SAINIK SCHOOL KAZHAKOOTAM

VACATION ASSIGNMENT

CLASS:VI

SNO	SUBJECT	TOPIC/ACTIVITY
1	ENGLISH	Write a short paragraph about any cultural aspect of your hometown or state that reflects the diversity of India. It could be a festival, a historical site, or a traditional art form. (An activity based on the last unit, "Culture and Tradition" of the textbook) **OR** Create amy one
2	HINDI	110 मुहावरों का अर्थ लिखकर वाक्य में प्रयोग करना- 2 अनुच्छेद लेखन- a बाल दिवस b वृक्ष - जीवन का आधार c मेरा भारत महान
3	MALAYALAM HIGHE	Make a collection of *NADANPAATTU*
4	MALAYALAM	Make a picture story.Paste or draw pictures ,write sentences and make a story. (Lower Malayalam)
5	MATHS	Collect data from your friends about their birthday months. Make a frequency table and draw a bar graph representing the number of students who have birthdays on the months (i) January to June. (ii) July to December. Answer the following questions from the first bar graph: a. How many students have birthdays on June? b. How many students have birthdays on April and May together? c. What is the total number of students who have birthdays from January to June? d. On which month (January to June) was the highest number of birthdays observed? Answer the following questions from the second bar graph: a. How many students have birthdays on the months November and December together? b. How many students have birthdays on the month September? c. What is the total number of students who have birthdays from July to December (6 Months)? d. On which month (July to December) was the highest number of birthdays observed?
6	SCIENCE	Observe the temperature at your place (9am and 9pm) for 10 days and plot two graphs using the data obtained, one for 9am and one for 9pm.
7	SOCIAL SCIENCE	Create a family tree: Create a visual representation of your family's lineage, tracing relationships and documenting key information about each family member.

SAINIK SCHOOL KAZHAKOOTAM

<u>VACATION ASSIGNMENT</u>

CLASS:VII

SNO	SUBJECT	TOPIC/ACTIVITY
1	ENGLISH	7A: Choose any story and rewrite its ending. Use your creativity to imagine what could have happened differently. For instance, you could create a new conclusion for *Golu Grows a Nose* or *Bringing up Kari.* *"Write names of 10 trees or plants and paste pictures, Describe its uses and features.(higher malayalam)7B, 7C: Watch the movie, 'Coco' (2017) two times. Narrate the story of the film as narrated by Miguel.* *1. You may begin like,* *"Hi, I am Miguel, I belong to a family of shoe makers, but…………..."* *2. Draw a family portrait of Miguel's family and put it as the cover page of your assignment.* "

2	HINDI	10 मुहावरों का अर्थ लिखकर वाक्य में प्रयोग करना
		2 अनुच्छेद लेखन
		  a नारी शक्ति
		  b बेरोज़गारी की समस्याएँ
		   c भारत में बढ़ता भ्रष्टाचार

3	MALAYALAM (HIGHE	Write name of ten plants from your surroundings and paste pictures.Describe its features and uses.
4	MALAYALAM LOWER	Prepare an Album of *FREEDOM FIGHTERS OF INDIA*
5	MATHS	Make the nets of 3D shapes: Cube, Cuboid, Cylinder, Cone and Square Pyramid.
6	SCIENCE	PHYSICS : MCQ booklet preperation on topics : effects of electric current and light CHEMISTRY: Painting using Natural indicator Turmeric powder Draw a picture or diagram and try to colour it using the principle turmeric is red in bases :
7	SOCIAL SCIENCE	Model Making: Create a 2D or 3D model of any landform discussed in the chapter "Our Changing Earth."

SAINIK SCHOOL KAZHAKOOTAM

VACATION ASSIGNMENT

CLASS:VIII

SNO	SUBJECT	TOPIC/ACTIVITY	REMARK
1	ENGLISH	Write a letter to your favorite character from any story from Honeydew or It So Happened, sharing your thoughts on their role. Express what you liked or disliked about them, using examples to support your opinion. For instance, you could write to Jody about his experience of finding the fawn or to the Fighter or Warrior from *The Fight*. OR Poem Parody Create a parody of any poem from Honeydew or It So Happened or convert any story to a poem form. Use your creativity to rewrite it humorously.	

