ramachandra Guha	
2,12,22,32	An Era of Darkness	Shashi Tharoor	
3,13,23,33	Life's Amazing Secrets	Gaur Gopal Das	
4,14,24,34	You Can Win	Shiv Khera	
5,15,25,35	Do Epic Shit	Ankur Warikoo	
6,16,26,36	The Secret of Leadership	Prakash Iyer	
7,17,27,37	Atomic Habits	James Clear	
8,18,28,38	The Monk Who Sold His Ferrari	Robin Sharma	
9,19,29,39	Zero to One	Peter Thiel	
10,20,30,40	My Journey: Transforming Dreams into Actions	Dr. A.P.J. Abdul Kalam	
41,42,43,44	The 3 Mistakes of My Life	Chetan Bhagat	
	What Young India Wants	Chetan Bhagat	

Subject : Hindi

1- प्रेमचंद्र की पांच कहानियों को याद करे तथा लिखकर समीक्षा करें । (प्रोजेक्ट कार्य) फाइल में करना

2- हरिवंशराय बच्चन और महादेवी वर्मा के जीवन ,साहित्यिक और शिक्षा पर विस्तृत वर्णन । (प्रोजेक्ट कार्य) फाइल में करना

3- जनसंचार तथा उसके भेद-प्रभेद , इटरनेट ,जनसंचार के साधन पर विस्तृत वर्णन । (प्रोजेक्ट कार्य)

4- तुलसीदास तथा सूरदास के जीवन , रचनाओं का विस्तृत वर्णन । (प्रोजेक्ट कार्य)

5- आपकी कालोनी में आवारा जानवरों की संख्यां अचानक बढ़ गई है ,जिससे कालोनी वासियों को परेशानी का सामना करना पड रहा है । इसकी तरफ ध्यान दिलाते हुए मुख्य नगर पालिका अधिकारी को पत्र लिखिए ।

विषय पर निबंध लिखिए ।

6- (क) देश के विकास में महिलाओं का योगदान (ख) अच्छे नागरिक के देश के प्रति उत्तरदायित्व

7- आपने गर्मियों की छुट्टियां कैसे बिताई ? इस दौरान आपकी दिनचर्या कैसे रही ? लिखिए ।

8- गीत (हरिवंशराय बच्चन) , कविता के बहाने (कुंवर नारायण) ,भक्तिन (महादेवी वर्मा) ,कैमरे में बंद अपाहिज (रघुवीर सहाय) के प्रश्नोत्तर पुस्तिका में लिखे एवं याद करें ।

Subject: ACCOUNTS

1.P and Q were partners in a firm sharing profits in 3::1 ratio. . Their respective fixed capitals were ₹10,00,000 and ₹6,00,000. . The partnership deed provided interest on capital @ 12 % % p..a. . even if it will result into a loss to the firm. . The net profit of the firm for the year ended 31st March, 2023 was ₹1,50,000.. Pass necessary journal entries in the books of the firm allowing interest on capital and division of profit//loss amongst the partners.

2. D, S and M are partners sharing profits and losses in the ratio of 3:2:1. With effect from 1st April, 2022 they agree to share profits equally. For this purpose, goodwill is to be valued at two year's purchase of the average profit of last four years which were as follows: Year ending on 31st March,2019 ₹ 50,000 (Profit) Year ending on 31st March,2020 ₹ 1,20,000 (Profit) Year

ending on 31st March,2021 ₹ 1,80,000 (Profit) Year ending on 31st March,2022 ₹ 70,000 (Loss) On 1st April, 2021 a Motor Bike costing ₹ 50,000 was purchased and debited to travelling expenses account, on which depreciation is to be charged @ 20% p.a by Straight Line Method. The firm also paid an annual insurance premium of ₹ 20,000 which had already been charged to Profit and Loss Account for all the years. Calculate the amount of Goodwill.

