

आंवासीय शिक्षण संस्थानम्



Acharyakulam

A Vaidic Integrated CBSE affiliated Residential(Co-ed) Educational Institute

Affiliated to C.B.S.E. upto + 2 (English Medium)
Affiliation No.: 3530430 and School Code No.: 81654



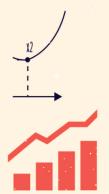




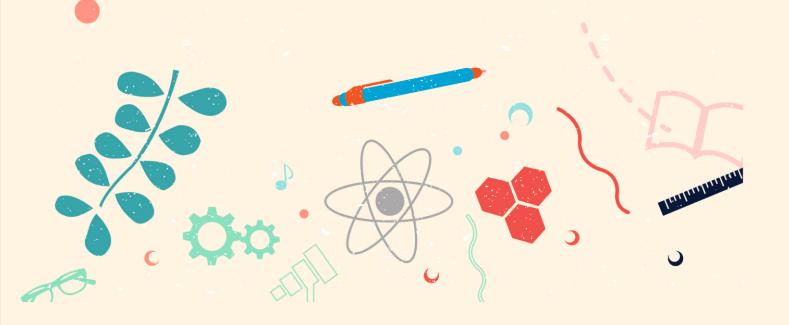




Diwali-Break Holiday Home Work



and
Assignment
(Session 2025 – 2026)
Class – XII Science









SUBJECT: SANSKRIT

- साम् हिकं यज्ञं कृत्वा साम् हिकं योगप्रशिक्षणं च दत्वा तस्य साम् हिकछायाचित्रम् एकस्मिन् A4
 sheet कर्गदे संश्लेश्य तस्य विवरणं संस्कृतेन लिखत |
- २. पठित-पाठेभ्यः सन्धि-समास-प्रत्यययुक्तपदानां चयनं कृत्वा एकस्यां संचिकायां(FILE) विलिख्य आनयत
- 3. सर्वे संलग्न-दैनिक-क्रियाकलापस्य पत्रकं नीत्वा अवश्यम् आनयन्तु ।

कक्षा-V-XII {सर्वेषां कृते}

ऋम.सं.	दिनाङ्क:	अभिवादनम्	योग:	यज्ञ:	भोजनमन्त्र:	संस्कृतवाक्यम्	शयनमन्त्र:	अभिभावक-
								हस्ताक्षरम्
1.	18.10.25							
2.	19.10.25							
3.	20.10.25							
4.	21.10.25							
5.	22.10.25							& ~
6.	23.10.25							
7.	24.10.25							77
8.	25.10.25							
9.	26.10.25							
10.	27.10.25							
11.	28.10.25		,					
12.	29.10.25							
13.	30.10.25							
14.	31.10.25							
15.	01.11.25							
16.	02.11.25							
17.	03.11.25							

धातव्य-

- 1. भो छात्र ! प्रतिदिन आपको उपरोक्त क्रिया कलाप अवश्य करने हैं और प्रतिनित्य अपने अभिभावकों के हस्ताक्षर इस आशय से कराने हैं कि आपने उनके समक्ष किया है |
- 2. प्रतिदिन किये गये क्रिया कलाप को चित्र के माध्यम से प्रमाण सहित उपस्थित करना अनिवार्य है |
- 3. संस्कृत वाक्य में प्रतिदिन अपने अभिभावकों को एक-एक संस्कृत का वाक्य सिखाना है |



















SUBJECT - ENGLISH CORE(301)

<u>PART - A</u> ALS Project:-

Project-Portfolio / Project Report - 10 MARKS (5 PROJECT + 5 VIVA) Interview-Based research:-

Prepare an Interview based project on any one of the following topics:

- (a) "Evolving food tastes in your neighbourhood"
- (b) Impact of Online Studies on Senior Students
- (c) Imposed versus Self-imposed Linguistic Chauvinism at the present scenario of academic life in the light of "The Last Lesson."
- (d) "When a people are enslaved, as long as they hold fast to their language it is as if they had the key to their prison."

Importance of Language

Meaning of 'Linguistic chauvinism'

Find examples in history where conquered people had their language taken away from them or had a

language imposed of them—what was the result / outcome

Problems faced by linguistic minority

How can they keep their language alive?

Linguistic human rights

Linguistic Chauvinism examples from English literature

(e) "Courage is not the Absence of Fear but Triumph over It."

Introduction

Origin of the quote

Courage – a choice to act

What can one learn from fear?

Benefits of having courage over fear

How and why to overcome fear?

