



THE ASIAN SCHOOL, DEHRADUN
HOMEWORK FOR WINTER VACATION 2025 CLASS XI

ENGLISH :General Instructions –

Please Note:

- The assignment must be hand written.
- Use A-4 size sheets and a file cover
- Assignment is to be submitted positively to the teacher on the first day the school reopens after the Winter break.

1. Read the passage carefully.

How can you best improve your English depends on how much you are into it. If you hear English spoken every day and mix freely with English speaking people it's an advantage.

Watching, Listening, reading, speaking, and writing in that order; step-by-step process is the best.

Reading English books is also a good idea. To read a lot is essential – not just text books but also novels and story books. Read for pleasure and not as a duty. Do not choose difficult books simply to learn new words but rather read books that interest you. Look for meaning of new words in the dictionary. Look for words now & then in any reading material and try guessing meanings from the context. Extensive reading and not intensive reading improve your English. As you read you will become familiar with words and sentence patterns and your understanding will improve.

Some people feel that we cannot learn a language through watching English news, documentaries, films, and serials etc. But this is a wrong notion. Actually, there is a lot common between the reading, watching and hearing English, it all helps in learning the language. Learning vocabulary of the written form we also learn its spoken form. Therefore, we are learning a language in its totality.

- (1). (a) On the basis of your reading of the passage make notes on it, using recognizable abbreviations** wherever necessary – minimum four). Use a format you consider suitable. Also supply a suitable title. (b) Write the summary of the passage in 80 words.

(2). Draft the following Advertisements. You may use the given cues:

- i). You are the manager of Super Software Solutions Ltd. Draft an advertisement for your company for the post of a Chief Programmer (Solutions) giving details as per your requirement.

(Use heading - Situation Wanted, Name of employee with address, no. of posts vacant, age limit, minimum qualification, pay scale, parks, mode of applying and whom to apply, deadline, contact)

- ii). Your aunt, emigrating to Canada wants to put up a classified advertisement to dispose off her flat before she leaves. Draft a suitable advertisement putting her flat on sale.

(Begin with For Sale or Available, mention the type of house, details - no. of rooms, size of floor etc, use adjectives like - airy, well ventilated etc, expected price, contact)

- iii). You have a cat named Katty, is missing since 12 June, 20xx. Draft an advertisement to be published in the 'Missing' column of the local daily.

(Begin with - Missing, give physical description, name, breed, colour of fur, any distinct feature, missing since when and from where, reward - if any, contact.)

- iv). Your uncle has just established a Tour and Travel Company and needs a classified advertisement to popularize it. Draft an advertisement giving necessary details.

(Begin with Tours and Travels, name of company, mention tours/ cruises/ sightseeing etc, duration and dates, packages and discounts, Visa requirements - if any, booking period, contact)

- v). While travelling in a bus you found some certificates, a wallet, and some jewellery in a bag. You found no contact details of the owner in the bag. Draft an advertisement to be published in the local newspaper.

(Begin with - Found, description as name of object, brand, colour, size, condition etc. found when and where, reward if any, keep strategic details undisclosed for authenticity and verification of the claimant, contact)

(3). Use the correct forms of the words given in brackets to complete the passage given below.

We often (i) (go) for a morning walk. Yesterday, my younger brother also (ii)..... (accompany) us. He got up early in the morning and (iii) (knock) at my door. I (iv)(wake up) with a start and (v) (gets) ready for the walk. While I (vi) (come) out of the room I saw my grandmother coming out of her room. She (vii) (tell) us it was just three o'clock. My brother (viii) (lose) count of time in excitement.

(4). Rearrange the following words into meaningful sentences:

- 1) the biggest /the /golden /in/ eagle /the /all eagles / and /United States / fastest/ of /is
- 2) altitudes /it can/ to/ of/ can/ 13,000 feet/ / fly
- 3) diving speed /200 miles/ nears /it has /per hour/ a/ that/nears
- 4) this /can /a/ bird / wingspan/with a / is a/ eight feet/reach/ formidable/that
- 5) plains of/ from the/ Mexico / tundra of/to the /Alaska, golden eagles / in high nests/ homes /make / their

(5.) TRANSFORMATION OF SENTENCES

1. This building is taller than any other building in the area. (Change to superlative degree)
2. No other river in India is as long as the Ganga. (Change to comparative degree)

Rewrite using too...to

1. The tea was so hot that I could not drink it.
 2. The bag was so heavy that she could not lift it.
1. **Begin with: "Hardly..."**
He had reached the station when the train departed.
2. **Begin with: "No sooner..."**
I stepped out of the house when it began to rain.

Gap Filling

1. I insisted _____ going to the museum. (on / at / for)
2. She is junior _____ me. (to / than / from)

Change to Reported Speech

1. He said, "I am feeling tired now."
 2. She said to me, "Do you like painting?" . Change to Passive Voice
1. She wrote a letter.
2. The boys are playing cricket.

(6). Answer the following questions briefly.

1. Why did Jonathan called the narrator the best daddy and captain in the world? ("WE ARE NOT AFRAID TO DIE... IF WE CAN ALL BE TOGETHER")
2. Who was King Tut and why has there been such widespread speculation about him in modern times? (DISCOVERING TUT: THE SAGA CONTINUES)
3. What did Rajendra Deshpande mean when he says, you neither travelled to the past nor the future. You were in the present experiencing a different world. (THE ADVENTURE)
4. "I was in a room I knew and did not know," says the narrator in the story 'The Address'. What prompted her to make this observation? ('THE ADDRESS')
5. Tsetan's support to the author during the journey. Elaborate. (SILK ROAD)
6. Which issues are raised by this play and how are they resolved? Answer with reference to Mother's Day. (MOTHER'S DAY)

HINDI:

- 1—प्रेमचंद लेखक के नमक का दारोगा में तत्कालीन समाज में फैले भ्रष्टाचार के चित्रण पर विचार व्यक्त करते हुए वर्तमान समाज में इसकी प्रासंगिकता पर विचार व्यक्त कीजिए। उदाहरण सहित अपने विचारों को व्यक्त कीजिए
- 2—मीराबाई के जीवन की चर्चा करते हुए बताइए कि तत्कालीन समाज एवं उनका परिवार का उनके प्रति कैसा व्यवहार रहा? वर्तमान समाज में स्त्रियों के साथ कैसा व्यवहार हो रहा है? हमारे देश के विकास में नारियों का क्या योगदान है?
- 3—एआई के कारण बदलती जीवन शैली विषय पर रचनात्मक लेखन परियोजना में लिखिए।
- 4—पत्रकारिता के विविध आयाम पर आकर्षक परियोजना

निर्देश—

- प्रथमपृष्ठ—विद्यार्थी का नाम
- द्वितीयापृष्ठ—आभार ज्ञापन
- तृतीयापृष्ठ—प्रमाणपत्र
- चतुर्थपृष्ठ—अनुक्रमांकिका
- पंचमपृष्ठ—प्रस्तावना
- षष्ठम् पृष्ठ—सम्पूर्ण चित्राकर्षक परियोजना
- अन्तिमपृष्ठ—संदर्भग्रन्थ

नोट—1. परियोजना कार्य निर्देशानुसार किया जाए।

2. सम्पूर्ण कार्य आन्तरिक मूल्यांकन के अन्तर्गत जाँचा जायेगा।

STANDARD MATHEMATICS :

(A) WORKSHEETS (TO BE SOLVED IN THE MATHEMATICS-CLASS-WORK NOTEBOOKS)

CHAPTER-7 PERMUTATION AND COMBINATIONS

Q1. Find the 3-digit numbers that can be formed from the given digits: 1, 2, 3, 4 and 5 assuming that

a) digits can be repeated.

b) digits are not allowed to be repeated.

Q2. A coin is tossed 6 times, and the outcomes are noted. How many possible outcomes can be there?

Q3: How many words, with or without meaning, can be formed using all the letters of the word EQUATION, using each letter Exactly once?

Q4: How many words can be formed each of 2 vowels and 3 consonants from the letters of the given word - DAUGHTER?

Q5: It is needed to seat 5 boys and 4 girls in a row so that the girl gets the even places. How many are such arrangements possible?

Q6: Find the number of 6 digit numbers that can be formed by using the digits 0, 1, 3, 5, 7, and 9. These digits shall be divisible by 10, and no digit shall be repeated?

Q7. Calculate how many numbers are there between 99 and 1000 having at least one of their digits 7?

Q8. A boy has 3 library tickets and 8 books of his interest in the library. Of these 8, he does not want to borrow Mathematics Part II, unless Mathematics Part I is also borrowed. In how many ways can he choose the three books to be borrowed?

Q9. Determine the number of permutations of the letters of the word ALLAHABAD.

Q10. How many automobile license plates can be made, if each plate contains two different letters followed by three different digits?

Chapter9 : Sequence and Series

1. If p^{th} , q^{th} and r^{th} terms of an A.P. are a , b , c respectively, then show that:

$$a(q - r) + b(r - p) + c(p - q) = 0$$

2. Which term of the sequence is 72, 70, 68, 66, is 40?

3. Find the number of terms common to the two A.P.'s 3, 7, 11, ..., 407 and 2, 9, 16, ..., 709.
4. Divide 32 into four parts which are in A.P. such that the product of extremes is to the product of means as 7 : 15.
5. The first, second and the last terms of an A.P. are a , b , c respectively. Prove that the sum is $\frac{(a+c)(b+c-2a)}{2(b-a)}$.
6. The p^{th} term of an A.P. is a and q^{th} term is b . Prove that the sum of its $(p+q)$ terms is $\frac{p+q}{2} \left\{ a + b + \frac{a-b}{p-q} \right\}$.
7. The sums of n terms of three arithmetical progressions are S_1, S_2, S_3 . The first term of each is unity and the common differences are 1, 2 and 3 respectively. Prove that $S_1 + S_3 = 2 S_2$.
8. The ratio of the sum of n terms of two A.P.'s is $(7n+1) : (4n+27)$. Find the ratio of their m^{th} terms.
9. Between 1 and 31 are inserted m arithmetic means so that the ratio of the 7th and $(m-1)^{\text{th}}$ mean is 5 : 9. Find the value of m .
10. Find three numbers in G.P. whose sum is 13 and the sum of whose squares is 91.
11. Find the sum of the following series: $0.7 + 0.77 + 0.777 + \dots$ to n terms
12. If S_1, S_2 and S_3 be respectively the sum of $n, 2n$ and $3n$ terms of a G.P. prove that $S_1(S_3 - S_2) = (S_2 - S_1)^2$.
13. The arithmetic mean between two numbers is 10 and their geometric mean is 8. Find the numbers.
14. The first term of a G.P. is 2 and the sum to infinity is 6. Find the common ratio.
15. The digits of a positive integer having three digits are in A.P. and their sum is 15. The number obtained by reversing the digits is 594 less than the original number. Find the number.

