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.

✤ <u>HINDI:</u>

- 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।

✤ <u>MATHEMATICS</u>:

- > 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 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 16ⁿ 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 $x^2 3kx + 4k$ be twice the other, then find the value of k.

- 8. If α and β are the zeroes of the polynomial $ax^2 5x + c$ and $\alpha + \beta = \alpha\beta = 10$, then find the value of a and c.
- **9.** If one zero of the polynomial $6x^2 + 37x (k 2)$ 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 α and β are zeroes of $x^2 + 7x + 12$, then find the value of $\frac{1}{\alpha} + \frac{1}{\beta} 2\alpha\beta$.
- **12.** Find the zeroes of the quadratic polynomial $5x^2 4 8x$ and verify the relationship between the zeroes and the coefficients of the polynomial.
- **13.** If the pair of equations 3x y + 8 = 0 and 6x ry + 16 = 0 represent coincident lines, then find the value of r.
- 14. If the system of linear equations 2x + 3y = 7 and 2ax + (a + b)y = 28 have infinite number of solutions, then find the values of 'a' and 'b'.
- **15.** If 217x + 131y = 913 and 131x + 217y = 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 $2x^2 + px 15 = 0$ and the quadratic equation $p(x^2 + x) + k = 0$ 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 km/h more, find the speeds of the faster and the passenger train.
- **20.** Find the value of k for which the equation $x^2 + k(2x + k 1) + 2 = 0$ has real and equal roots.
- **21.** Three numbers in A.P. have the sum 30. What is its middle term.
- **22.** The 7th term of an A.P. is 20 and its 13th 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, ... 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