Fighting against fear is hard but worth it (Examples)

Mention some of your worst fears and how you managed to overcome them — A Questionnaire

Famous personalities who overcame their fear (Their motivation podcast / speech / stories (f) "A Thing of Beauty and its Role in Human Life."

- 1. Index
- 2. Acknowledgement
- 3. Certificate of Completion
- 4. Objective
- 5. About author John Keats (pictures)
- 6. Different characteristics of nature like its eternal, changeless, perfect, source of true happiness, etc.)(Beautiful pictures of Nature)
- 7. Comparison of human life and Nature (1 page) for example: Human Nature Change, Changeless,















7. Comparison of human life and Nature (1 page) for example: Human Nature - Change, Changeless, Mortal, Immortal, Death & Decay Eternal

8. Description of beautiful things in nature like

- Rivers: Symbol of excitement, adventure, and healing touch, never ending supply of life...
- Sun: equality, light, hope royalty, divinity, positivity, power...
- Trees: lively, wisdom, prosperity, transformation...
- Animals: divine, moving, growing, fertility, happiness elegance, strength, energy wisdom....
- Flowers: purity, hope, beautiful, innocence, humility, youthful....
- Beauty of Mighty dead, stories of Saints and sages, their work and deeds, how they immortalize themselves (Maximum 6-7 pages with pictures)
- 9. Any 10 Central ideas of -A Thing of Beauty.
- 10. Bibliography or References.

The students should read the available literature. Then they should conduct the interviews with the neighbours on the topic. For an interview students should frame questions based on the preliminary research / background. The students will then write an essay / write up / report etc. up to 1000 words on his / her research. A viva will be taken on the report.

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

The Project-Portfolio must include the following:

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

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

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

OR

Listen to podcasts / interviews/radio or TV documentary on a topic and prepare a report countering or agreeing with the speakers. Write an 800 - 1000 words report and submit. A viva will be taken on the report.

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





















Acharyakulam A Vaidic Integrated CBSE affiliated Residential (Co-ed) Educational Institute

The Project-Portfolio must include the following:

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

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

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

PART – B

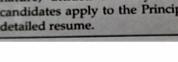
Q1. Notice Writing

You are Sonia / Sohan os Simon Public School, Meerut. Your school has decided to organise a cultural programme to raise funds for the victims of floods in Bihar. Draft a notice, in not more than 50 words, or your school notice board.

SITUATION VACANT

Sunshine Public School, Pune

Two sports coaches (M+F) needed, degree in P.Ed., SAI certified, minimum experience of 5 years, pleasant and energetic personality, dominating nature, attractive salary. Interested candidates apply to the Principal with





Q2. Application for Job

Sunshine Public School, Pune requires two sports coaches (one male and one female). Each should should be a degree holder in physical education as well as an SAI certified coach in athletics. You have seen their advertisement and you know that you have qualifications. Write an application in 120 - 150 words along with your resume. You are Praveen / Praveena, M-114, Najafgarh, Delhi.

Q3. Editorial Letter Writing

Write a letter in about 120 - 150 words to the Editor of a national daily expressing your views on the issue 'Dangers of Using Headphones on Roads and Railway Tracks'. Sign yourself as Himani / Hitesh Sabharwal of 69/7B, Lok Vihar, Rothek. You can take help from the newspaper clipping given.

































SUBJECT: MATHEMATICS

Grade 12 Maths Investigatory Projects that can be completed any one over the holidays!

- 1. Real-World Applications of Math: Explore how math is used in a particular field (e.g., medicine, finance, engineering) and create a presentation or report.
- 2. Mathematical Modeling: Choose a real-world scenario (e.g., population growth, financial markets) and create a mathematical model to predict outcomes.
- 3. Data Analysis: Collect and analyze data on a topic of interest (e.g., sports, environment, social media) and create visual representations (e.g., graphs, charts).
- 4. Mathematical Art: Use math to create art (e.g., fractals, geometry, tessellations) and write a brief explanation of the mathematical concepts used.
- 5. Mathematical Games: Design and create a mathematical game or puzzle and write a set of instructions for others to play.
- 6. Cryptography: Explore encryption techniques and create a secret message or code for others to decipher.
- 7. Mathematical Storytelling: Create a story or comic strip that incorporates mathematical concepts (e.g., probability, geometry, algebra).
- 8. Mathematical Science Investigate the math behind a scientific concept (e.g., gravity, motion, energy) and create a presentation or report. Some specific project ideas include:
- Analyzing the trajectory of a projectile
- Modeling population growth and decay
- Investigating the Fibonacci sequence in nature
- Creating a mathematical maze or labyrinth