Chapter 10 : Straight lines

1. Find the slope of the lines which makes the angle $2\pi/3$ with the positive direction of x axis.
2. Find the equation of the line with slope -1 and cutting off an intercept of 4 units on negative direction of y -axis.
3. Find the ratio in which the line segment joining the points (2, 3) and (4, 1) divides the line segment joining the points (1, 2) and (4, 3).
4. Find the equation of the straight line which is at a distance of $3\sqrt{2}$ units from the origin and the perpendicular from the origin makes an angle of 75° with the positive direction of x axis.
5. Transform the following equations of the line to
 - (i) slope intercept form and find its slope and y intercept
 - (ii) intercept form and find intercepts on the coordinate axes
 - (iii) normal form and find the inclination and length of the perpendicular:
 - a) $\sqrt{3}x + y - 8 = 0$
6. Find the equation of the straight line passing through the point (2, -3) and the point of intersection of the lines $x + y + 4 = 0$ and $3x - y - 8 = 0$.
7. Find the equation of straight line whose intercepts on the axes are thrice as long as those made by $2x + 11y = 6$.
8. Find the equation of straight lines which are perpendicular to the line $12x + 5y = 17$ and at a distance of 2 units from the point (-4, 1).
9. The points A(2, 3) B(4, -1) & C(-1, 2) are the vertices of a triangle. Find the length of perpendicular from A to BC and hence the area of ABC.
10. Find the equation of the straight line which passes through (3, -2) and cuts off positive intercepts on the x axis and y axis which are in the ratio 4:3.
11. Reduce the equation $3x - 2y + 4 = 0$ to intercept form. Hence find the length of the segment intercepted between the axes.
12. Find the image of the point (1, 2) in the line $x - 3y + 4 = 0$.
13. If the image of the point (2, 1) in a line is (4, 3). Find the equation of the line.
14. Find the equation of a line passing through the point (-3, 7) and the point of intersection of the lines $2x - 3y + 5 = 0$ and $4x + 9y = 7$.
15. If A (1, 4) , B(2, -3) and C(-1, -2) are the vertices of a triangle ABC . find
 - a) The equation of the median through A

- b) The equation of the altitude through A
 c) The right bisector of side BC
16. If the slopes of the two lines are $\frac{1}{2}$ and 3, then find the angle between the two lines.
 17. Find the angle between the x-axis and the line joining the points (3, -1) and (4, -2).
 18. Find the equations to the line parallel to the axes and passing through the point (-3, 5).
 19. Find the equation of the line which is passing through the point (-2, -4) and perpendicular to the line $3x - y + 5 = 0$.
 20. Find the equation of the line which passes through the point (3,4) and the sum of whose intercepts on the axes is 14.
 21. Find the distance of the point (-1,1) from the line $12(x+6) = 5(y-2)$
 22. Find the point of intersection of the lines $5a + 7b = 3$ and $2a - 3b = 7$.
 23. At what point is the origin to be shifted, if the coordinates of the point (5) become (3,7)?
 24. Find the area of the triangle formed by the lines $y - x = 0$, $x + y = 0$ and $x - c = 0$.
 25. Find the intercepts cut off by the line $2a - b + 16 = 0$

Chapter 12: Introduction to 3D Geometry

1. Name the octant in which each of the following points lies.
 (i) (1, 2, 3), (ii) (4, -2, 3), (iii) (4, -2, -5) (iv) (4, 2, -5)
 (v) (-4, 2, 5) (vi) (-3, -1, 6) (vii) (2, -4, -7) (viii) (-4, 2, -5).
2. Find the third vertex of triangle whose centroid is (7, -2, 5) and whose other 2 vertices are (2, 6, -4) and (4, -2, 3).
3. Find the point in XY-plane which is equidistant from three points A(2,0,3), B(0,3,2) and C(0,0,1) through A.
4. Find lengths of the medians of the triangle with vertices A(0,0,6), B(0,4,0) and C(6,0,0)
5. Find the ratio in which the line joining the points (1,2,3) and (-3,4,-5) is divided by the XY-plane. Also, find the co-ordinates of the point of division.
6. If the points A (1, 0, -6), B (-3, p, q) and C (-5, 9, 6) are collinear, find the values of p and q.
7. Find the co-ordinates of the point which divides the line segment joining the points (-2, 3, 5) and (1, -4, -6) in the ratio (2:3 internally (ii) 2:3 externally
8. Find the coordinates of the points which trisect the line segment AB, given A (2, 1, -3) and B (5, -8, 3).
9. Find the ratio in which the line segment joining the points (2, 4, 5) and (3, 5, -4) is divided by the YZ plane. Also find the co-ordinate of the point of division.
10. Find the centroid of a triangle, the mid-point of whose sides are D (1, 2, -3), E (3, 0, 1) and F (-1, 1, -4).

(B) THE STUDENTS HAVE TO PREPARE MATHEMATICS ACTIVITY FILE FOR THE, INTERNAL ASSESSMENTS IN MATHEMATICS, AS PER THE GUIDELINES ISSUED BY CBSE.

GUIDELINES AND INSTRUCTIONS FOR PREPARING THE ACTIVITY FILE:

- The activities should be done in a loose ruled project sheets and fixed in a stick file.
- It should contain the following in the order
 - INDEX
 - ACKNOWLEDGEMENT
 - The figures should be drawn with pencil.
 - The headings should be written in black ink and the content in blue ink.
 - Use the graph sheets wherever required.
 - Color pencil and pen can be used.
 - Mention NAME OF THE SCHOOL, your NAME, CLASS AND SECTION, SUBJECT and SESSION in the activity file.
 - Prepare a neat and clean creative activity file.

NOTE: THE PDF OF THE ACTIVITIES TO BE COMPLETED WILL BE SHARED IN THE CLASS WHATSAPP GROUPS BY THE SUBJECT TEACHER.
THE HOLIDAY HOMEWORK HAS TO BE SUBMITTED AFTER THE WINTER VACATIONS.

APPLIED MATHEMATICS:

THE HOLIDAY HW HAS TWO PARTS PART-1 AND PART-2

(PART-1) THE STUDENTS HAVE TO PREPARE A PROJECT FOR THE INTERNAL ASSESSMENTS IN APPLIED MATHEMATICS, AS PER THE GUIDELINES ISSUED BY CBSE.

GUIDELINES AND INSTRUCTIONS FOR PREPARING THE PROJECT:

TOPIC FOR THE PROJECT:

DESCRIPTIVE STATISTICS AND ITS APPLICATION IN REAL LIFE.