2	HINDI	1 20 मुहावरों का अर्थ लिखकर वाक्य में प्रयोग करना -
		2 अनुच्छेद लेखन-
		  a विद्यालय में वन महोत्सव
		  b प्लस्टिक की दुनिया
		  c भारतीय समाज और अंधविश्वास
		3 अपने जन्म दिवस पर मित्र द्वारा भेजे गए उपहार के लिए धन्यवाद पत्र लिखिए-	

3	MALAYALAM	Collect 10 malayalam Proverbs and find English and Hindi proverbs with the same meaning(Lower)	
4	MALAYALAM HIGH	Prepare a Seminar Paper about '*M T VASUDEVAN NAIR*'	
5	MATHS	https://drive.google.com/drive/folders/1QrezuYzru-ZwS1-vpNxmSR1aiT7iBXw3?usp=sharing	FROM THE PROVIDED LINK SOLVE QUESTIONS 1 TO 75 FROM CHAPTER DIRECT AND INVERSE PROPORTION(Ex-C)- Exempler Problems
6	SCIENCE	PHYSICS : Seminar report on the topic some natural phenomena	
7	SOCIAL SCIENCE	☐Industrial Visit: Visit an industry and prepare a report on the visit, including details about the product, raw materials used, inputs, processes, and outputs. ☐Assignment: A report on any recent industrial disaster.	

SAINIK SCHOOL KAZHAKOOTAM

VACATION ASSIGNMENT

CLASS:IX

SNO	SUBJECT	TOPIC/ACTIVITY
1	ENGLISH	Learn a new foreign language (not any language from India). Write the whole alphabet/ pronunciation set of that language. Write 50 words in that language and their meanings and explanations in English.
2	HINDI	25 मुहावरों का अर्थ लिखकर वाक्य में प्रयोग करना - 2 अनौपचारिक पत्र लेखन- a मित्र के कक्षा में प्रथम स्थान करने पर उसे बधाई पत्र लिखिए। b अपने भाई के विवाह में सम्मिलित होने के लिए मित्र को निमंत्रण पत्र लिखिए। 4 ताजमहल की सैर को लेकर मित्रों के बीच एक संवाद लिखिए।
3	MALAYALAM	Make an album of writers with short notes on their works.
4	MATHS	printed questions are given to each cadets.
5	SCIENCE	PHYSICS : MCQ booklet preperation on the topics : motion, force and laws of motion, gravitation, work and energy, sound
6	SOCIAL SCIENCE	Assignment and Report: Write an assignment and report on a disaster recently happened in India.

SAINIK SCHOOL KAZHAKOOTAM

VACATION ASSIGNMENT

CLASS:X

SNO	SUBJECT	TOPIC/ACTIVITY	REMARKS
1	ENGLISH	10 A, B, C: Work out the given 5 sample question papers of class 10 CBSE Board exam pattern as per the instructions. (Follow the link provided for the access.) https://drive.google.com/drive/folders/1LAyNSMtjt1syzz64TEIQNLS4BGd2Xcn_?usp=sharing	
2	HINDI		
3	MALAYALAM	Write short notes on 4 charecters from lesson 6. Make an album of 5 writers.	
4	MATHS	https://drive.google.com/drive/folders/1j4re8w6MMKlgkw5qWS_IAaLt6IThemHL?usp=sharing	Solve the sample questions provided in the link
5	SCIENCE	1.Numerical Questions -Chapter Light -Reflection and Refraction (10) 2. Numerical Questions -Chapter Electricity (15) CHEMISTRY:Ball and Stick model : Construct ball and stick model of one organic compound known to you using	Complete the solution and attach along with the QP
6	SOCIAL SCIENCE	Assignment: Interdisciplinary Activity: The role of infrastructure development in globalization in India. Project: The role of consumer protection organizations in protecting consumer rights.	Work should be done in A4 sheet.Late submission will not be accepted.