APP MATHS

MAKE AT LEAST 3 PROJECTS OUT OF THE FOLLOWING:-

- 1. LPP
- 2. TIME SERIES
- 3. HYPOTHESIS
- 4. EMI/ FINENTIAL MATHEMATICS
- 5. PROBABILITY
- 6. APP OF DERIVATIVE

SUBJECT: BIOLOGY

Task - Prepare an investigatory project report (final copy). Project report must include the following-

- Aim
- Apparatus/ Reagents required
- Theory
- **Procedure**
- Observation
- Result and Conclusion
- Precaution
- **Bibliography**

To Know more about Investigatory projects kindly check link given below-

ttps://ncert.nic.in/pdf/publication/<u>s</u>ciencelaboratorymanuals/classXII/biology/lelm216.pdf







































अभ्युत्यः Acharyakulam

SSIGN.	Link	s of Physic s nves Projects			
oject umber		•			
		Links of Sample ProjectFiles	Links of Sample ProjectFiles	Links of Sample ProjectFiles	Links of SampleProject Files
1.	To study various factors on which the internal resistance/EMF of a cell depends.	PmBwRfnZqglZHNjO	https://drive.google. com/file/d/1V64CJX1IDe VO_lvZEG5ZyhMerF UrtgE6/view?usp=share_1 ink	https://drive.google.com/file/d/1- qWwm0PhJ8pIixa6hqM1Sc PIaH5lRYss/view? usp=share_link	https://drive.google. com/file/d/1tS7Ej8F6qug0N hJXkKD waVV2IHU1WayH/view? usp=share_link
	To study the variations in current flowing in a circuitcontaining an LDR because of a variation in (a) the power of the incandescent lamp, used to 'illuminate' the LDR (keeping all the lamps at a fixed distance). (b) the distance of a incandescent lamp (of fixed power) used to 'illuminate' the LDR	https://drive.go ogle. com/file/d/14rc CbVllcB- fmFbGphwSN puUoZ_Z4elh/ view? usp=share_link	https://drive.google. com/file/d/1jn9EAEsCse MGnpVbCGkLvh78l6 lUS489/view?usp=share_l ink	https://drive.google. com/file/d/1QJLz0PjX0xpu UpJmwNoDG5ym4A2WQ E7d/view?usp=share_link	https://drive.google. com/file/d/1zOtXFxUPE4GJ jPHvbCIi mBrJhmVDcBqw/view? usp=share_link
3 / •	To find the refractive indices of (a) water (b) oil (transparent) using a plane mirror, an equiconvex lens (made from a glass of known refractive index) and an adjustable object needle.	https://docs.google.com/document/d/1o7InzE7qUQfOUp7eysx3Ugu1BN18UTe7/edit2usp=share_link&ouid=111228412894650855811&rtpof=true&sd=true	oogle. com/file/d/1R c9UXDTpyj- 3Rzk7ENhv3r vlt7dE- opF/view? usp=share_lin k		
4	To investigate the relation between the ratio of (i) output and input voltage and (ii) number of turns in the secondary coil and primary coil of a self-designed transformer.	https://drive.google. com/file/d/19RRycrgz1 J058ovzVEzylV0TmI 5MIm1f/view?usp=sha re_link	https://docs.google. com/document/d/1KSWu OGY4UGr5QHKh2F rHtwtrKcfPcE1N/edit? usp=share_link&ouid=111 228412894650855 811&rtpof=true&sd=true	https://drive.google.com/file/d/1iN-rw2yqspINt2BisiCHfalagiXiV0xB/view?usp=share_link	
5	To investigate the dependence of the angle of deviation on the angle of incidence using a hollow prism filled one by one, with different transparent fluids.	https://drive.google. com/file/d/1c8y20AM UuUre9WUf- 9jZp6AFFMM2X2nP/ view?usp=share_link,	https://docs.google.com/document/d/1s- 1ycKMGt4plk1o1jr6NFn H_4wrcExFJ/edit? usp=share_link&ouid=111 228412894650855 811&rtpof=true&sd=true	ZiltGHEhYzCd6- GX15kOMjJgOX/edit? usp=share_link&ouid=111	
6	To estimate the charge induced on each one of the two identical Styrofoam (or pith) balls suspended in a vertical plane by making use of Coulomb's law.	9	https://drive.google. com/file/d/1e7avcC01C2f AxK82W_Ipdtzkmd 0DonCN/view?usp=share link	https://docs.google.com/doc ument/d/1Jafs5V- fr2RD3mw1F04foKflNlhzO 6Nt/edit? usp=share_link&ouid=1112 28412894650855811&rt pof=true&sd=true	





