KEY-POINTS ABOUT THE TOPIC. (USE IN POINT-B, UNDER THE HEADING INSTRUCTIONS)***

- DEFINITION OF STATISTICS
- OBJECTIVES OF STUDYING STATISTICS
- RESEARCH QUESTIONS
- AREAS IN WHICH WE CAN USE STATISTICS IN REAL LIFE.
- TYPES OF DESCRIPTIVE STATISTICS.
- INTERESTING REAL-LIFE EXAMPLES IN DESCRIPTIVE STATISTICS UNDER ALL TYPES OF DESCRIPTIVE STATISTICS
- APPLICATION OF STATISTICS IN VARIOUS AREAS.
- (Scientific disciplines: Statistics is used in the physical and social sciences, as well as in medicine.
- Business: Statistics is used in business analytics to develop insights from data sets.
- Government: Statistics is used in government.
- Manufacturing: Statistics is used in manufacturing.
- Psychology: Statistics is used in psychology.
- Geology: Statistics is used in geology.
- Sociology: Statistics is used in sociology.
- Weather forecasting: Statistics is used in weather forecasting.
- Clinical trial design: Statistics is used to design clinical trials to test the safety of drugs and medicines.

INSTRUCTIONS:

WHAT SHOULD BE INCLUDED IN THE PROJECT.

(A). COVER PAGE IN THE FORMAT GIVEN BELOW.

WELCOME TO MY PROJECT

NAME:

CLASS AND SECTION.....

NAME OF SCHOOL.....

SCHOOL ADDRESS.....

NAME OF SUBJECT TEACHER.....

SESSION.....

SUBJECT: MATHEMATICS

FINISH THE FOLLOWING SENTENCES: -

GOAL SHEET:

- MY STRENGTH IN MATH INCLUDE: _____
- MY WEAKNESSES IN MATH INCLUDE: _____
- THE AREAS IN WHICH I HAVE IMPROVED IN MATH ARE: _____

PHOTO

(B). NOTE ON WHAT YOU HAVE LEARNT.

USE KEY POINTS:

C). PROJECT REFLECTION

1). DATE OF START.....

2). DATE OF COMPLETION.....

3). AREAS OF IMPROVEMENT IN PROJECT.....

(D). SELF ASSESSMENT QUESTIONS IN THE PROJECT RELEVANT TO THE TOPIC (MIN. 5 QUESTIONS)

(E). TEACHERS COMMENTS (TO BE DONE BY THE TEACHER).

.....
.....

NAME OF STUDENT.....

TEACHERS SIGNATURE.....

*** NOTE:**

- MAKE A CREATIVE PROJECT.
- USE PROJECT SHEETS. (MINIMUM 10 SHEETS)
- USE GRAPH SHEETS IF REQUIRED
- COLOR PEN AND PENCIL CAN BE USED
- STICK FILE IS TO BE USED FOR THE PROJECT

➤ The PROJECT should be done in a loose ruled project sheets and fixed in a stick file.

➤ It should contain the following in the order

- INDEX
- ACKNOWLEDGEMENT
- BIBLIOGRAPHY

(PART-2) THE STUDENTS HAVE TO PREPARE A SPREADSHEET (EXCELFILe) FOR THE INTERNAL ASSESSMENTS IN APPLIED MATHEMATICS, AS PER THE GUIDELINES ISSUED BY CBSE.
GUIDELINES AND INSTRUCTIONS FOR PREPARING THE FILE:

Create a worksheet to keep track of revenue collected and expenses done in conducting tour programs at different tourist places during 2020 to 2024.

(WRITE THE EXCEL FORMULAE/FUNCTIONS) in order to perform the given task

Q1 Format the numeric data in currency format.

Q2 Prepare year wise columns for revenue and expenses for each tourist place and calculate the difference.

Q3 The calculated difference may be negative, the format of negative balance may be red coloured.

Q4 Use conditional formatting for higher and lower values of revenue and expenses.

Q5 Align entire text in centre.

Q6 The font of tourist place is Arial with 14 points while the font of year is Times Roman with 14 points.

Q7 Calculate average expenditure of Manali.

Q8. Find total expenditure of the year 2020.

Q9. Increase the revenue for KERALA by 20% for the year 2024.

Q10. Count the number of tourist places in the given sheet.

(Amount in lacs)

Tourist place	2020		2021		2022		2023		2024	
	REV	EXPD.	REV	EXPD.	REV	EXPD.	REV	EXPD.	REV	EXPD.
MANALI	125	120	225	110	325	220	425	320	525	320
SHILLONG	120	105	220	115	220	205	320	255	320	205
KERALA	95	75	195	175	195	175	195	175	195	120
SRINAGAR	85	45	185	145	185	145	285	245	385	245
KASHMIR	250	200	150	100	350	250	230	200	350	200
RAJSTHAN	145	120	125	100	250	190	165	120	245	190
LEH	200	180	210	180	200	180	240	195	240	160

Q11. USE THE ABOVE DATA AND REPRESENT IT USING THE DOUBLE BAR GRAPH IN THE SPREADSHEET

NOTE: THE HOLIDAY HOMEWORK HAS TO BE SUBMITTED as per instructions.

PART-1 TO BE SUBMITTED AFTEFR VACATIONS.

PART-2 TO BE SUBMITTED AS A SOFT COPY (sprlodhi@gmail.com)

Mention NAME, CLASS, SECTION as a SUBJECT.

