

PM SHRI Kendriya Vidyalaya Kurnool
Autumn Break Holiday Home Work(2025-26)

CLASS VI

SUBJECT : MATHEMATICS

1. *Number Sequence Puzzle*: Identify the pattern and complete the sequence:
A) 2, 5, 8, 11, 14, ?, ? B) 1, 4, 9, 16, 25, ?, ?
2. *Angle Measurement*: Measure and draw different types of angles (acute, obtuse, right, straight).
3. *Line Segment Measurement*: Measure the length of different line segments in your surroundings. (any 5 examples with name and length of object)
4. *Geometry in Art*: Create a geometric art piece using lines and angles.
5. *Number Games*: Play "Guess My Number" with a friend or family member and record the steps.
6. *Palindrome Numbers*: Find and write 5 examples of palindrome numbers.

Subject Enrichment Activity:

7. *Survey*: Conduct a survey on favorite hobbies of your family members or neighborhood and present the data using a bar graph. (do for 5 members)
8. *Pictograph*: Create a pictograph to represent the number of books read by you.
9. *Factor Tree*: Create a factor tree for a given number.

NOTE :

Do your homework in A4 Sheets

SUBJECT : HINDI

पीएम श्री केंद्रीय विद्यालय कर्नूल
शरद कालीन गृह कार्य
कक्षा- छठी

प्रश्न 1) अपने मित्र को जन्मदिन की बधाई देते हुए पत्र लिखें।

प्रश्न 2) भाई की शादी में शामिल होने के लिए विद्यालय से 2 दिन के अवकाश हेतु प्राचार्य को पत्र लिखें।

प्रश्न 3) आपका नाम मोहन है। आप अपने दोस्त सोहन के साथ पिकनिक पर गए हैं। यात्रा के दौरान आप दोनों के मध्य हुए संवाद लिखें।

प्रश्न 4) कृष्ण और मां यशोदा के मध्य हुए संवाद लिखिए। एवं एक सुंदर सा चित्र भी बनाएं। (मैया, मैंने माखन नहीं खाया है) .

Class VII:

SUBJECT : MATHS

1. Write the number 4,05,0678 in words using the Indian place value system.
2. What is the number name for 12,78,830 in the Indian system?
3. How many zeros does 1 crore have?
4. What is the value of one lakh twenty-three thousand four hundred.
5. Compare 30 thousand and 3 million.
6. Which is greater: 500 lakhs or 5 million?
7. Estimate the sum $4,63,128 + 4,19,682$ and determine which lakh it is near.

8. If the Thoughtful Thousands calculator has a +1000 button, how many times should it be pressed to show 53,000?

9. If the Handy Hundreds calculator has a +100 button, how many times should it be pressed to show 3,700?

10. If Roxie eats 3 varieties of rice every day for 100 years, how many varieties will she try?

11. Fill in the blanks to make the expressions equal on both sides of the '=' sign:

(a) $13 + 4 = \underline{\hspace{2cm}} + 6$

(b) $22 + \underline{\hspace{2cm}} = 6 \times 5$

(c) $8 \times \underline{\hspace{2cm}} = 64 \div 2$

(d) $34 - \underline{\hspace{2cm}} = 25$

12. Simplify the following :

a) $100 - (60 + 30)$

b) $(8+2) \times 5$

c) $(6 \times 4) + (6 \times 3)$

d) $(10 \times 5) - (3 \times 5)$

13. Find the decimal form of 854 tenths and 729 hundredths.

14. Find the sum of 13.87 and 2.005.

15. A fruit vendor has 1.012 kg of oranges out of which 0.250 kg were rotten. Find the weight of fresh oranges.

16. Convert as directed : i) 116 mm into cm. ii) 27 paise in rupees

17. Solve : $11 \div 11 + 11 \times 11 =$

18. Match the following :

Column I

(a) 18 tens and 6 tenths

(b) 45 tens, 45 ones, 45 tenths, and 45 hundredths

(c) 22 tens, 13 ones, and 3 tenths

(d) 9 tens, 8 tenths, and 70 hundredths

(e) 34 ones, 7 tenths, and 5 hundredths

Column II

(i) 34.75

(ii) 233.3

(iii) 499.95

(iv) 180.6

(v) 91.5

Q 19. Riya went to Vishal Mega Mart to buy some grocery items.

