PM SHRI KENDRIYA VIDYALAYA CRPF, GANDHINAGAR

SUMMER VACATION HOMEWORK

CLASS X

SUBJECT ; ENGLISH

Q. 1. Write a letter about lack of proper pavements causing danger to pedestrians.

Write about the poor condition of roads / potholes in your locality.

Suggest measures to improve traffic safety near schools.

Q.2 Write a letter on increasing air pollution in your city.

Highlight the need to ban plastic bags.

Write about the need for tree plantation drives.

Q.3Write about pressure of exams and marks on students.

Suggest improvements in online learning (post-COVID trend).

Write about the need for career counselling in schools.

Highlight mental health awareness among students.

Q.4.Write about child labour in urban areas.

Raise concern about women's safety.

Write about animal cruelty and the need for stricter laws.

Highlight mobile phone addiction among children.

Q. 5. Write about frequent power cuts affecting students.

Suggest improvements in the public transport system.

Complaining about misuse of public parks.

Suggest installing CCTV cameras in markets.

Q.6. Answer the following questions.

A. 'Lencho was an ox of a man, working like an animal in the fields, but still he knew how to write.' What does this line tell us about the norm amongst such farmers, then?

B. The postmaster was a representative of God. Evaluate this statement in the context of your understanding of 'A Letter to God".

C. Rationalise what you think the poet was probably doing when the dust of snow fell on him?

D. The dusting of snow on account of the crow helped make the poet's day better. How do you think the crow's droppings might have impacted the poet?

E. Fire and Ice projects a pessimistic outlook. Comment.

F. Mandela feels that courage is triumph over fear. How would you define courage in this context?

G. Freedom is inconsequential if it is behind bars of prejudice and narrow mindedness. How would you explain this statement? Support your answer with suitable examples from the real world.

H. 'Privilege often confuses actual needs for perceived ones.' Evaluate this statement with reference to Mrs. Pumphrey.

I. "Tricki's only fault was greed", says the narrator. What might be Mrs. Pumphrey's "only fault"?

कक्षा XA, XB (हिन्दी)

1॰ पोर्टफोलियो

2॰ पत्रलेखन **अनौपचारिक पत्र (1)अपने छोटे भाई को कुसंगति से बचाने हेतु एक सुझाव पत्र लिखिए| (2) अपने मित्र के भाषण प्रतियोगिता में प्रथम आने पर एक बधाई पत्र लिखिए)**

औपचारिक पत्र (1)॰ राशन वितरण में अनियमितता की शिकायत करते हुए जिला खाद्यान अधिकारी को एक पत्र लिखिए| (2)आपके शहर में कल कारखानों से प्रदूषण से हो रही वृद्धि को रोकने के लिए नगर निगम अधिकारी को एक पत्र लिखिए | (3) अपने विद्यालय के प्राचार्य महोदय को चरित्र प्रमाण पत्र देने हेतु एक प्रार्थना पत्र लिखिए |

3॰ अनुच्छेद लेखन (1॰ स्वस्थ शरीर एक वरदान 2. राष्ट्र निर्माण में विद्यार्थियों का योगदान 3. साक्षरता उन्नति का मार्ग 4. मेट्रो रेल महानगरीय जीवन का सपना 5.मीडिया बदलता हुआ स्वरूप)

4. सूरदास की जीवनी एवं कृतित्व

5. नेताजी सुभाषचंद्र का जीवन परिचय(

व्याकरण

१. रचना के आधार पर वाक्य भेद के उदाहरण तथा वाक्य परिवर्तन के २० उदाहरण लिखिए।

२ दो अपठित गद्यांश लिखकर प्रश्नोत्तर लिखिए

३. दो अपठित पद्यांश लिखकर प्रश्नोत्तर लिखिए।

PM SHRI KV CRPF GANDHINAGAR

MATHEMATICS HOLIDAY HOME WORK

GENERAL INSTRUCTIONS -

1. Update your Maths portfolio file.
2. Kindly Solve all the questions on A4 Sized sheets or ruled sheets that can be added to your portfolio later.
3. Prepare the Art integrated project assigned to your group.

Q.1 Multiple Choice Questions.

1) A quadratic polynomial, the product and sum of whose zeroes are 5 and 8 respectively is

(a) $k[x^2-8x + 5]$ (b) $k[x^2 + 8x + 5]$

(c) $k[x^2-5x + 8]$ (d) $k[x^2 + 5x + 8]$

2) The LCM of two numbers is 2400. Which of the following can not be their HCF?