SAINIK SCHOOL KAZHAKOOTAM

VACATION ASSIGNMENT

CLASS:XI

SNO	SUBJECT	TOPIC/ACTIVITY
1	ENGLISH	1. Listen to the FIRST POST by Palki Sharma Upadhyay every day (youtube). 2. Learn all the words and their meaning in the SYNONYMS section of the Arihant Pathfinder. Be able to use them in your own sentences. (Pages 33 – 39 in the latest edition)
2	MATHS	1. Solve last ten years UPSC Maths QP of chapters completed. 2. Miscellaneous Exercise of 3D geometry.
3	PHYSICS	Investigatory Projects 1.To Study of the Parallelogram Law of the Vectors 2.To Study the Simple Harmonic Motion (SHM) of a Spring 3.To Study and Demonstrate the Rotational Moment of Inertia 4.To Study the Newton's Universal Law of the Gravitation 5.To Study the Newton's Third Law of Motion: Physics Projects 6.To Study the Wave Motion: Transverse and longitudinal waves 7.To Study of Pascal's Law and its Applications 8.To Study the Various Effects of the Mass on the Terminal Velocity
4	CHEMISTRY	Nomenclature of Cyclic compounds, aromatic compounds(25 example each), assignment on different hybridisation with relevant examples
5	BIOLOGY	1.Project Work for Practical Examination 2.Describe Nerve impulse generation and conduction 3. Describe Nerve impulse transmission 4.Describe Sliding filament theory of Muscle contraction 5. Explain the divisions of Human skeletal system
		Programs
		Write a program to perform addition, subtraction, multiplication, and division on two input numbers and display the results with proper formatting.
		Write a program to calculate and display the area and perimeter of a circle. The radius should be input by the user, and the result should be rounded to two decimal places.
		Write a program to swap two variables without using a temporary variable, and verify the swap by displaying the values before and after swapping.

6	COMPUTER SCIENCE	Write a program that converts a given temperature from Celsius to Fahrenheit and Fahrenheit to Celsius using the respective formula.
		Write a program to calculate the roots of a quadratic equation ax2+bx+c using the quadratic formula. Handle imaginary roots appropriately.
		Write a Python program to compute the sum of the first 'n' natural numbers where nnn is entered by the user.
		Write a program to generate the first 'n' terms of the Fibonacci sequence, where 'n' is input by the user.
		Write a program to compute the factorial of a given number using both iterative and recursive approaches.
		Write a Python program to check whether a given number is a prime number.
		Write a program to perform various operations (append, insert, delete, and sort) on a list of integers entered by the user.
		Write a program to check whether a given string is a palindrome, ignoring spaces and case sensitivity.
		Write a program to count the number of vowels, alphabets, digits and special symbols in a given sentence entered by the user.
		Write a program to reverse a given string without using built-in reverse functions.
		Write a program to check whether a given number is an Armstrong number. (Sum of Cubes of digits is same as number).
		Write a Python program to find the second largest number in a list without using built in functions.
		Write a program to remove duplicate elements from a list of integers entered by the user, while maintaining the original order.
		Write a program to find the index of a specific element in a tuple entered by the user. If the element is not present, display an appropriate message.

			Write a program to find the longest word in a sentence entered by the user and display its length.
			Write a program to count the frequency of each word in a sentence entered by the user and store the result in a dictionary.
			Write a program to store and display the marks of students in a dictionary. Allow the user to add, update, and delete entries for a student.

