



# **NORTHERN INDIA PUBLIC SCHOOL**

## **HOLIDAY HOMEWORK**

### **CLASS – X**

Subject :- Science

Physics :- Do all the question of Chapter 1 from S. Chand in holiday home work copy. Make a circuit, which is having one electric bulb, wire and switch.

(a) Parallel ( Roll No. 1 to 6).

(b) Series ( Roll No. 7 to 12 ).

Chemistry :- Prepare a chart / A4sheets on different types of 5 reactions with their examples. Learn Chapter 1.

Biology :- Draw a neat labeled and colorful chart on Human excretory system.

:- Human heart – chart

:- Respiration in human – chart

:- Write at least 50 extra questions of ch.- 1 (Life processes)

Subject :- Maths

Do Chapter 1,2,3 from NCERT in your notebook Revise Chapter 1,2,3 from R.S. Aggarwal.

Subject :- English

(i) Describe your summer vacations in your own words.

(ii) Write the article on the following topics :-

(a) Wastage of food in Indian marriages.

(b) Terrorism

(c) National Integration

**Subject :- IT**

**Draw chart paper about CPU and its internal parts. And write about topologies and draw diagram on A4 sheet.**

**Subject :- S.St.**

**(i) Draw India's map showing its states and capitals.**

**(ii) Prepare an assignment on the following topics :-**

**(a) Average income , per capital income.**

**(b) Human development.**

**(c) Sustainable development.**

**(iii) Write your views on the given topic in 300 words. How can you create more Employment ?**

**Subject :- Hindi**

**Kritika :- Learn the question and answer of chapter 1,2. Write 100hard words.**

**Vyakaran :- Learn chapter 1. Write worksheet chapter 1. Make 2 questions from chapter 1 and find out their answers too. Make 3 questions from Chapter 2 and find out their answers too.**

**पर्यावरण प्रदूषण कारण एवं निवारण और बेटी बचाओ बेटी पढ़ाओ पर निबन्ध लिखिए।**

**हिंदी अध्यापक के रिक्त पद हेतु उस विद्यालय के प्रबन्धक / प्रधानाचार्य को एक पत्र लिखिए।**

**Subject :- S.St.**

**Work sheet I**

**Q.1. Answer the following questions.**

**(i) What is the issue of sustainability important for development ?**

**(ii) List the few examples of environment degradation around you ?**

**(iii) Describe the Primary and Tertiary sector.**

**(iv) Describe MNREGA and its objectives in your own words.**

**(v) What do you understand disguised unemployment ? Explain with example each of the rural and urban areas.**

**Subject :- S.St.**

**Work sheet II**

**Q.1. Answer the following questions :-**

- (i) Explain the biotic resources and Abiotic resources.**
- (ii) Write the type of soil and write about of any three kind of soil in detail.**
- (iii) Write about the Conservation of resources.**
- (iv) What is soil erosion ? How can we conserve our soil from erosion ?**
- (v) What is resource ? How can use save our resources for future use till a long time ?**

**Subject :- Computer**

**Work sheet III**

**Q.1. Answer the following questions :-**

- (i) Write about operating system at least 10 lines.**
- (ii) How many types of network write in detail ?**
- (iii) What are topologies ? Explain about each and everyone in detail.**
- (iv) What is Internet ? How many types of internet connection write about any two in detail ?**
- (v) Define Network Architecture. Describe peer to peer network and client server architecture with the help of diagram.**

**Subject :- Biology**

**Work sheet IV**

**Q.1. What are the conditions necessary for photosynthesis to take place ?**

**Q.2. Draw the different stages in the nutrition of Amoeba.**

**Q.3. Define dental plaque.**

**Q.4. Difference between Aerobic and anaerobic respiration.**

**Q.5. Name the plants transport system and also their function.**

**Q.6. What are the main components of blood.**

**Q.7. The amphibians and reptiles have a three chambered heart ? Why ?**

**Q.8. What is the pulse rate of an adult human while resting ?**

**Q.9. What is the normal blood pressure values of : Systolic pressure & Diastolic pressure**

**Q.10. Write the functions of lymph .**

**Q.11. Each kidney is made up of a large number of excretory unit called as ?**

**Q.12. State the difference between artery veins ?**

**Q.13. What is meant by dialysis ? What type of patients are put on dialysis.**

**Q.14. Define excretion ?**

**Q.15. Draw a neat labelled, diagram of human excretory system.**

**Subject :- Maths**

**Work sheet V**

1. Which of the following are polynomial in x?

(a)  $x^2 - 6\sqrt{x} + 2$  (b)  $\sqrt{x} + \frac{1}{\sqrt{x}}$  (c)  $\frac{5}{x^2-3x+1}$  (d) none of these

2. Polynomial  $2x^4 + 3x^3 - 5x^2 - 5x + 1$  is a

(a) linear polynomial (b) quadratic polynomial (c) cubic polynomial (d) bi-quadratic polynomial