She bought the following groceries.

Rice, Sugar, Oil, Flour

The prices, she paid for these groceries are

Rice: ₹ 245.75

Sugar : ₹ 120.50

Oil : ₹ 98.35

Flour : ₹ 300.20

She gave ₹ 1000 to the cashier.

Now, answer the following questions.

- (i) How much did she pay?
- (ii) How much did the cashier return to her?
- (iii) If Riya had ₹ 500, how much more money would she need?

Q20. Sunaina's father paid an electricity bill of ₹ 385.70. Out of a 500-rupee note, how much change should he have received?

***Math Project*:** Create a project that demonstrates the application of mathematical concepts in real-life scenarios. Choose a topic of your interest (e.g., finance, science, engineering) and present your findings in a report or presentation. This activity will help you develop problem-solving skills and appreciate the relevance of mathematics in everyday life

NOTE: Do your work on A4 size sheets with proper cover page including name, class, section, roll no.

SUBJECT: HINDI

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शरद कालीन गृह कार्य

कक्षा- सातवीं

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प्रश्न 4) स्वच्छता का महत्व पर अनुच्छेद लिखें।

CLASS: VIII

SUBJECT: SCIENCE

1. Make an exhibit or project for Science exhibition. Theme/ Topic will be shared in parents group.
2. Prepare any one activity from text book for demonstration in the class.
3. Write about any two scientists.
4. Collect the data of vaccination schedule given to the children from primary health centre or ward sachivalayam.

TOPIC: MULTIDISCIPLINARY PROJECT(MDP) BASED ON THE

TOPIC NATURAL RESOURCES .

SUBJECT: MATHEMATICS CLASS:VIII

MAX.MARKS = 10.

WATER CONSERVATION.

- 1) A tank in a village can store 12,000 litres of water.If each family in the village uses 150 litres per day.How many

families can the tank supply water to for 4 days?

FOREST AREA.

2) Out of a total land area of 6,0

00 hectares, 1,800 hectares is

covered by forest.

(I)What fraction of the land is forest area?

(ii)What percentage of the total land is not forest?

COAL CONSUMPTION.

3) A factory uses 2.5 tonnes of coal per day .If coal is supplied

in trucks carrying

20 tonnes each, how many days can one

truck supply coal for?

How many trucks are required for 150 days?

ENERGY FROM SOLAR PANELS.

4) One solar panel produces 5

kwh of electricity per day.

A school needs 750 kwh per month (30 days)

How many such

solar panels should be installed?

RAINWATER HARVESTING.

5) A roof of area 50m x 40m collects rainwater during a shower

of 2 cm rainfall.

If 80% of the rainwater is collected, find the volume of water

stored (in litres) ($1\text{m}^3 = 1000$ litres).

RECYCLING

PAPER.

Producing 1 tonne of paper requires cutting 17 trees.

If a school saves 600 kg of paper in a year through Recycling, , how many trees are saved?.

TOPIC: MULTIDISCIPLINARY PROJECT (MDP) BASED ON THE

TOPIC: **NATURAL RESOURCES.**

SUBJECT: SCIENCE CLASS: VIII

MAX.MARKS = 10.

1. Create a Model on Wind Energy, and make a chart explaining the process of building it.

(Or)

Create a Model on Hydro Electricity, and make a chart explaining the process of building it.

2. Complete the learner's dairy of all Subjects.

CLASS: IX

SUBJECT: SST

Index

1. Introduction

2. Geography Section

3. History Section

4. Political Science Section

5. Economics Section

6. Conclusion

Geography - Activity Idea: "The Journey of Vegetables" (visit a market and buy vegetables and groceries for the day/month).
Maintain a record for it and compare with other shops.

History - Discuss about the 3 leaders of first 3 ch. of History and explain which one was better and why?

Political Science - Design a bookmarks, badges or collages inspired by the Indian constitution.

Economics- Survey in your family/neighbourhood: Which jobs fall under primary, secondary, tertiary sectors? present in a pie chart.

SUBJECT : ENGLISH

With the help of given clues complete the bio-sketch in not more than 80 words.