SAINIK SCHOOL KAZHAKOOTAM

VACATION ASSIGNMENT

CLASS:XII

SNO	SUBJECT	TOPIC/ACTIVITY
1	ENGLISH	1. Listen to the FIRST POST by Palki Sharma Upadhyay every day (youtube). 2.Read all the chapters in the syllabus from FLAMINGO and VISTAS and be able to give a gist of the story/theme of the poem.
2	MATHS	1. Solve last 2 years Board QP. 2. Complete record work.
3	PHYSICS	1. Solve the last three years board exam question paper. 2. Complete and submit practical fair record. 3. Submit final copy of project.
4	CHEMISTRY	Complete the chemistry fair practical record, Submit the spiral binded project
5	BIOLOGY	1.Project work for practical examination 2.Explain life cycle of plasmodium 3.Explain types of cancer 4.Describe replication of retrovirus in animal cell 5. Explain Primary and Secondary Sewage Treatments 6.Explain components of Biogas plant
6	COMPUTER SCIENCE	Write a function countmy() in Python to read the text file "DATA.TXT" and count the number of times "my" occurs in the file. For example , if the file "DATA.TXT" contains: "This is my website. I have displayed my preference in the CHOICE section." The countmy( ) function should display the output as: "my occurs 2 times"
		Aalam has created a list, L containing marks of 10 students. Write a program, with separate user defined function to perform the following operation: PUSH()- Traverse the content of the List, L and push all the odd marks into the stack,S. POP()- Pop and display the content of the stack. Example: If the content of the list is as follows: L=[87, 98, 65, 21, 54, 78, 59, 64, 32, 49] Then the output of the code should be: 49 59 21 65 87

		Write a python program to create a csv file DVD. CSV and write 10 records in it Dvd_id, dvd_name, qty, price. Display those DVD details whose DVD price is more than 25.
		Kishan wants to write a program in Python to insert the following record in the table named Flight in MYSQL database KV: ● Flno (Flight number)-varchar ● Source (source)- varchar ● Destination (Destination)-varchar ● Fare (fare)-integer Note the following to establish connectivity between Python and MySQL: ● User name-root ● Password – KVS@123 ● Host-localhost ● GID (Game ID)-integer ● Gname(Game name)-varchar ● No_of_Participants (number of participants)-integer ● Username: root ● Password: KVS@123 ● Host: localhost The values of fields Flno,Source,Destination and Fare has to be accepted from the user. Help Kishan to write the program in Python. OR Suman has created a table named Game in MYSQL database Sports: Note the following to establish connectivity between Python and MySQL: Suman, now wants to display the records of students whose number of participants are more than 10, Help Suman to write the program in Python.
		Write a program in Python that defines and calls the following functions: Insert() – To accept details of clock from the user and stores it in a csv file 'watch.csv'. Each record of clock contains following fields – ClockID, ClockName, YearofManf, Price. Function takes details of all clocks and stores them in file in one go. Delete() – To accept a ClockID and removes the record with given ClockID from the file 'watch.csv'. If ClockID not found then it should show a relevant message. Before removing the record it should print the record getting removed.

Amit is a monitor of class XII-A and he stored the record of all the students of his class in a file named "class.dat". Structure of record is [roll number, name, percentage]. His computer teacher has assigned the following duty to Amit
Write a function remcount( ) to count the number of students who need remedial class (student who scored less than 40 percent)

What is the advantage of using a csv file for permanent storage?
A CSV file "Book.csv" has structure [BookNo, Book_Name, Author, Price].
(i) Write a user defined function CreateFile() to input data for a record and add to Book.csv .
(ii) Write a function CountRec(Author) in Python which accepts the Author name as parameter and count and return number of books by the given Author are stored in the CSV file "Book.csv"

A CSV file "Student.csv" has structure (adm_num, name, percentage).
(i) Write a function CreateFile() to input data into Student,csv
(ii) Write a function countrec() that would read contents of the file "Student.csv" and display the details of those students whose percentage is above 75. Also display number of students score above 75%

Jacob has created a dictionary containing names and marks as key- value pairs of 6 students. Write a program, with separate user defined functions to perform the following operations:
● Push the keys (name of the student) of the dictionary into a stack, where
the corresponding value (marks) is greater than 75.
● Pop and display the content of the stack.
For example: If the sample content of the dictionary is as follows:
R={"Hari":76, "Jai":45, "Shiv":89, "Anup":65, "Fin": 90, "Tom":82}
The output from the program should be: Tom Fin Shiv Hari

Arnab has a list containing 10 integers. You need to help him create a program with separate user defined functions to perform the following operations based on this list.
● Traverse the content of the list and push the even numbers into a stack.
● Pop and display the content of the stack.
For Example: If the sample Content of the list is as follows:
N=[12, 13, 34, 56, 21, 79, 98, 22, 35, 38]
Sample Output of the code should be: 38 22 98 56 34 12