

**KENDRIYA VIDYALAYA BURHANPUR**

**HOLIDAY HOME WORK (SUMMER VACATION)-2022-23**

**CLASS:-IX**

**SUBJECT:- MATHEMATICS**

**CHAPTER-1-NUMBER SYSTEM**

- 1 Find the value of  $x^{a-b} \times x^{b-c} \times x^{c-a}$  .
- 2 If  $a + 8b\sqrt{5} = \frac{8+\sqrt{5}}{8-\sqrt{5}} - \frac{8-\sqrt{5}}{8+\sqrt{5}}$  determine the rational numbers  $a$  &  $b$
- 3 If  $x = \frac{\sqrt{3}+\sqrt{2}}{\sqrt{3}-\sqrt{2}}$  and  $y = \frac{\sqrt{3}-\sqrt{2}}{\sqrt{3}+\sqrt{2}}$ , find the value of  $x^2 + xy + y^2$
- 4 A shopkeeper sells its items at the rate of Rs.  $\frac{11}{27}$  and Rs.  $\frac{2}{11}$  Per item respectively. Which of the two is a better deal for the customer? If the shopkeeper suggests Rs.  $\frac{2}{11}$  Per item to be the better price, then what moral value does it depicts?
- 5 Express 0.00323232..... in the form  $\frac{p}{q}$  .

**CHAPTER-2-POLYNOMIALS**

- 6 If  $(x - 4)$  is a factor of the polynomial  $2x^2 + Ax + 12$  and  $(x - 5)$  is a factor of the polynomial  $x^3 - 7x^2 + 11x + B$ , then what is the value of  $(A - 2B)$ ?
- 7 Find the value of  $a$  if  $x+6$  is a factor of  $x^3 + 3x^2 + 4x + a$  .
- 8 If  $x - \frac{1}{x} = 3$ , then find the value of  $x^3 - \frac{1}{x^3}$  .
- 9 If a teacher divides a material of volume  $x^3+6x^2+12x+8$  cubic units among three students of his class equally .is it possible to find the quantity of material each gets?

केंद्रीय विद्यालय बुरहानपुर  
ग्रीष्मकालीन अवकाश गृह कार्य  
विषय हिंदी - कक्षा - नौवीं

नोट- वर्तनी शुद्धता पर विशेष ध्यान दें, स्वच्छ व सुंदर लिखें।

प्रश्न 1- दो बैलों की कथा पाठ से 20 बहुविकल्पीय प्रश्नों का निर्माण कीजिए

प्रश्न 2- कबीर दास द्वारा रचित साखी तथा सबद से 20 बहुविकल्पीय प्रश्नों का निर्माण कीजिए।

प्रश्न 3- ल्हासा की ओर पाठ के प्रश्न उत्तर अपनी अभ्यास पुस्तिका में लिखिए।

प्रश्न 4- उपसर्ग तथा प्रत्यय की परिभाषा लिखकर दोनों के 30-30 उदाहरण लिखिए।

प्रश्न 5- मेरे जीवन का लक्ष्य विषय पर 2 पेज का एक अनुच्छेद लिखिए।

प्रश्न 6- एक रचना लिखिए जो स्वयं रचित हो।

विषय अध्यापक हिंदी -मोहम्मद अरशद मलिक

**Holiday Homework (Summer Vacation)**

**Class-IX (A+B)**

**Subject- Science**

1. Draw a well labelled diagram of plant cell and Animal cell and differentiate b/w them
2. List out the cell organelles and their function.
3. Define the following:
  - a) Hypotonic solutions
  - b) Isotonic solutions
  - c) Hypertonic solutions
4. Write the function of-
  - a) Cell membrane
  - b) Cell wall
  - c) Nucleus
5. Write the differences in the characteristics of States of matter.
6. How does evaporation cause cooling?

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**SUMMER VACATION HOMEWORK**

**SUBJECT – SOCIAL SCIENCE**

**Class – 9**

**Geography**

- 1) The sun rises two hours earlier in Arunachal Pradesh as compared to Gujarat in the West but the watches show the same time. How does this happen ?
- 2) Name the countries which are larger than india.
- 3) Write down the Indian longitude and latitude

**History**

- 1) Draw up a list of democratic rights we enjoy today whose origins could be traced to the French Revolution
- 2) Describe the circumstances leading to the outbreak of revolutionary protests in France.

**Politics**

- 1) Write the definition of democracy.
- 2) Write an essay on 'Democracy and poverty' using the information given in this report but using examples from India.

**Economics**

- 1) Is it Important to increase the area under irrigation? Why?
- 2) How does the medium end large farmers obtain capital for farming ? How is it different from the small farmers?
- 3) What are the non farm production activities taking place in your area ? make a short list.

**Kendriya Vidyalaya, Burhanpur**

**Summer vacation homework**

**Subject – Computer**

- Q- 1 What is communication skill ? draw a label diagram of communication cycle ?
- Q- 2 What is non verbal communication ? list any 10 forms of non-verbal communication ?
- Q-3 Write down the importance of communication ?
- Q-4 Explain the components of communication cycle ?