A Vaidic Integrated CBSE affiliated Residential(Co-ed) Educational Institute

Prepare a final draft of investigatory project for AISSCE (Practical) – 2025-26. Project report must include the following

- Aim
- Apparatus/ Reagents required
- Theory
- **Procedure**
- Observations
- Result and Conclusion
- **Precautions**
- **Bibliography**

Some suggested projects are as follows:

- 1. Qualitative analysis of ions present in cold drinks like phosphate and fluorides
- Organic qualitative analysis of functional groups in various classes of drugs and medicines..
- Electrochemical cells and related calculations.
- 4. Analysis of alums.
- 5. Preparation of rayon threads.
- 6. Preparation of potash alum from scrap aluminum.

To know more about Investigatory projects kindly check link given below:

https://cbseacademic.nic.in/web material/Curriculum16/SrSecondary/Chemistry.pdf

























Subject: INFORMATICS PRACTICE

Prepare Practical file with at least 15 Python Program and 15 SQL Commands. Some suggested programs are:

- 1. WAP to input marks in any five subject and find the percentage of the total marks and grade of the student on the basis of the following criteria
 - (a) Grade A if percentage is greater than or equal to 90
 - (b) Grade B if percentage is greater than or equal 80 and below 90
 - (c) Grade C if percentage is greater than or equal 70 and below 80
 - (d) Grade D if percentage is greater than or equal 60 and below 70
 - (e) Grade E if percentage below 60
- 2. WAP to input an integer and check whether the number is odd or even.
- 3. WAP to input the value of a, b, c and find the roots of the quadratic equation.

e.g.,
$$x = \frac{-b \pm \sqrt{b*b-4*a*c}}{2*a}$$

also check the discriminant value i.e. d = b * b - 4 * a * c and check

- (a) If d>0 than roots are real and unequal
- (b) If d==0 than roots area real and equal
- (c) If d<0 than roots are imaginary
- Write a program to input the year and check whether the year is leap year or not
- 5. WAP to print the Fibonacci series i.e. 0 1 1 2 3 5 8 13 21 ...
- 6. WAP to print the sum of the first 100 natural numbers
- 7. WAP to find the sum of all odd numbers between 1 and 100.
- 8. WAP to find the sum of all even numbers between 1 and 100.
- 9. WAP to input an integer number and check whether the number is prime or not.
- 10. WAP to print the all the prime numbers between the range given by the user.
- 11. WAP to find the sum of the all the prime numbers between 1 and 100.
- 12. WAP to input an integer and find the factorial of the number. i.e. factorial (6) = 6*5*4*3*2*1 =720
- 13. WAP to input and integer number and find the sum of the digits of the number.
- 14. WAP to print the reverse of the number.
- 15. WAP to input and integer number and check whether the number is palindrome or not.
- 16. WAP to input a string and print the reverse of the string.
- 17. WAP to print the following patterns





























Acharyakulam

A Vaidic Integrated CBSE affiliated Residential (Co-ed) Educational Institute

Star pattern examples

L	ı		*	****
*	*	*****	***	****
**	***	*****	****	***
***	****	******	*****	*
****	*****	******	****	***
****	*****	******	***	****
*****	******	*****	*	*****

PYTHON PATTERN PROGRAM

*				1	D	
*	*			121	PY	1 2 2
*	*	*		12321	P Y T P Y T H	333
*	*	*	*	1234321	PYTHO	4444
*	*	*	* *	123454321	PYTHON	55555

Suggested SQL Queries

- 1. To create a database
- 2. To create a student table with the student id, class, section, gender, name, dob, and marks as attributes where the student id is the primary key.
- 3. To insert the details of at least 10 students in the above table.
- 4. To delete the details of a particular student in the above table.
- 5. To increase marks by 5% for those students who have Rno more than 20.
- 6. To display the entire content of the table.
- 7. To display Rno, Name and Marks of those students who are scoring marks more than 50.
- 8. To find the average of marks from the student table.
- 9. To find the number of students, who are from section 'A'.
- 10. To add a new column email in the above table with appropriate data type.
- 11. To add the email ids of each student in the previously created email column.
- 12. To display the information of all the students, whose name starts with 'AN' (Examples: ANAND, ANGAD,..)
- 13. To display Rno, Name, DOB of those students who are born between '2005- 01-01' and '2005-12-31'.
- 14. To display Rno, Name, DOB, Marks, Email of those male students in ascending order of their names.
- 15. To display Rno, Gender, Name, DOB, Marks, Email in descending order of their marks.
- 16. To display the unique section available in the table.





