PHYSICS :

Instructions :

- The project report should be handwritten in A-4 size Project sheets.
- The project report should be of 25-30 pages.
- The project report should be presented in the following order:
 - Cover page showing name of school, title of the project, name of subject, academic session, student information and name of the guide teacher along with his/her designation.
 - Certificate
 - Acknowledgement
 - Index
 - Content with relevant headings
 - Summary and conclusion based on findings
 - Bibliography/References
- Credit will be awarded to the original drawings and illustrations and creative use of materials.
- All photographs and sketches should be labelled and acknowledged.
- Check the relevant content and References from different books and web sites.

Prepare an investigatory project report on any one topic out of the following -

- Projectile Motion and Its Applications
- Surface Tension in Different Liquids & its Dependence on Temperature
- Behaviour of Water in Capillary Tubes of Different Diameters
- Study of Hydrostatic Pressure and Its Variation with Depth
- Study of Resonance in a Tuning fork
- Effect of Damping on Simple Harmonic Motion
- Standing Waves on a Stretched String
- Study of Latent Heat of Fusion or Vaporization of a Substance
- Investigating the Relationship between Pressure and Volume (Boyle's Law)

- j) Bernoulli's Principle and its daily life Applications
 - k) Study of Thermal Expansion of Solids and Liquids
 - l) Analysis of Heat Transfer through Conduction, Convection and Radiation
-

CHEMISTRY: Prepare an Investigatory project report on any ONE of the following topics :

- a) Classification of Elements And Periodic Properties
- b) Thermodynamics
- c) Equilibrium
- d) Organic Chemistry- Some Basic Principles and Techniques
- e) Hydrocarbons
- f) Chemical Bonding and Molecular Structure

• **Instructions:**

- (i) The project report should be handwritten in A-4 size (Interleaf) Project sheets.
- (ii) The project report should be of 25-30 pages.
- (iii) The project report should be presented in the following order:
 - (a) Cover page showing name of school, title of the project, name of subject, academic session, student information and name of the guide teacher along with his/her designation.
 - (b) Certificate
 - (c) Acknowledgement
 - (d) Index
 - (e) Content with relevant headings
 - (f) Summary and conclusion based on findings
 - (g) Bibliography/References
- (iv) Credit will be awarded to the original drawings and illustrations and creative use of materials.
- (v) All photographs and sketches should be labelled and acknowledged.

Biology :

Prepare an investigatory project report on any one topic out of the following-

- 1) Breathing and Exchange of Gases in human body and related disorders.
- 2) Human Blood Circulatory System and related disorders.
- 3) Excretory Products and their elimination in human body and related disorders.
- 4) Neural Control and Coordination in human body and related disorders.
- 5) Human Endocrine System and related disorders.

Instructions:

- i) The project report should be handwritten in A-4 size Project sheets.
- ii) The project report should be of 20-25 pages.
- iii) The project report should be presented in the following order:
 - a) Cover page showing name of school, title of the project, name of subject, academic session, student information and name of the guide teacher along with his/her designation.
 - b) Certificate
 - c) Acknowledgement
 - d) Index
 - e) Content with relevant headings
 - f) Summary and conclusion based on findings
 - g) Bibliography/References
- iv) Credit will be awarded to the original drawings and illustrations and creative use of materials.

- v) All photographs and sketches should be labelled and acknowledged.
- vi) Check the relevant content and References from different books and web sites.

COMPUTER SCIENCE:

1. Write a program using a **while loop** to find the sum of the digits of a number entered by the user.
2. Write a program that prompts the user to enter numbers repeatedly. Use a **while loop** and the **break statement** to stop taking input if the user enters the number 0. Print the count of all numbers entered before the termination.
3. Write a program to generate the first \$N\$ terms of the Fibonacci series (where \$N\$ is input by the user) using a loop. (The series starts: 0, 1, 1, 2, 3, 5, 8...)
4. Write a program using **nested loops** to find and print all **prime numbers** between 10 and 50.
5. Write a program that takes a string input and checks if it is a **palindrome** (reads the same forwards and backward, ignoring case).
6. Write a program that takes a sentence and counts the total number of **uppercase letters**, **lowercase letters**, and **digits** present in the string.
7. Write a program that takes a sentence and replaces all occurrences of the substring "is" with the substring "was". Print the new sentence.
8. Write a program that accepts a string, swaps the case of all characters (uppercase becomes lowercase, and vice-versa), and prints the resulting string.
9. Write a program that initializes a list of numbers. Find and print the **second largest number** in the list without using the built-in sort() or sorted() functions.
10. Write a program that accepts a list of integers from the user and creates two new lists: one containing all the **even** numbers and one containing all the **odd** numbers from the original list.
11. Write a program to calculate the **product** (multiplication) of all the elements in a list of integers.
12. Write a program to convert a given list into a tuple and print its data type. Then, print the element at the third position of the newly created tuple.
13. Write a program to determine if an element (input by the user) exists within a given tuple, and if so, print its first index.
14. Write a program that defines two tuples of student records, where each record is a string (e.g., ("Ravi", "11A", "Delhi")). Use the + operator to **concatenate** the two tuples and print the resulting combined tuple.
15. e new dictionary. If a key is present in both dictionaries, the value from the **second** dictionary should be retained.
16. Write a program that takes a sentence from the user and creates a dictionary where the keys are the **words** in the sentence and the values are the **length** of that word.
17. Write a program that initializes a dictionary and uses a loop to print all the **keys** in alphabetical order.
18. Write a program that takes a dictionary containing employee IDs (keys) and salaries (values). Add a **bonus** of Rs.10/- to the salary of all employees whose current salary is less than Rs 50000. Print the updated dictionary.
19. Solve UT 2 paper in your fair notebook

HISTORY: All students are required to do a project on **ANY TOPIC OF SYLLABUS 2025-26**.

Following essentials are required to be fulfilled for its preparation and submission-

1. The total length of the project report will not be more than 10-15 written pages of A-4 size paper).
2. The project report will be handwritten and credit will be awarded to original drawings, illustrations, photographs, artworks, good layout and creative use of materials.
3. The project report will be presented in a neatly bound simple project file.
4. **The project report will be developed and presented in this order**
 - Cover page showing project title, student information, school and year.

