

S.V.V. Sr. Sec. School, Tharwai Prayagraj

Summer Holiday Home Work 2019-20

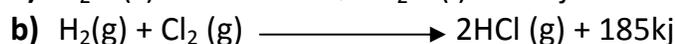
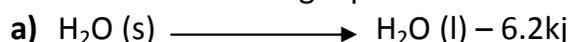
Class-X

Physics

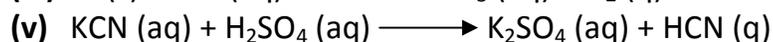
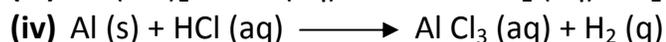
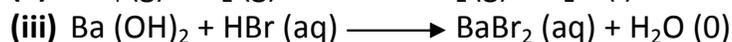
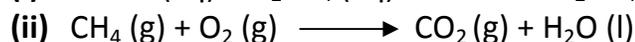
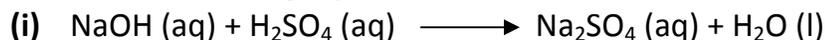
1. Define electric potential and potential difference.
2. Explain Ohm's Law and also explain the factors on which resistivity of conductor depends.
3. Derive an expression for equivalent resistance in series and parallel combination.
4. Solve numerical problems of chapter electricity which is asked in board examination including NCERT exercise problems.

Chemistry

1: Which of the following equations are exothermic or endothermic?



2: Balance the following equations –



Biology

- ❖ Define the following terms –
 - a) Renewable/Non Renewable
 - b) Biodegradable/Non-biodegradable
 - c) Ozone depletion
 - d) Global warming
 - e) Biomagnification
- ❖ Project – Any one {On chart paper} Draw and label
 - Digestive system
 - Respiratory system
 - Excretory system
 - Endocrine system
 - Circulatory system

Computer

1. Write a note in 250 words on "need of computer as a subject"
2. Write 20 programs in python to solve math's problem (Note – take the formulas from your 9th Maths book)

English

1. Write a letter to your younger brother advising him to pay attention to his studies and refrain from watching television for a long time.
2. Write and learn summary of 'A Letter to God and 'Nelson Mandela: Long Walk to Freedom.'
3. Write articles on the following topics:
(i) Importance of Adult Education (ii) Modern food habits and health issue
4. Modern life has paved the way to a mechanical and dependent life on gadgets. They play a significant role in day today life of every human being, thus occupying measure part of their house. Write an article on useful aspects of gadgets and their service to mankind.

Social Science

History : Ch-1
Civics : Ch-1
Geography: Ch-1
Economics: Ch-1

Read these Chapters and make 10-10 questions from each Chapter and gives these Answer's

Maths

1. The numbers 525 and 3000 are both divisible only by 3, 5, 15, 25 and 75. What is HCF of (3000, 525)? Justify your answer.
2. Explain why $(3 \times 5 \times 7 \times 7)$ is a composite number.
3. Can two numbers have 18 as their HCF and 380 as their LCM? Give reasons.
4. Show that the square of any positive integer is either of the form $4q$ or $4q+1$ for some integer q .
5. Using Euclid's division algorithm, prove that cube of any positive integer is of the form $4m$, $4m+1$ or $4m+3$ for some integer m .
6. If n is an add integer, then show that (n^2-1) is divisible by 8.
7. Using Euclid's division algorithm, find the largest number that divides 1251, 9377 and 15628 leaving remainders 1, 2 and 3 respectively.
8. Prove that $\sqrt{3} + \sqrt{5}$ is an irrational number.
9. Show that $(12)^n$ cannot end with digit 0 or 5 for any natural number.
10. For any positive integer n , prove that n^3-n is divisible by 6.
11. Find the zeroes of the polynomials given below by factorization method and also verify between the zeroes and coefficients of the polynomials.
(i) $4x^2-3x-1$ (ii) $3x^2+4x-4$ (iii) $5t^2+12t+7$ (iv) t^3-2t^2-15t (v) $4x^2 + 5\sqrt{2}x - 3$
12. Given that $\sqrt{2}$ is a zero of a cubic polynomial $6x^3 + \sqrt{2}x^2 - 10x - 4\sqrt{2}$, find its other two zeroes.
13. For which values of a and b are the zeroes of $q(x) = x^3 + 2x^2 + a$ also the zeroes of polynomial $p(x) = x^5 - x^4 - 4x^3 + 3x^2 + 3x + b$? Which zeroes of $p(x)$ are not the zeros of $q(x)$?
14. If the zeroes of the polynomial $x^3 - 3x^2 + x + 1$ are $a - b$, a and $a + b$, find a and b .
15. If the polynomial $x^4 - 6x^3 + 16x^2 - 25x + 10$ is divided by another polynomial $x^2 = 2x + k$, the remainder comes out to be $x+a$, Find k and a .

हिन्दी - (गृहकार्य प्रोजेक्ट पेपर पर लिखें)

1. पाठ के आधार पर सूरदास और तुलसीदास के भाषा-सौन्दर्य पर दस-दस पंक्तियाँ लिखिए।
2. "बालगोबिन भगत" पाठ में ऋतुओं के बहुत ही सुंदर शब्द-चित्र उकड़े गए हैं। बदलते हुए मौसम को दर्शाते हुए चित्र/फोटो का संग्रह कर एक अलबम तैयार कीजिए।
3. नेता जी सुभाषचंद्र बोस के व्यक्तित्व और कृतित्व पर एक प्रोजेक्ट बनाइए।