Rabindranath Tagore

Birth: in 1861, wealthy family of Kolkata

Education: no formal education-left free to pursue his literary activities-interest in literary creation shown even in childhood

Achievements: Nobel Prize for literature (Gitanjali) in 1913-first man from the East to win the prize

Interests: Versatile genius-painted, acted, composed music-keen and active interest in the freedom struggle

Karl Marx

Birth: 15 May, 1818, Treves in Province of Rhineland

Family: upper middle class Jewish

Studied : in universities of Bonn and Berlin

1841: Doctorate degree from Jena University

1850: left Germany, went to London

1867: published first volume of 'Das Capital-got world wide popularity

Other works: 'The Holy Family', 'The German Ideology', 'Communist Manifesto 'The Philosophy of Poverty

Died: 18 March. 1883

Do the exercises from Words & Expressions from

Unit 1- 6

Subject and Verb Agreement

Choose the correct form of the verb to complete each sentence.

1. Neither of the balls _____ any air (has, have)
2. Either the lady or the man _____ going to the market. (is, are)
3. Neither the boys or the girls _____ allowed in the class. (was, were)
4. Neither the chairs nor the table _____ expensive. (is, are)
5. Neither the cups nor the plates _____ washed. (was, were)
6. Neither of them _____ very far. (swims, swim)
7. Either the workers or the boss _____ the grocery. (delivers, deliver)
8. Everybody _____ on time for classes. (was, were)
9. Nobody in the class _____ the correct answer. (knows, know)
10. Neither of the men _____ a pet. (has, have)
11. Either the siren or my watch _____ incorrect. (is, are)
12. Neither her sisters or her brother _____ to the school. (goes, go)
13. Flocks of birds _____ perched on the tree. (is, are)
14. Fifty dollars _____ on the floor. (was, were)
15. Measles _____ a very common disease. (is, are)
16. The boy along with his friends, _____ at the cinema. (was, were)
17. Monkeys as well as crocodiles _____ found at the zoo. (was, were)
18. Mavis together with her brothers _____ absent from school. (was, were)
19. A lot of children _____ wearing their polo shirts. (was, were)
20. Most of my life _____ spent studying. (was, were)

Reported Speech

Write the given sentences into Reported Speech

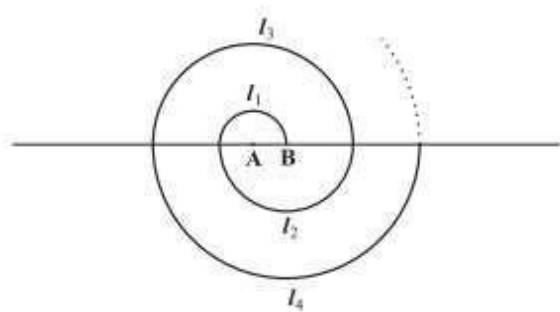
1. Rahul said, "When are you leaving?"
2. The teacher said to Shelly, "Why are you laughing?"
3. "Call the ambulance," said the man.
4. Bruce said, "I shall do the work."
5. My mother said, "You were wrong."
6. Mr. Richard said, "Please wait here till I return."

7. The captain said, "Bravo! You have played well."
8. Raj said, "Alas! My pet died."
9. Ruchi said, "I may go there."
10. Bucky said, "Do you hear me?"
11. The boy said, "Let me come in."
12. Granny said, "May God bless you."
13. "Where do you live?" asked the stranger.
14. "Have you completed your homework?" asked the teacher.
15. "I will visit Paris next year," she said.