- List of contents with page numbers.
- Certificate.
- Acknowledgement.
- Chapters with relevant headings.
- Summary and conclusions.
- Bibliography

POLITICAL SCIENCE :

All students are required to make a project on **ANY TOPIC FROM SYLLABUS 2025-26**

Following essentials are required to be fulfilled for its preparation and submission-

1. The total length of the project report will not be more than 8-10 written pages of A-4 size paper).
2. The project report will be handwritten and credit will be awarded to original drawings, illustrations, photographs, artworks, good layout and creative use of materials.
3. The project report will be presented in a neatly bound simple project file.

4. The project report will be developed and presented in this order

- Cover page showing project title, student information, school and year.
 - List of contents with page numbers.
 - Certificate.
 - Acknowledgement.
 - Chapters with relevant headings.
 - Summary and conclusions.
 - Bibliography

GEOGRAPHY :

1. Prepare a project on the Erosional and Depositional Land forms of the following Geomorphic Agents:
 - a) Running Water
 - b) Ground Water
 - c) Glaciers
 - d) Waves & Currents
 - e) Winds

INSTRUCTIONS:

- a) The total length of the project report should be 25-30 A-4 size sheets.
- b) The project work should be hand written
- c) Paste/ Draw, colourful pictures/Diagrams.
- d) It should be presented in a neatly bound simple project file. The project should be developed and presented in the following order
 - i) Cover page showing project title, student information, school and year.
 - ii) List of contents with page number.
 - iii) Certificate page
 - iv) Acknowledgement
 - v) Explanation
 - vi) Bibliography

ECONOMICS : As per CBSE guidelines for the session 2025-26 the students will prepare a project work on any **ONE** of the following topics :

1. Price Determination
2. Demand and its determinants along with case studies
3. Elasticity of demand along with case studies
4. Elasticity of supply along with case studies

5. Supply and its determinants along with case studies
6. Monopoly- Indian railway
7. Monopolistic Competition- toothpaste market in India
8. Imperfect competition and Market Failure
9. Theories of Utility (Ordinal and Cardinal Approach)
10. Opportunity Cost
11. Production- Returns to a factor
12. Oligopoly- Cement Industry, cellular networks industry with emphasis on the price wars started by reliance Jio, Automobile Industry
13. Gandhian Economics
14. Gram Swaraj- An alternative Economic Model
15. Role of Swadeshi in development of Indian Economy
16. Case study of a model village (Economic Perspective)- Hiwre Bazar (MH), Piplantri (RJ), Pansari (GJ) etc.
17. Boycott Chinese items vs Upliftment of Swadeshi
18. Impact of Corona Crisis on Indian Economy
19. Impact of Corona Crisis on Agricultural
20. Impact of Lockdown on Indian Industries
21. New Economic trends after corona breakdown
22. Paradigm shift in Indian Economy after Corona Virus Breakdown.

GENERAL INSTRUCTIONS:

- e) The total length of the project report should not be more than the 15 written pages or 700 words of A-4 size sheet.
- f) The project work should be hand written and credit will be given to original drawing.
- g) It should be presented in a neatly bound simple project file. The project should be developed and presented in the following order
 - vii) Cover page showing project title, student information, school and year.
 - viii) List of contents with page number.
 - ix) Certificate page
 - x) Acknowledgement
 - xi) Summary and Conclusion
 - xii) Bibliography

ACCOUNTANCY: Project Work (Any One)

1. Collection of source documents, preparation of vouchers, recording of transactions with the help of vouchers.
2. Preparation of Bank Reconciliation Statement with the given cash book and the pass book with twenty to twenty-five transactions.
3. Comprehensive project of any sole proprietorship business. This may state with journal entries and their ledgering, and preparation of Trial balance. This may include simple GST related transaction.

GENERAL INSTRUCTIONS:

- a) The total length of the project report should not be more than the 15 written pages or 700 words of A-4 size sheet.
- b) The project work should be hand written and credit will be given to original drawing.
- c) It should be presented in a neatly bound simple project file. The project should be developed and presented in the following order :
 - i) Cover page showing project title, student information, school and year.
 - ii) List of contents with page number.
 - iii) Certificate page
 - iv) Acknowledgement

- v) Summary and Conclusion
- vi) Bibliography

BUSINESS STUDIES (Any One)

I. Project One: Field Visit

The objective of introducing this project among the students is to give a firsthand experience to them regarding the different types of business units operating in their surroundings, to observe their features and activities and relate them to the theoretical knowledge given in their textbooks. The students should select a place of field visit from the following: – (Add more as per local area availability.)

1. Visit to a Handicraft unit.
2. Visit to an Industry.
3. Visit to a Wholesale market (vegetables, fruits, flowers, grains, garments, etc.)
4. Visit to a Departmental store.
5. Visit to a Mall.

The following points should be kept in mind while preparing this visit.

1. Select a suitable day free from rush/crowd with lean business hours.
2. The teacher must visit the place first and check out on logistics. It's better to seek permission from the concerned business- incharge.
3. Visit to be discussed with the students in advance. They should be encouraged to prepare a worksheet containing points of observation and reporting.
4. Students may carry their cameras (at their own risk) with prior permission for collecting evidence of their observations.

1. Visit to a Handicraft Unit

The purpose of visiting a Handicraft unit is to understand nature and scope of its business, stakeholders involved and other aspects as outlined below

- a) The raw material and the processes used in the business: People /parties/firms from which they obtain their raw material.
- b) The market, the buyers, the middlemen, and the areas covered.
- c) The countries to which exports are made.
- d) Mode of payment to workers, suppliers etc.
- e) Working conditions.
- f) Modernization of the process over a period of time.
- g) Facilities, security and training for the staff and workers.
- h) Subsidies available/ availed.
- i) Any other aspect that the teachers deem fit.