3. If  $\alpha$  and  $\beta$  are zeros of  $x^2 + 5x + 8$ , then the value of  $(\alpha + \beta)$  is

(a) 5 (b) -5 (c) 8 (d) -8

4. The sum and product of the zeros of a quadratic polynomial are 2 and -15 respectively. The quadratic polynomial is

(a)  $x^2 - 2x + 15$  (b)  $x^2 - 2x - 15$  (c)  $x^2 + 2x - 15$  (d)  $x^2 + 2x + 15$

5. Find the quadratic polynomial where sum and product of the zeros are 9 and  $\frac{1}{9}$ .

6. If  $\alpha$  and  $\beta$  are the zeroes of the quadratic polynomial  $f(x) = x^2 - x - 4$ , find the value of  $\frac{1}{\alpha} + \frac{1}{\beta} - \alpha\beta$ .

7. If the square of the difference of the zeroes of the quadratic polynomial  $f(x) = x^2 + px + 45$  is equal to 144, find the value of  $p$ .

8. Divide:  $(6x^3 - 26x - 21 + x^2)$  by  $(-7 + 3x)$ .

9. Apply division algorithm to find the quotient  $q(x)$  and remainder  $r(x)$  on dividing  $f(x)$  by  $g(x)$ , where  $f(x) = x^3 - 6x^2 + 11x - 6$ ,  $g(x) = x^2 + x + 1$

10. If two zeroes of the polynomial  $x^4 - 6x^3 - 26x^2 + 138x - 35$  are  $2 \pm \sqrt{3}$ , find the other zeroes.

11. What must be subtracted from the polynomial  $f(x) = x^4 + 2x^3 - 13x^2 - 12x + 21$  so that the resulting polynomial is exactly divisible by  $g(x) = x^2 - 4x + 3$ ?

12. What must be added to  $6x^5 + 5x^4 + 11x^3 - 3x^2 + x + 5$  so that it may be exactly divisible by  $3x^2 - 2x + 4$ ?

1. A pair of linear equation in two variables which has a common point i.e., which has only one solution is called a

(a) Consistent pair (b) Inconsistent pair (c) Dependent pair (d) None of these

2. If a pair of linear equation  $a_1x + b_1y + c_1 = 0$  and  $a_2x + b_2y + c_2 = 0$  represents coincident lines, then

(a)  $\frac{a_1}{a_2} \neq \frac{b_1}{b_2}$  (b)  $\frac{a_1}{a_2} = \frac{b_1}{b_2} \neq \frac{c_1}{c_2}$  (c)  $\frac{a_1}{a_2} = \frac{b_1}{b_2} = \frac{c_1}{c_2}$  (d) None of these

3. The value of 'k' for which the system of equation  $2x + 3y = 5$  and  $4x + ky = 10$  has infinite number of solutions is

(a)  $k = 1$  (b)  $k = 3$  (c)  $k = 6$  (d)  $k = 0$

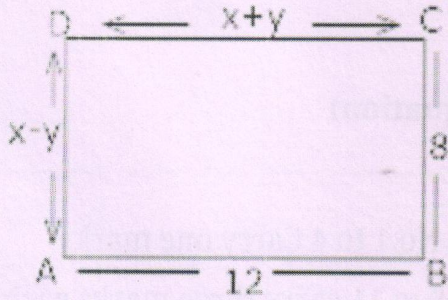
4. If the system of equation  $2x + 3y = 7$  and  $29x + (a + b)y = 28$  has infinitely many solutions, then

(a)  $a = 2b$  (b)  $b = 2a$  (c)  $a + 2b = 0$  (d)  $2a + b = 0$

5. The cost of two kg of apples and 1 kg of grapes on a day was found to be Rs. 160. After a month the cost of 4 kg apples and 2 kg grapes is Rs. 300. Represent the situation algebraically and graphically.

6. Find the value of 'k' for which the system of equation  $kx + 3y = k - 3$  and  $12x + ky = k$  will have no solution.

7. ABCD is a rectangle, find the values of x and y.



8. Solve the following system of equation graphically.

$x + 2y = 1$ ,  $x - 2y = -7$ , also read the points from the graph where the lines meet the x-axis and y-axis.

9. Solve  $23x - 29y = 98$  and  $29x - 23y = 110$ .

10. A man has only 20 paise coins and 25 paise coins in his purse. If he has 50 coins in all totaling Rs 11.25. How many coins of each kind does he have?

11. A says to B "my present age is five times your that age when I was an old as you are now. It the sum of their present ages is 48 years, find their present ages.

12. A boat goes 30 km upstream and 44 km downstream in 10 hours. In 13 hours it can go 40 km upstream and 55 km down stream. Determine the speed of the stream and that of the boat in still water.