CLASS : X

SUBJECT: MATHS

1. Prove the following numbers are irrational numbers.
(i) $\sqrt{3}$ (ii) $\sqrt{5}$ (iii) $5 + 4\sqrt{3}$ (iv) $5 - 4\sqrt{3}$
2. Find the zeroes of the Quadratic polynomials, and also verify the relationship between the zeroes and the coefficients of the polynomials
(i) $5x^2 + 8x - 4$. (ii) $6x^2 - 3 - 7x$.
3. Draw the graphs of the equations $x - y + 1 = 0$ and $3x + 2y - 12 = 0$. Determine the coordinates of the vertices of the triangle formed by these lines and the x-axis, and shade the triangular region.
4. A lending library has a fixed charge for the first three days and an additional charge for each day thereafter. Saritha paid Rs.27 for a book kept for seven days, while Susy paid Rs.21 for the book she kept for five days. Find the fixed charge and the charge for each extra day.
5. A train travels a distance of 480 km at a uniform speed. If the speed had been 8 km/h less, then it would have taken 3 hours more to cover the same distance. Then find speed of a train.
6. The altitude of a right triangle is 7 cm less than its base. If the hypotenuse is 13 cm, find the other two sides.
7. Find the sum of first 15 multiples of 8.
8. A spiral is made up of successive semicircles, with center's alternately at A and B, starting with Centre at A of radii 0.5, 1.0 cm, 1.5 cm, 2.0 cm, as shown in figure. What is the total length of such a spiral made up of thirteen consecutive semicircles? (Take $\pi = 22/7$)



9. Prove that "If a line is drawn parallel to one side of a triangle and intersects the other two sides in distinct points, then other two sides are divided in the same ratio".

drawn parallel to one side of a triangle
two sides in

10. If $\tan(A + B) = \sqrt{3}$ and $\tan(A - B) = \frac{1}{\sqrt{3}}$

; $0^\circ < A + B \leq 90^\circ$; $A > B$, find A and B.

11. If $\sin(A - B) = \frac{1}{2}$

, $\cos(A + B) = \frac{1}{2}$

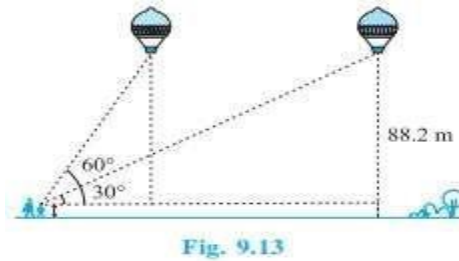
$\frac{1}{2}$

; $0^\circ < A + B \leq 90^\circ$; $A > B$, find A and B.

12. $(\sin A + \operatorname{cosec} A)^2 + (\cos A + \sec A)^2 = 7 + \tan 2A + \cot 2A$.

13. $\sin \theta - 2 \sin^3 \theta + \cos^3 \theta = \tan \theta$

14. A 1.2 m tall girl spots a balloon moving with the wind in a horizontal line at a height of 88.2 m from the ground. The angle of elevation of the balloon from the eyes of the girl at any instant is 60° . After some time, the angle of elevation reduces to 30° (see Fig. 9.13). Find the distance travelled by the balloon during the interval.



15. A straight highway leads to the foot of a tower. A man standing at the top of the tower observes a car at an angle of depression of 30° , which is approaching the foot of the tower with a uniform speed. Six seconds later, the angle of depression of the car is found to be 60° . Find the time taken by the car to reach the foot of the tower from this point.

16. From the top of a 7 m high building, the angle of elevation of the top of a cable tower is 60° and the angle of depression of its foot is 45° . Determine the height of the tower.

17. The tangent at any point of a circle is perpendicular to the radius through the point of contact.

18. Prove that the length of the tangents drawn from an external point to a circle are equal.

19. The taxi charges in a city consist of a fixed charge together with the charge for the distance covered. For a distance of 10 km, the charge paid is ₹ 105 and for a journey of 15 km, the charge paid is ₹ 155/-. What are the fixed charges and the charge per km? How much does a person have to pay for travelling a distance of 25 km?

20. If A and B are $(-2, -2)$ and $(2, -4)$, respectively, find the coordinates of P such that $AP = \frac{3}{7}AB$ and P lies on the line segment AB.

SUBJECT: SST

NAME:

CLASS & SECTION:

ROLL NO:

(Subjects Relevant)

I AM GOOD AT.

MY Limitations.

I WANT TO LEARN / FOCUS.

MY TARGET FOR THE SUBJECT (100)

YOUR THOUGHTS ON THE SUBJECT...

MOST LIKED TOPICS/CHAPTER IN SOCIAL SCIENCE & REASON TO BE LIKED

- 1.
- 2.
- 3.

