# ARMY PUBLIC SCHOOL KANPUR <br> HOLIDAY HOMEWORK-2024-25 <br> Class IX 

## SUBJECT: ENGLISH

## NOTE- All the holiday homework should be done in a separate file. Homework done in classroom notebook will not be accepted.

## Q1.

a) Read the chapter Kathmandu from BEEHIVE. Compare and contrast the atmosphere in and around the Baudhnath Shrine in 100-150 words.
b) What do the surroundings of a holy place in your city look like? Share your experience in 100-150 words.
Q2. Write an article on 'Cyberbullying: its causes and solutions' in about 150 Words.
Q3. Make a Tense chart with examples on a file sheet.

## ART INTEGRATED PROJECT:-

Q4. Imagine you are on a seven-day tour of Arunachal Pradesh and Meghalaya.
Write a travelogue describing your trip to places in Meghalaya and Arunachal Pradesh. You can paste pictures of the various places you visited, famous musicians of the states, art and craft culture of the state, to illustrate your travelogue. Keep the word limit to 150-200 words.

## Tips to write a travelogue -

*Research about the place
*Highlight the various attraction
*Write descriptively
*Give some cultural background
*Stay and food facilities
*Famous art, musicians, cuisine.
विषय - हिंदी


1. दिए गये चित्र का अपने शब्दों में वर्णन कीजिए।
2. देश प्रेम विषय पर कविता लिखिए।
3. अपनी रुचि अनुसार किसी भी एक खेल के विषय में विस्तार से लिखिए।
4. दुःख का अधिकार कहानी की तरह कोई अन्य कहानी लिखिए और उससे मिलने वाली शिक्षा का भी उल्लेख कीजिए।
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नोट-उपर्युक्त कार्यों के लिए आवश्यकतानुसार चित्रों का प्रयोग भी करिए।
    और इसी से एक पोर्टफोलियो तैयार करिए जिसमें प्रथम पृष्ठ आपके अपने बारे में होना
चाहिए
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## SUBJECT: MATHEMATICS

Note: Do the following work in neat and clean hand writing.

* MAKE A PPT ON THE TOPIC "DECIMAL EXPANSION OF REAL NUMBERS" OF MINIMUM 10 SLIDES.
* DO AN ACTIVITY FROM THE FOLLOWING LINK: https://youtu.be/9GLklorF2ts?si=36UPDSt9xJcDleE
* MAKE A PROJECT FILE ON THE TOPIC "ALGEBRAIC IDENTITIES".


## Do these questions as instructed:

1. Let ' $a$ ' be a non-zero rational number and ' $b$ ' be an irrational number. Is 'ab' necessarily an irrational? Justify your answer with example.
2. Represent $\sqrt{ } 3$ and $\sqrt{ } 3.2$ on the number line.
3. Find ' $x$ ', if $2^{x-7} \times 5^{x-4}=1250$.
4. If $x=9+4 \sqrt{ } 5$, find the value of $\sqrt{ } x-\sqrt{ } \frac{1}{x}$.
5. Find $a$ and $b$, if

$$
\frac{2 \sqrt{5}+\sqrt{3}}{2 \sqrt{5}-\sqrt{3}}+\frac{2 \sqrt{5}-\sqrt{3}}{2 \sqrt{5}+\sqrt{3}}=a+\sqrt{15} b
$$