2. Visit to an Industry.

The students are required to observe the following:

- a) Nature of the business organisation.
- b) Determinants for location of business unit.
- c) Form of business enterprise: Sole Proprietorship, Partnership, Undivided Hindu Family, Joint Stock Company (a Multinational Company).
- d) Different stages of production/process
- e) Auxiliaries involved in the process.
- f) Workers employed, method of wage payment, training programmes and facilities available.
- g) Social responsibilities discharged towards workers, investors, society, environment and government.
- h) Levels of management.
- i) Code of conduct for employers and employees. 13

- j) Capital structure employed- borrowed v/s owned.
- k) Quality control, recycling of defective goods.
- l) Subsidies available/availed.
- m) Safety Measures employed.
- n) Working conditions for labour in observation of Labour Laws.
- o) Storage of raw material and finished goods.
- p) Transport management for employees, raw material and finished goods.
- q) Functioning of various departments and coordination among them (Production, Human Resource, Finance and Marketing)
- r) Waste Management.
- s) Any other observation.

3. Visit to a wholesale market: vegetables/fruits/flowers/grains/garments etc.

The students are required to observe the following:

- a) Sources of merchandise.
- b) Local market practices.
- c) Any linked up businesses like transporters, packagers, money lenders, agents, etc.
- d) Nature of the goods dealt in.
- e) Types of buyers and sellers.
- f) Mode of the goods dispersed, minimum quantity sold, types of packaging employed.
- g) Factors determining the price fluctuations.
- h) Seasonal factors (if any) affecting the business.
- i) Weekly/ monthly non-working days.
- j) Strikes, if any- causes thereof.
- k) Mode of payments.
- l) Wastage and disposal of dead stock.
- m) Nature of price fluctuations, reason thereof.
- n) Warehousing facilities available\availed.
- o) Any other aspect.

4. Visit to a Departmental store

The students are required to observe the following:

- a) Different departments and their layout.
- b) Nature of products offered for sale.
- c) Display of fresh arrivals.
- d) Promotional campaigns.
- e) Spaces and advertisements.
- f) Assistance by Sales Personnel.
- g) Billing counter at store – Cash, Credit Card/ Debit Card, swipe facility. Added attractions and facilities at the counter.
- h) Additional facilities offered to customers
- i) Any other relevant aspect.

5. Visit to a Mall.

The students are required to observe the following:

- a) Number of floors, shops occupied and unoccupied.
- b) Nature of shops, their ownership status
- c) Nature of goods dealt in: local brands, international brands,
- d) Service business shops- Spas, gym, saloons etc.
- e) Rented spaces, owned spaces,
- f) Different types of promotional schemes.

- g) Most visited shops.
- h) Special attractions of the Mall- Food court, Gaming zone or Cinema etc.
- i) Innovative facilities.
- j) Parking facilities.

II Project Two: Case Study on a Product

Take a product having seasonal growth and regular demand with which students can relate. For example,

- Apples from Himachal Pradesh, Kashmir.
- Oranges from Nagpur,
- Mangoes from Maharashtra/U.P./Bihar/Andhra Pradesh etc.
- Strawberries from Panchgani,
- Aloe vera from Rajasthan,
- Walnuts/almonds from Kashmir,
- Jackfruit from South,
- Guavas from Allahabad,
- Pineapples from North East India,
- Tea from Assam,
- Orchids from Sikkim and Meghalaya,
- Pottery of Manipur,
- Fishes from coastal areas.

Students may develop a Case Study on the following lines:

- (i) Research for change in price of the product. For example, apples in Himachal Pradesh during plucking and non plucking season.
- (ii) Effect on prices in the absence of an effective transport system.
- (iii) Effect on prices in the absence of suitable warehouse facilities.
- (iv) Duties performed by the warehouses.
- (v) Demand and supply situation of the product during harvesting season, prices near the place of origin and away.

Students may be motivated to find out the importance of producing and selling these products and their processed items along with the roles of Transport, Warehousing, Advertising, Banking, Insurance, Packaging, Wholesale selling, Retailing, Co-operative farming, Co-operative marketing etc.

III. Project Three: Aids to Trade

Taking any one AID TO TRADE, for example Insurance and gathering information on following aspects

1. History of Insurance Lloyd's contribution.
2. Development of regulatory Mechanism.
3. Insurance Companies in India
4. Principles of Insurance.
5. Types of Insurance. Importance of insurance to the businessmen.
6. Benefits of crop, orchards, animal and poultry insurance to the farmers.
7. Terminologies used (premium, face value, market value, maturity value, surrender value) and their meanings.
8. Anecdotes and interesting cases of insurance. Reference of films depicting people committing fraudulent acts with insurance companies.
9. Careers in Insurance.

IV. Project Four: Import /Export Procedure

Any one from the following

1. Import /Export procedure

The students should identify a product of their city/country which is imported /exported. They are required to find the details of the actual import/export procedure. They may take help from the Chambers of Commerce, Banker, existing Importers/Exporters, etc.

They should find details of the procedure and link it with their Text knowledge.

The specimens of documents collected should be pasted in the Project file with a brief description of each. They may also visit railway godowns/dockyards/ transport agencies and may collect pictures of the same.

Presentation and submission of project report. At the end of the stipulated term, each student will prepare and submit his/her project report.

Following essentials are required to be fulfilled for its preparation and submission.