3. Sanjay, Sudha and Shakti are partners in a firm sharing profits in the ratio of 3:1::1. . Their fixed capital balances are ₹4,00,000, ₹1,60,000 and ₹1,20,000 respectively. . Net profit for the year ended 31st March, 2020 distributed amongst the partners was ₹1,00,000, without taking into account the following adjustments: (a)) Interest on capitals @ 2..5% % p..a.. (b)) Salary to Sanjay ₹18,000 p..a. . and commission to Shakti ₹12,000. (c)) Sanjay was allowed a commission of 6% % of divisible profit after charging such commission.. Pass a rectifying journal entry in the books of the firm. . Show workings clearly.

4. A, B and Care partners share profits and losses in the ratio of 3:2:1. Their capitals ₹1,00,000, ₹75,000 and ₹50,000 respectively. They agreed to allow interest on capital @ 10 % p.a. and agreed to charge interest on drawings @10% p.a. Their drawings for the year were ₹10,000, ₹8,000 and ₹6,000 respectively. C was very active getting a salary of ₹2,000 per month and in return, he guaranteed that firm's profit would not be less than ₹80,000 before charging or allowing interest and salary payable to C. Actual profit for the year 2011 was ₹75,000. Prepare Profit and Loss Appropriation Account and Partners Capital Account.

5. On 1st April, 2014 a firm had assets of Rs 1,00,000 excluding stock of Rs 20,000. Partners' capital accounts showed a balance of Rs 60,000. The current liabilities were Rs 10,000 and the balance constituted the reserve. If the normal rate of return is 8% the 'Goodwill' of the firm is valued at Rs 60,000 at four years' purchase of super profit, find the average profit of the firm.

Subject: BUSINESS STUDIES

Q1. Shreya Ltd has been awarded recently with the 'Best Employer of the year award'. The Company has believed in the ideas and suggestions of its employes. There is systematic dispersal of Decision making at all levels. There is no delay in delivery of orders to customers due to prompt decisions taken by employees.

 A) Identify the concept of Management followed by the Company.

 B) Explain the Concept.

Q2. Sonia ltd was engaged in the business of manufacturing auto components. Lately its business was expanding due to increased demand for cars. In order to keep its market share intact, the company directed its workforce to work overtime. But it results in many problems.

Due to increased pressure of work the efficiency of workers declined. Sometimes the subordinate has to work for more than one superior. The workers were becoming undisciplined. The spirit of teamwork had begun to wane. Identify the principles of management which were being violated?

3. solve all case based questions on last 5 year question paper on chapter 1,2,and 3

Subject: ECONOMICS

*** Try to Solve all numerical questions of Macro Economics Chapter -4****

1. Prepare Family Budget and as deficit Budget

2. Show organic farming methods through the pictures (Indian Economy)

3. Prepare a bulletin board showing sources of Rural Credit their interest rates. Using Pictures

4. Watch a movie related to Partion of India during 1947 and prepare a note on "Adverse Effects of Partition on Indian Economy"

5. Write the review of Chapter 1 Indian Economy on Eve of Independence.

6. Collect the data of foreign exchange rate in the reference of 20 foreign currencies in the month of June 2024 with the help of Internet and write currency name and make coloured symbol also.

7. Go through the newspapers of your region and identify the problems raised by them in relation to rural areas and the solutions offered.

 8. Prepare a list of recent schemes and their objectives from the government website https:// www.rural.nic.in. Collect the details of how anyone of these schemes implemented in your region/rural neighbourhood areas.

9. In your locality/neighbourhood, you might notice self-help groups providing credit. Attend few meetings of such self-help groups. Write a report on the profile of a self-help group. The profile may include - when it was started, the number of members, amount of savings and type of credit they provide and how borrowers use the loan.

10. Visit a nearby super market, vegetable shop and/or a departmental shop. Identify a few products. Prepare a chart comparing a few goods that are produced organically and in the normal way on the basis of their prices, shelf life, quality and the kind of advertisement through which they are popularised.