MY ACTIVITIES

1. ACTIVITY AND YOUR PARTICIPATION

MAP BOOK

(Collection of all the maps)

CLASS : XI

Class XI IP PRACTICALS LIST 2025-26

➤ **Complete the given list of practicals as per the instruction in the class.**

1. Write a python program to design a calculator (+, -, *, /, % and //).
2. Write a Python program to calculate perimeter/circumference and area of shapes such as triangle, rectangle, square and circle.
3. Write a Python program to calculate Simple and Compound interest.
4. Write a python program to find average and grade for given marks.
5. Write a Python program to find the sale price of an item with a given cost and discount (%).
6. Write a python program to find the largest and smallest numbers in a list.
7. Write a python program to find the third largest/smallest number in a list.
8. Write a python program to find the sum of squares of the first 100 natural numbers.
9. Write a python program to print the first 'n' multiples of a given number.
10. Write a python program to count the number of vowels in user entered string.
11. Write a python program to print the words starting with an alphabet in a user entered string.
12. Write a python program to print the number of occurrences of a given alphabet in each string.
13. Write a python program to Create a dictionary to store names of states and their capitals.

14. Write a python program to Create a dictionary of students to store names and marks obtained in 5 subjects.

15. Write a python program to To print the highest and lowest values in the dictionary.

CLASS : XII

Class XII (IP) (Session 2025-26)

Subject Name with code: (065) Informatics Practices

Details of Practical Examination

Maximum Marks: 30

Sno	Area	Marks
1	Program using Pandas and Matplotlib	8
2	SQL Queries	7
3	Practical file (minimum of 15 programs based on Pandas, 4 based on Matplotlib and 15 SQL queries must be included)	5
4	Project Work (using concepts learned in class XI and XII)	5
5	Viva voce	5
	TOTAL	30 M

Order of the points required in practical file:

1. AIM : means the problem which you are going to solve
2. CODING : actual code in Python (Handwritten)
3. OUTPUT : output of the program on sample data (Handwritten or screenshot)
4. VARIABLE AND FUNCTION USED : list of variables and function used in the program

VARIABLE AND FUNCTION USED

Sno	Variable / Function Name	Datatype	Purpose

Practical List:

Data Handling

1. Create a panda's series from (a) Scaler Value (b) List (c) List with index (d) a dictionary of values.
2. Write a program to generate a series using a dictionary to represent month number and month names.

3. Given the following series objects:

S1	
0	13
1	53
2	56
4	12
5	26

S2	
0	26
2	75
3	65
4	35
6	48

(i) What will be the result of $S1 + S2$?

(ii) What will be the result of $S1 - S2$?

4. Given a Series of marks, print all the elements that are above 75 marks.

5. Consider that we have created a Series object as

```
>>> import pandas as pd
```

```
>>> S=pd.Series([0.45, 0.65, -0.25, -0.85])
```

What will be returned by following statements?

(a) $S * 100$

(b) $S > 0$

(c) $S1 = \text{pd.Series}(S)$

(d) $S2 = \text{pd.Series}(S1) + 3$

6. Write a program to create a Data Frame Quarterly Sales where each row contains the Quarterly Sales of TV, Fridge and AC. Show the DataFrame after deleting details of Fridge.

7. Create a data frame for examination result and display row labels, column labels data types of each column and the dimensions

8. Filter out rows based on different criteria such as duplicate rows.

9. Importing and exporting data between pandas and CSV file.

10. Given a dataframe (df) as under: City School

Delhi	7550
Mumbai	8700
Kolkata	9800
Chennai	8600

11. Write a program to print dataframe. Also display first two rows of city column and last two rows of school column.

12. Write a program to create a DataFrame to store Roll Number, Name and Marks of five students. Print the DataFrame and its transpose.

13. Write a program to create a DataFrame which contains RollNumber, Name, Height and weight of 05 students. Create a CSV file using this DataFrame.

14. Write a program to create a DataFrame which contains RollNumber, Name, Height and weight of 05 students. Add a column BMI (Body Mass Index) using appropriate formulas.

15. Write a program in python to create a DataFrame **GARMENTS** from following data and answer the questions (i) to (v)

	Color	Count	Price
Shirt	Blue	35	1500
Tshirt	Green	29	900
Bow	Black	28	350
Trouser	Grey	40	1100
Tie	Red	55	300

(i) Display price of all garments.

(ii) Display color and price of all garments.

(iii) Display color to price of Shirt and Tshirt.