6. Manu went to his mathematics teacher and asked him "Sir, I want some chocolates to distribute among my classmates for my birthday but I have no monev 「ąn vnı nroviḍ me some chocolates." Teacher told Manu, I am giving $\frac{1}{3+2 \sqrt{2}}$ and $\frac{1}{3-2 \sqrt{2}}$ ars and if you can find the value of sum of their squares, then I will provide you as many chocolates as the resulting value of sum of squares of given numbers. Find the number of chocolates. What value is depicted from this action?
7. Find the value of $m$, if $x+4$ is a factor of the polynomial $x^{2}+3 x+m$.
8. Find the remainder when $x^{3}+x^{2}+x+1$ is divided by $x-\frac{1}{2}$ using remainder theorem.
9. Factorise: $1-2 a b-\left(a^{2}+b^{2}\right)$.
10. If $p(x)=x^{3}+3 x^{2}-2 x+4$, then find the value of $p(2)+p(-2)-P(0)$.
11. Factorise: $x^{3}-6 x^{2}+11 x-6$.
12. In a camp organised by the students of class-9 to donate amount collected to flood victims of Kashmir. At the time of payment of a juice glass at one stall of juice, stall holder asked the students to pay the remainder of $x^{3}+3 x^{2}+3 x+1$ divided by $\left(x-\frac{1}{2}\right)$. What is the price of the juice at the stall? Which value is depicted by class-9 students by organising such camps?
13. Linear equation $x-2=0$ is parallel to which axis?
14. If $(1,-2)$ is a solution of the equation $2 x-y=p$, then find the value of $p$.
15. In an one day international cricket match, Raina and Dhoni together scored 198 runs. Express the statement as a linear equation in two variables.
16. In some countries temperature is measured in Fahrenheit, whereas in countries like India it is measured in Celsius. Here is a linear equation that converts Fahrenheit to Celsius: $\mathrm{F}=[9 / 5] \mathrm{c}+32$, If the temperature is $-40^{\circ} \mathrm{C}$, then what is the temperature in Fahrenheit? 17. If $(p, 2 p+1)$ is the solution of the linear equation $4 x+3 y=23$. Find the value of $p$.
17. Mrs Sharma lost her purse containing 50 rupee and 100 rupee notes amount to Rs. 1500 in a shop. Next day shopkeeper found the purse during dusting. He immediately went to Mrs Sharma's house and returned the purse and rupees. Mrs Sharma appreciates the shopkeeper for his act. '
(i) Represent the situation as an equation.
(ii) What value do you learn from shopkeeper's act?
18. In which quadrant or axis on the following points will lie?
$(-3,5),(2,0),(2,2),(-3,-6),(4,-1)$.
19. Three vertices of any rectangle $A B C D$ are $A(3,1), B(-3,1)$ and $C(-3,3)$. Plot these points on the graph paper and find the coordinates of the fourth vertex D. Also, find the area of rectangle ABCD.
20. Students of class IX are on a visit to Sansad Bhawan. Their teacher assigns them the activity to observe and take some pictures to analyse the seating arrangement between various MP and the speaker based on Coordinate Geometry. The staff tour guide explains various facts related to Maths of Sansad Bhawan to the students. Students are surprised when the teacher asks them to apply Coordinate Geometry on the seating arrangement of MPs and the speaker.


Answer the following questions using the above given image and graph:
(i) What are the coordinates of position ' F '?
(a) $(3,4)$
(b) $(4,3)$
(c) $(-3,4)$
(d) $(-4,3)$
(ii) What are the coordinates of position 'D'?
(a) $(3,2)$
(b) $(-3,-2)$
(c) $(-3,2)$
(d) $(3,-2)$
(iii) What are the coordinates of position 'H'?
(a) $(8,5)$
(b) $(8,4.5)$
(c) $(8,4)$
(d) $(8,5.5)$
(iv) In which quadrant, the point ' C ' lie?
(a) I
(b) II
(c) III
(d) IV
(v) Find the perpendicular distance of the point $E$ from the $y$-axis.
(a) 13 units
(b) 10 units
(c) 11 units
(d) 3 units

NOTE:

- MAKE ONE FOLDER
- WRITE YOUR NAME, CLASS AND SECTION
- SOLVE ALL QUESTIONS ON DOUBLE SIDED A 4 SHEET.
- SEND PPT ON MY WHATSAPP NUMBER.
- KEEP YOUR PROJECT FILE IN FOLDE

SUBJECT: SCIENCE

- Make a Project File on Natural Resources


## SUBJECT: SOCIAL SCIENCE

- Make a Project File on Disaster Management

