



केंद्रीय विद्यालय महबूबाबाद / KENDRIYA VIDYALAYA MAHABUBABAD

ग्रीष्मकालीन अवकाश गृहकार्य / SUMMER VACATION HOLIDAYS HOME WORK

कक्षा दसवीं / **Class – X**

Subject : English

Q1.How did Nelson Mandela describe freedom in his speech?

Q2..Letter Writing

Write a letter to your principal requesting permission for a school event.

Q3.Write 2 Analytical paragraphs

Write an analytical paragraph (100–120 words) describing the data. Compare the Activities and give a conclusion.

(graph Screen Time of Students)

The bar graph shows the number of hours students spend on different activities in a Day. Activities:

Studying – 5 hours

Sleeping – 8 hours

Using Mobile – 4 hours

Playing – 2 hours

Other Activities – 5 hour

Q4.Write an analytical paragraph (100–120 words) analyzing the data, comparing the uses, and giving a conclusion.

The pie chart shows the sources of water consumption in a city:

Domestic use – 40%

Agriculture – 30%

Industries – 20%

Other uses – 10%

Q5. Grammar

1.Write the definitions, structure and write 2 examples for all 12 tenses.

2.Write all modal verbs and provide examples for each.

3. Write the definition and structure of direct and indirect speech with examples

MDP - (Multi disciplinary project)

Q7. How is Artificial Intelligence changing the way humans communicate in daily life?

AIP- (Art Integrated project)

Q8. How can the education system be improved to help reduce exam pressure on students?

Including Introduction, Problems in the Current System , Ways to Improve the Education System

Subject : Hindi

(पठन लेखन एवं सृजनात्मक गतिविधि)

1. पोर्टफोलियो
2. कला समेकित परियोजना
3. छुट्टियों के किसी एक दिन का अनुभव विस्तार से लिखिए जिसमें आपने कुछ नया सीखा हो या कहीं भ्रमण किया हो।
4. किसी प्राकृतिक दृश्य या सामाजिक घटना का चित्र चिपकाकर 150 शब्दों में अनुच्छेद लिखिए

Mathematics :

Topics: Real Numbers (Irrational Proofs), Polynomials, Pair of Linear Equations

Instructions:

*Complete the notes of completed chapters

*Do all example and exercise problems from text book.

Show all steps clearly

Use proper formulas

Keep work neat

Section A – Real Numbers (Irrational Proofs)

Q1. Prove that $\sqrt{2}$ is irrational.

Q2. Prove that $\sqrt{3}$ is irrational.

Q3. Prove that $5 + \sqrt{7}$ is irrational.

Q4. Show that the product of a rational number and an irrational number is irrational.

Q5. Prove that $\sqrt{5}$ is irrational using contradiction method.

Section B – Polynomials

(i) Finding Zeroes

Q6. Find the zeroes of the polynomial:

a) x^2-5x+6

b) $2y^2-7+3$

c) x^2+4+4

(ii) Relation Between Zeroes and Coefficients

Q7. Find the sum and product of zeroes of:

a) x^2-3x+2

b) $3x^2+5x-2$

Q8. Find a quadratic polynomial whose sum and product of zeroes are:

a) Sum = 5, Product = 6

b) Sum = -2, Product = -3

(iii) Higher Order Thinking

Q9. If a and b are zeroes of $x^2-7x+10$, find:

a) $a+b$

b) $a \cdot b$

c) a^2+b^2

Section C – Pair of Linear Equations in Two Variables

(i) Solve by Substitution Method

Q a) $x+y=10$.

$$x-y=2$$

b) $0.2x+0.3y=1.3$

$$0.4x+0.5y=2.3$$

(ii) Solve by Elimination Method

11. a) $2x+3y=13$

$$x-y=1$$

b) $3x+4y=25$

$$5x-6y=-9$$

(iv) Word Problems

Q12 The sum of two numbers is 27 and their difference is 3. Find the numbers.

Q13. The cost of 2 pens and 3 notebooks is ₹90. The cost of 4 pens and 2 notebooks is ₹100. Find the cost of each.

Section D – Challenge Questions

Q14. Prove that $\sqrt{2} + \sqrt{3}$ is irrational.

Q15. If one zero of a quadratic polynomial is 2, find the other zero if the sum is 7.

Bonus Activity (Creative Work)

Make a chart showing:

Steps to prove irrational numbers

Graph of a pair of linear equations (intersecting lines)

Relation between zeroes and coefficients.

SCIENCE

1. Revise CHAPTER 1 AND 2 and write question and answers.

2. Complete the following M D P activities?

- I). Write all types of chemical reactions with suitable examples. (use A4 paper portfolio)
- II). Create a Digestive system and Transportation in human beings 2D models (A4 paper)
- III). Prepare Working model on Human respiration system