1. The total project will be in a file format, consisting of the recordings of the value of shares and the graphs.
2. The project will be handwritten.
3. The project will be presented in a neat folder.
4. The project report will be developed in the following sequence-
 - Cover page should project the title, student information, school and year.
 - List of contents.
 - Acknowledgements and preface (acknowledging the institution, the news papers read, T.V. channels viewed, places visited and persons who have helped).
 - Introduction.
 - Topic with suitable heading.
 - Planning and activities done during the project, if any.
 - Observations and findings while conducting the project.
 - News paper clippings to reflect the changes of share prices.
 - Conclusions (summarised suggestions or findings, future scope of study).
 - Appendix (if needed).
 - Teachers report.
 - Teachers will initial preface page.
 - At the completion of the evaluation of the project, it will be punched in the centre so that the report cannot be reused but is available for reference only.
 - The projects will be returned after evaluation. The school may keep the best projects.

V. Project Five: A visit to any State Emporium (other than your school state).

The purpose of this project is that it leads to -

- Development of deeper understanding of the diversity of products in the states like Assam, Tripura, Nagaland, Mizoram, Manipur, Meghalaya, Sikkim, Arunachal Pradesh, Jammu and Kashmir, Kerala, Chhatisgarh, Telangana, Andhra Pradesh and other states of the country.
- Sensitization and orientation of students about other states, their trade, business and commerce,
- Understanding the cultural and socio-economic aspects of the state by the students,
- Developing the understanding of role of folk art, artisanship and craftsmanship of the state in its growth and economic development. Understanding the role of gifts of nature and natural produce in the development of trade, business and commerce
- Understanding the role of vocational skills and abilities on the livelihood of artisans/ craftsman

- Understanding of entrepreneurial skills and abilities of the artisans/craftsman
- Understanding of the unemployment problem of the state and role of art and craft of the state in generating employment opportunities
- Value aspect -
- Sense of gratitude - betterment of our lives by appreciating the contributions made by others in the
- Appreciating the dignity of work
- Sensitivity towards social, cultural, ethical and religious differences Benefits of social harmony and peace
- Understanding and appreciating the unity in diversity in India
- Appreciating differences in race, skin colour, languages, religion, habits, festivals, clothing coexistence

Presentation and Submission of Project Report

At the end of the stipulated term, each student will prepare and submit his/her project report.

Following essentials are required to be fulfilled for its preparation and submission.

1. Nature of the business organisation (emporium)
2. Determinants for location of the concerned emporium
3. Is the space rented or owned
4. Nature of the goods dealt in
5. Sources of merchandise of the emporium
6. Role of co-operative societies in the manufacturing and/or marketing of the merchandise
7. Role of gifts of nature or natural produce in the development of goods/merchandise. 8. Types of buyers and sellers
9. Modes of goods dispersed, minimum quantity sold and type of carrying bag or package used for delivery of the products sold
10. Factors determining the pricing at the emporium
11. Comparison between the prices of goods available at the emporium with the prices in the open market. Also highlight probable causes of variations if any.
12. Kind of raw material available naturally, used in making the products
13. The technique used in making the products i.e., handmade or machine made
14. Has the child labour being used in making the products sold at the emporium
15. Are the products eco-friendly, in terms of manufacturing, disposal and packing
16. Seasonal factors if any affecting the business of the emporium
17. Weekly/ Monthly non-working days
18. Mode of billing and payments - Cash, Credit Card/ Debit Card, Swipe facility.
19. Does the emporium sell its merchandise in instalment / deferred payment basis
20. Do they provide home delivery and after sales services?
21. Different types of promotional campaigns / schemes
22. Assistance by Sales Personnel
23. Export orientation of this emporium and procedure used
24. Policies related to damaged/ returned goods
25. Any government facility available to the emporium
26. Warehousing facilities available / availed
27. Impact of tourism on the business of emporium
28. Additional facility offered to customers
29. Any Corporate Social Responsibility (CSR) assumed by the emporium
30. Contribution made by the emporium to its locality

PSYCHOLOGY :

- Students complete your practical work.

Attempt all these questions on your homework notebook.

1. Draw the stage model of memory.
2. Explain all types of interference.
3. Explain the forgetting theory.
4. What are the ways to enhance memory? Explain all the methods.
5. Define sensation.
6. What are the theories of selective attention? explain it.
7. Explain all types of illusions.
8. What are perceptual constancies? explain all types of perceptual constancy.

PHYSICAL EDUCATION :

1. Prepare a file on any sports including play field diagram, fundamental skills, terminology, rules, famous sports personality and important sports tournament (according to class 11th syllabus)
2. Detailed explanation of all Shat kriyas with their diagram, benefits and procedure.

MUSIC (TABLA) Project Work :

1. Definitions of following : Laya, Sangeet, Kala
2. Write down the Thah, Dugun & Chaugun- Teentaal, Jhaptaal, Ektaal with introduction.
3. Brief note on – Banaras Gharana.
4. Diagram of Tabla.
5. Kaida in Teentaal.
6. Kaida- Rela in Teentaal
7. Rela in Teentaal
8. Three Tukdas in Teentaal.
9. Keharwa and Dadra Taal Theka with Introduction
10. Life Sketch : Pt. Kudau Singh, Pt. Nana Panse

Note : Homework to be done in Project File Only.

MUSIC (VOCAL) :

TO DO ☞ # All the Work Done in Your Notebook According to the Chapters.

NOTE ☞ # THE HOLIDAY HW Must Be Done in PROJECT FILE Only.

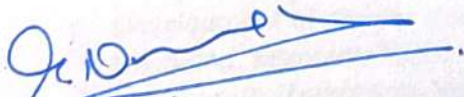
NO STICK FILE to be Used At All.

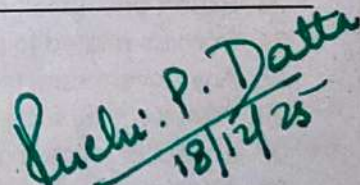
PAINTING :

- Make 8 Portraits black & white in water colour.

Note : Size- A3

Sheet- Cartridge Sheet (Drawing sheet)


HEAD SENIOR SCHOOL


18/12/25
PRINCIPAL