(iv) Display the total value of each garment i.e. count X price

(v) Display all Grey coloured garments.

16. Consider the DataFrame **df** given below. Create the df with the help of Dictionary and perform following task

	Name	Year	Total_Score	Result
0	Anand	2020	410	Pass
1	Manish	2020	350	Pass
2	Rohit	2021	150	Fail
3	Suresh	2021	380	Pass

(i) Display Result of student whose name is "Anand"

(ii) Display details of students who are passed

(iii) Display name and Result column of df for the year 2021

(iv) Display year of Result for the student Rohit

Data Visualization

1. Given the school result data, analyses the performance of the students on different parameters, e.g subject wise or class wise.
2. For the Data frames created in qstn 13, analyze and plot appropriate charts with title and legend.
3. Take data of your interest from an open source (e.g. data.gov.in), aggregate and summarize it. Then plot it using different plotting functions of the Matplotlib library.
4. The data for population of country ABC and PQR is given. Show them using line chart with title, label and legends of both axis:

Year	1960	1970	1980	1990	2000
ABC	449.48	553.57	696.35	870.13	1000.42
PQR	44.91	58.12	78.75	107.74	138.64

5. Given the school result data. Analyze the performance of the students in IP and English subject using bar graph.

Data Management

1. Create a database XIIP
2. Create a student table with the student id, name, gender, dateofbirth, class, section, tcstatus (y/n) and marks as attributes where the student id is the primary key.
3. Insert the details of any 10 new student in the table earlier created.
4. Delete the details of a student whose tcstatus is 'Y' from the above table.
5. Print details of all students whose birth is in the month of July.
6. Use the select command to get the details of the students with marks more than 80.
7. Delete the student whose Student who secured marks less than 5
8. Show the student with marks more than 45.
9. Show the student the record of all Girls students
10. Find the min, max, sum, and average of the marks in a student marks table.
11. Show all Students whose name started with K. (Example Ketaki, Ketan etc)
12. Find the total number of records in the table student
13. Show the records of students in the ascending order of marks.
14. Find the total number of students in each section in the table (using group by)
15. Show the number of students secured marks more than 20
16. Demonstrate use of maths functions.
17. Demonstrate use of text functions.
18. Demonstrate use of datetime functions.
19. Demonstrate use of aggregate functions.
20. Demonstrate use of equi-join with two tables.

PROJECT WORK

The aim of the class project is to create tangible and useful IT application. The learner may identify a real-world problem by exploring the environment. e.g. Students can visit shops/business places, communities or other organizations in their localities and enquire about the functioning of the organization, and how data are generated, stored, and managed. The learner can take data stored in csv or database file and analyze using Python libraries and generate appropriate charts to visualize.

Learners can use Python libraries of their choice to develop software for their school or any other social good.

Learners should be sensitized to avoid plagiarism and violation of copyright issues while working on projects. Teachers should take necessary measures for this. Any resources (data, image etc.) used in the project must be suitably referenced.

The project can be done individually or in groups of 2 to 3 students. The project should be started by students at least 6 months before the submission deadline.

The Informatics Practices (Python-DataFrame/ CSV File) Project Report must contain following and in the same order as mentioned below

- Cover Page
- Project Certificate
- Acknowledgment
- Overview of Python and DataFrame (i.e. Pandas, Matplotlib libraries)
- Need for the Project/Synopses/Summary
- Requirements (Hardware & Software)
- Source Code (listing of all the programs prepared as part of project.)
- Output (Dumps of all the output screens)
- Shortcomings/ Limitations
- Reference (Bibliography/ Books/

Websites) Note:

1. Index to be placed after Acknowledgment in the report but NOT to be mentioned in the index.
2. Running project Source Code to be submitted in a CD/PD along with relevant data/csv files
3. Project CD/PD/Cover Page should be properly LABELED with
 1. Class: XII
 2. Section: C/D
 3. Year: 2024-25
 4. BOARD ROLL No.
 5. Project TITLE

Basic coding required:

- * Data in CSV File
- * Then create dataframe from that csv file
- * Front End in Python
- * Functions for every task (menu driven code)
- * Report/ Output from front-end
- * must handle validations on data
- * Any thing special, that you may implement