(a) 300 (b) 400 (c) 500 (d) 600

3) If the zeroes of the quadratic polynomial

$x^2 + (a + 1) x + b$ are 2 and -3, then

(a) a = -7, b = -1 (b) a = 5, b = -1

(c) a = 2, b = -6 (d) a = 0, b = -6

4) In aΔABC, $\angle A = x°$, $\angle B = (3x - 2)°$,$\angle C = y°$. Also $\angle C - \angle B = 9°$. The sum of the greatest & the smallest angles of this triangle is

(a) 107° (b) 135° (c) 155° (d) 145°

5) If n is natural number, the $2(5^n + 6^n)$ always ends with

(a) 1 (b) 4 (c) 3 (d) 2

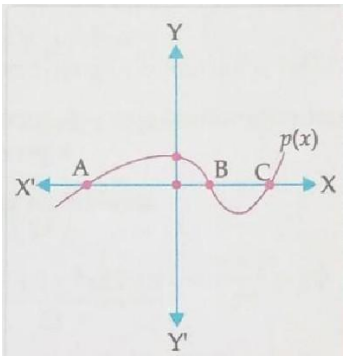
6) 3 chairs and 1 table cost₹900; whereas 5 chairs and 3 tables cost ₹2,100. If the cost of 1 chair is x and the cost of 1 table is y, then the situation can be represented algebraically as

(a) 3x + y = 900. 3x + 5y = 2100
(b) x + 3y = 900. 3x + 5y = 2100
(c) 3x + y = 900 5x + 3y = 2100
(d) x + 3y = 900 5x + 3y = 2100

(e)

7) Given HCF (2520, 6600) = 40 and LCM (2520, 6600) = 252 × k, then the value of k is

(a) 1650 (b) 1600 (c) 165 .(d) 1625



8) In figure, the graph of a polynomial p(x) is shown. The number of zeroes of p(x) is

(a) 1. (b) 2 (c) 3. (d) 4

9) The LCM of smallest two-digit number and smallest composite number is

(a) 12 (b) 4 (c) 20 (d) 40

10) The exponent of 5 in the prime factorisation of 3750 is

(a) 3 (b) 4 (c) 5 (d) 6

11) The values of x and y satisfying the two equations 32x+ 33y = 34, 33x + 32y = 31 respectively are

(a) -1,2 (b) -1,4 (c) 1,-2 (d) -1,-4

12 If n is a natural number, then $2(5^n + 6^n)$ always ends with

(a) 1 (b) 4 (c) 3 (d) 2

13 If x - 1 is a factor of the polynomial $p(x) = x^3 + ax^2 + 2b$ and a + b = 4 then

(a) a = 5 b = - 1
(b) a = 9 b = - 5
(c) a = 7 b = - 3
(d) a = 3 b = 1

14 HCF of two numbers is 27 and their LCM is 162. If one of the number is 54, then the other number is

(a) 36 (b) 35 (c) 9 (d) 81

15 Three alarm clocks ring their alarms at regular intervals of 20 min., 25 min. and 30 min. respectively. If they first beep together at 12 noon, at what time will they beep again for the first time?

(a) 4:00 pm (b) 4:30 pm (c) 5:00 pm (d) 5:30 pm

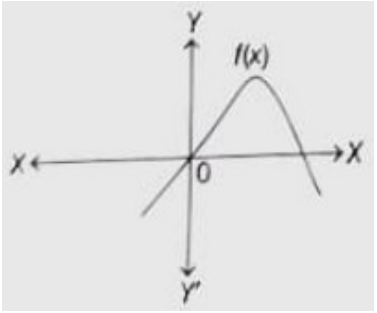
16 A quadratic polynomial having sum and product of its zeroes as 5 and 0 respectively, is

(a) $x^2 + 5x$ (b) $x(x - 5)$ (c) $5x^2 - 1$ (d) $x^2 - 5x + 5$

17 If α and β are the zeroes of the polynomial $x^2 - 1$, then the value of α + β is

(a) 2 (b) 1 (c) -1 (d) 0

18 In the given figure, graph of a polynomial f(x) is shown. The number of zeroes of polynomial f(x) is



(a) 3 (b) 1 (c) 0 (d) 2

19 The LCM of two numbers is 2400. Which of the following cannot be their HCF?

(a) 300 (b) 400 (c) 500 (d) 600

20 The smallest Irrational number by which $\sqrt{20}$ should be multiplled, so as to get a rational number is,

(a) $\sqrt{20}$ (b) $\sqrt{2}$ (c) 5 (d) $\sqrt{5}$

21 The point of intersection of the line represented by 3x - y = 3 and y-axis is given by

(a) (0,-3) (b) (0,3) (c) (2, 0) (d) (-2, 0)

