## HOLIDAY HOMEWORK

CLASS - X

## * ENGLISH:

- Draft your own Magazine
- Step 1: Make a beautiful cover page and give your magazine a name.
- Step 2: Page 1 Write your own imaginary story(paste pictures also)
- Page 2: Joke, recipe of your favourite dish, crossword puzzle (one each)
- Page 3: Collect and paste any 2 English news headlines.
- Page 4: Write a movie review (word limit 100 words)
- Page 5: Myself (write about your strength and weakness) ( word limit-100 words)
- Page 6: Write \& Paste pictures of any one poet of the states (Puducherry and Uttarakhand)
- NOTE: Use A4 Ruled Sheets.


## * HINDI:

- किसी भी शीर्षक पर एक स्वरचित कहानी अथवा कविता लिखकर एक आकर्षक परियोजना तैयार कीजिए।
- विज्ञापन-आपके बड़े भाई ने बेकरी की दुकान खोली है।उसके लिए एक आकर्षक विज्ञापन तैयार कीजिए। अथवा
- प्रदूषण से बचने के लिए जनहित जारी एक विज्ञापन पर्यावरण विभाग की ओर से तैयार कीजिए।
- कला एकीकृत गतिविधि-उत्तराखंड व पुडुचेरी के वाद्ययंत्रों व किन्हीं चार गायक/गायिकाओं के नाम लिखकर एक सचित्र परियोजना तैयार कीजिए।


## * MATHEMATICS:

$>$ Art integrated Activity : (Do this activity in A4 Shets)

- About Uttarakhand and Puducherry.
- Draw a pie chart of different languages spoken in Uttarakhand and Puducherry.
> Do the following activities in Maths Lab Manual:
- To verify the conditions of consistency/inconsistency for a pair of linear equations in two variables by graphical method.
- To identify Arithmetic Progressions in some given list of numbers.


## $>$ Do the following practice work in a separate notebook.

1. Find the LCM and HCF of 1296 and 5040 by prime factorisation method.
2. The HCF of 408 and 1032 is expressible in the form $1032 \mathrm{~m}-2040$. Find the value of m . Also, find the LCM of 408 and 1032.
3. The LCM of two numbers is 14 times their HCF. The sum of LCM and HCF is 600 . If one number is 280 , then find the other number.
4. In a school, the duration of a period in junior section is 40 minutes and in senior section is 1 hour: If the first bell for each section ring at 9:00 a.m., when will the two bells ring together again?
5. Prove that $16^{n}$ can never end with digit 0 , where n is a natural number.
6. Prove that $\frac{2-\sqrt{3}}{5}$ is an irrational number if it is given that $\sqrt{3}$ is irrational.
7. If one zero of the polynomial $x^{2}-3 k x+4 k$ be twice the other, then find the value of $k$.
8. If $\alpha$ and $\beta$ are the zeroes of the polynomial $a x^{2}-5 x+c$ and $\alpha+\beta=\alpha \beta=10$, then find the value of $a$ and $c$.
9. If one zero of the polynomial $6 x^{2}+37 x-(k-2)$ is reciprocal of the other, then find the value of $k$.
10. Find the quadratic polynomial whose sum of zeroes is 8 and their product is 12 . Hence find zeroes of polynomial.
11. If $\alpha$ and $\beta$ are zeroes of $x^{2}+7 x+12$, then find the value of $\frac{1}{\alpha}+\frac{1}{\beta}-2 \alpha \beta$.
12. Find the zeroes of the quadratic polynomial $5 x^{2}-4-8 x$ and verify the relationship between the zeroes and the coefficients of the polynomial.
13. If the pair of equations $3 x-y+8=0$ and $6 x-r y+16=0$ represent coincident lines, then find the value of $r$.
14. If the system of linear equations $2 x+3 y=7$ and $2 a x+(a+b) y=28$ have infinite number of solutions, then find the values of ' $a$ ' and ' $b$ '.
15. If $217 x+131 y=913$ and $131 x+217 y=827$, then solve the equations for the values of $x$ and $y$.
16. Seven times a two digit number is equal to four times the number obtained by reversing the order of the digits. If the difference of the digits is 3 , determine the number.
17. If -5 is a root of the quadratic equation $2 x^{2}+p x-15=0$ and the quadratic equation $p\left(x^{2}+x\right)+k=0$ has equal roots, find the value of $k$.
18. Solve : $\frac{1}{a+b+x}=\frac{1}{a}+\frac{1}{b}+\frac{1}{x}$.
19. A journey of 192 km from a town $A$ to town B takes 2 hours more by a ordinary passenger train than a super fast train. If the speed of the faster train is $16 \mathrm{~km} / \mathrm{h}$ more, find the speeds of the faster and the passenger train.
20. Find the value of $k$ for which the equation $x^{2}+k(2 x+k-1)+2=0$ has real and equal roots.
21. Three numbers in A.P. have the sum 30 . What is its middle term.
22. The $7^{\text {th }}$ term of an A.P. is 20 and its $13^{\text {th }}$ term is 32 . Find the A.P.
23. Find 10th term from end of the A.P. 4,9, 14, ..., 254.
24. How many natural numbers are there between 200 and 500 , which are divisible by 7 ?
25. Which term of the progression $4,9,14,19, \ldots$ is 109 ?

## SCIENCE:

- From Life Processes chapter and Control and coordination draw all the diagrams in your class work notebook.
- Charts


## * SOCIAL SCIENCE:

$>$ CBSE Project:

- Pick any one and make a project on it.

1. Social issues
2. Sustainable Management
3. Consumer Awareness

## Art Integrated Activity:

- Comparative account of Puducherry and Uttarakhand on

1. Crops
2. Cropping season
3. Irrigation methods