22 HCF of $(3^4 \times 2^2 \times 7^3)$ and $(3^2 \times 5 \times 7)$ is

(a) 630 (b) 63 (c) 729 (d) 567

23 If $a = 2^2 \times 3^x$, $b = 2^2 \times 3 \times 5$, $c = 2^2 \times 3 \times 7$ and LCM (a, b, c) = 3780, then x is equal to

(a) 1 (b) 2 (c) 3 (d) 0

24 The sum of the digits of a two-digit number is 9. If 27 is subtracted from the number, its digits are interchanged. Which of these is the product of the digits of the number?

(a) 8 (b) 14 (c) 18 (d) 20

25 What is the value of k such that the following pair of equations have infinitely many solutions ? x - 2y = 3 and - 3x + ky = - 9

(a) (-6) (b) -3 (c) 3 (d) 6

26 If a and b are two coprime numbers, then a^3 and b^3 are

(a) (a) Coprime (b) Not copríme (c) Even (d) Odd

27 A pair of irrational numbers whose product is a rational number is

(a) $\sqrt{16}$, $\sqrt{4}$ (b) $\sqrt{5}$, $\sqrt{2}$ (c) $\sqrt{3}$, $\sqrt{27}$ (d) $\sqrt{36}$, $\sqrt{2}$

28 Shown below are the graphs of the lines y - 2x = 0, x + y = 6 and px + qy = r.

Which of these is the solution for the pair of equatio x + y = 6 and px + qy = r.

(a) x = 2 Y = 4. b) x = 4 y = 2. c) x = 3 y = 2
(d) We cannot say for sure as the values of p and q are not known.

29. The quadratic polynomial, the sum of whose zeroes is -5 and their product is 6, is

(a) x2 + 5x + 6 (b) x2 - 5x + 6 (c) x2 - 5x - 6 (d) -x2 + 5x + 6

30. The given linear polynomial y = f(x) has

(a) 2 zeroes (b) 1 zero and the zero is 3. (c) 1 zero and the zero is 4 (d) No zero

SHORT ANSWER TYPE QUESTIONS

31) Given that √2 is irrational, prove that (5 + 3√2) is an irrational number.

32) Prove that 11 + 3√2 is an irrational number, given that √2 is an irrational number.

33) Find HCF and LCM of 404 and 96 and verify that HCF × LCM = Product of the two given

numbers.

CASE BASED QUESTIONS

34) In a pool at an aquarium, a dolphine jumps out of the water travelling at 20 cm/s. Its height above water level after t s is given by $p(t) = 20\,t - 16t^2$. On the basis of above information, answer the following questions.

(a) Find zeroes of polynomial $p(t) = 20\,t - 16t^2$
(b) Which types of graph will be represented by p(t)?
(c) What would be the value of h at t = 3 ? Interpret the result.

Or

(b) How much distance has the dolphin covered before hitting the water level again?

35) To enhance the reading skills of grade X students, the school nominates you & two of your friends to set up a class library. There are two sections- section A and dection B of grade X. There are 32 students in section A and 36 students in section B.

35.1) What is the minimum number of books you will acquire for the class library, so that they can be distributed equally among students of Section A or Section B?

a) 144 b) 128 c) 288 d) 272

35.2) If the product of two positive integers is equal to the product of their HCF and

LCM is true then, the HCF (32 , 36) is

a) 2 b) 4 c) 6 d) 8

35.3) 7 x 11 x 13 + 13 is a

a) Prime number b) Composite number c) Neither prime nor composite d) None of the above

Class 10 – Science Holiday Homework

SECTION A: MCQs
1. Which gas is used in storage of fat and oil-containing foods?
(a) CO_2 (b) O_2 (c) N_2 (d) Ne

2. In the reaction $H_2S + I_2 \rightarrow 2HI + S$, the reducing and oxidizing agents are:
(a) Iodine & sulphur
(b) Iodine & hydrogen sulphide
(c) Sulphur & iodine
(d) Hydrogen sulphide & sulphur

SECTION B: SHORT ANSWER QUESTIONS (CHEMISTRY)
1. Write the balanced chemical equations and identify the type of reaction:
(a) Nitrogen + Hydrogen → Ammonia
(b) Sodium hydroxide + Acetic acid
(c) Ethanol + Ethanoic acid

(d) Ethene + Oxygen

2. Write equations and types:
(a) Thermit reaction
(b) Magnesium + Nitrogen
(c) Chlorine + Potassium iodide
(d) Ethanol combustion

3. Complete the following reactions:
(a) $Pb(NO_3)_2 + 2KI \rightarrow PbI_2 + 2KNO_3$
(b) $Cu + 2AgNO_3 \rightarrow Cu(NO_3)_2 +$ ____
(c) $Zn + H_2SO_4 \rightarrow ZnSO_4 +$ ____
(d) $CaCO_3 \rightarrow CaO + CO_2$

4. Identify exothermic/endothermic:
(a) Ferrous sulphate decomposition
(b) Dilution of sulphuric acid
(c) Dissolution of NaOH
(d) Dissolution of NH_4Cl

5. Name the black substance formed and give its formula.

SECTION C: LONG ANSWER QUESTIONS (CHEMISTRY)
1. On heating copper nitrate:
(a) Write equation
(b) Identify brown gas
(c) Type of reaction
(d) pH range

2. Tests for gases: CO_2, SO_2, O_2, H_2

3. What happens when:
(a) $Zn + CuSO_4$
(b) Al + HCl
(c) $Ag + CuSO_4$

4. Zn with H_2SO_4, HCl, HNO_3, NaCl, NaOH

5. $BaCl_2 + Na_2SO_3$ reaction

6. Identify reducing agent (given reactions)

7. Identify oxidising agent (given reactions)

8. Write equations:
(a) $Na_2CO_3 + HCl$
(b) $NaHCO_3 + HCl$
(c) $CuSO_4 + KI$

9. $KCl + AgNO_3$ reaction

10. Ferrous sulphate decomposition

11. Why do fireflies glow at night?

12. Grapes fermentation

13. Physical/chemical changes

14. Metals with dilute HCl observations

15. Identify substance X (oxide used in cement & bones)

16. Lead acetate + HCl reaction

SECTION D: LONG ANSWER QUESTIONS (BIOLOGY)
1. Explain nutrition in Amoeba
2. Describe alimentary canal
3. Explain breathing in humans
4. Importance of soil
5. Draw alimentary canal diagram
6. Digestion of carbohydrates, proteins and fats
7. Mechanism of photosynthesis
8. Three pathways of breakdown
9. Blood circulation
10. Urine formation

SECTION E: ADDITIONAL QUESTION (Q26)
26. Mention the type of chemical reaction and write balanced equation:

(i) $2Mg + O_2 \rightarrow 2MgO$ (Combination reaction)
(ii) $CaCO_3 \rightarrow CaO + CO_2$ (Thermal decomposition)
(iii) $2AgBr \rightarrow 2Ag + Br_2$ (Photochemical decomposition)
(iv) $2H_2O \rightarrow 2H_2 + O_2$ (Electrolytic decomposition)
(v) $NH_3 + HCl \rightarrow NH_4Cl$ (Combination reaction)

FINAL TASK:
Prepare a Portfolio File

HOLIDAY HOME WORK (SUMMER VACATION) 2026-27
SUBJECT- SOCIAL SCIENCE

CLASS- X-A & B

1. Competency Based Questions and their answers of Geography lesson-1, Political Science lesson-1 and Economics lesson-1.
   (Link for CBQ-
   https://drive.google.com/file/d/1Jv78SEQXychMq7uwyHTvS7dNfUJ2xIHbos/view?usp=sharing)

2. Project as per CBSE guidelines on any one of the following topics-
    a- Consumer's awareness
    b- Sustainable Development
    c- Social Issues

(The projects and models prepared should be made from eco-friendly products without incurring too much expenditure. The Project Report should be handwritten.)

The sequence of the project:

- Front Page- School Name, Student's Name, Class, Subject, Topic
- Acknowledgement
- Certificate
- Index- List of topics and sub topics covered under project
- Content (At least 25 pages)
- Creativity and neatness of the project will also be evaluated.
- Student should include graphs, data and images to make the project more efficient.