## **KENDRIYA VIDYALAYA SIKAR** CLASS – X

#### **SUBJECT - MATHEMATICS**

#### Home assignment for summer vacation

Q:1. The decimal expansion of  $\frac{147}{120}$  will terminate after how many places of

decimal ?

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

Q:2. If the HCF of 65 and 117 is expressible in the form of 65m-117, then value of

m is

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

Q:3. The quadratic polynomial having zeroes -3 and -2 is

(a) x <sup>2</sup> -5x - 6	(b) x <sup>2</sup> +x-6
(c)x <sup>2</sup> +5x+6	(d) x <sup>2</sup> -5x+6

Q:4. If the pair of linear equations in two variables has infinitely number of

solutions, then the lines represented by these equations are

(a) intersecting lines(b) coincident lines(c) parallel lines(d) perpendicular lines

Q:5. A pair of linear equations  $a_1x+b_1y+c_1=0$  and  $a_2x+b_2y+c_2=0$  has one

solution if

(a) 
$$\frac{a1}{a2} = \frac{b1}{b2} \neq \frac{c1}{c2}$$
 (b)  $\frac{a1}{a2} \neq \frac{c1}{c2}$   
(c)  $\frac{a1}{a2} \neq \frac{b1}{b2}$  (d)  $\frac{b1}{b2} \neq \frac{c1}{c2}$ 

Q:6.Prove that  $3+2\sqrt{5}$  is irrational.

Q:7. Find a quadratic polynomial ,the sum and the product of whose zeroes are -3

and 2 respectively.

**Q:8.** For which values of k will the following equation have no solution ?

3x + y = -12(k-1)x + (k-1)y = 2k+1

- Q: 9. Find HCF and LCM OF 6,72 and 120, using prime factorization method.
- Q: 10. Use Euclid's division algorithm to find the HCF of 455 and 42 .
- Q: 11. Divide  $3x^2 x^3 3x + 5$  by x-1  $x^2$  and verify the division algorithm.
- Q: 12 Solve the following pair of equations

$$\frac{3x}{2} - \frac{5y}{3} = -2$$

$$\frac{x}{3} + \frac{y}{2} = \frac{13}{6}$$

Q: 13. Draw the graphs of the equations x - y + 1 = 0 and 3x + 2y - 12 = 0.

Determine the coordinates of the vertices of the triangle formed by these

lines and the *x*-axis, and shade the triangular region.

Q: 14. Find the zeroes of the quadratic polynomial  $3x^2 - x - 4$ , and verify the

relationship between the zeroes and the coefficients.

Q:15. Show that any positive odd integer is of the form 6q+1, or 6q+3, or 6q+5,

where q is some integer.

Q:16.Obtain all zeroes of the polynomial  $f(x) = x^4 - 3x^3 - x^2 + 9x$ -6, if two of its

zeroes are -  $\sqrt{3}$  and  $\sqrt{3}$ .

Q:17. Ritu can row downstream 20km in 2 hours , and upstream 4 km in

2 hours . Find her speed of rowing in still water and the speed of the current.

# **KENDRIYA VIDYALAYA SIKAR**

### SUMMER VACATION HOMEWORK 2021-22

### **CLASS- X (ENGLISH)**

**<u>NOTE</u>**: All students must prepare a consolidated creative project file for the given assignment.

**1.** Write down a <u>Biography</u> of any poet/author/famous personality as per given in your English textbook.

2. To show your creativity write down a <u>pictorial story</u> as per your choice with suitable moral & title.

**3.** To show your creativity write down a <u>Movie Review</u> on a film based on social/patriotic/science fictional/cartoon etc. theme.

#### 4. Analytical paragraph:

(A) The info graphic given below shows the risk of COVID-19 fatalities in different age brackets and gender.

Write a paragraph analyzing the given data.

MORTALITY RISK RISES WITH AGE				
	Cases	Deaths	Fatality rate	
Below 40	1,911	8	0.4	
40 to 60	1,383	33	2.4	
Above 60	773	69	8.9	
Male	3,091	80	2.6	
Female	976	29	3.0	
Total	4067	109	2.7	
Source: Calcu TOI FORM	lated from I	health minist	rry data released on Apr 6	

Image credit: Times of India

(B) The pie-chart below displays data about the factors which make people happy. The data has been collected from people of two age brackets: under 30 years of age and above 30 years of age. Summarise the information by selecting and reporting the main features, and make comparisons where relevant.



### 4. Write down the following Letters:

(A) You are Sonal/Sonali, a resident of New Shiv Colony, Jaipur. You have noticed that your next door neighbour family (all three members) have COVID-19 flu symptoms like persistent high fever along with cough and cold for more than a week. They are alternately flouting quarantine rules and despite repeated requests made by other neighbours, they are not getting themselves COVIDtested.

Write a letter to the Medical Officer of the local hospital/dispensary, drawing attention towards the same. Explain how such acts impact the health of the community and request immediate intervention and strict action.

(B) You are Prem/Priya from New Delhi and you live near the landfill site. The growing unsanitary conditions are causing multiple diseases and inconvenience due to poor hygiene to the residents. It has also resulted in illnesses and rising fatalities in your colony. Write a letter to the Municipal Commissioner requesting him/her to organize a cleanliness drive.

(C) You are Suresh/Sarita, the student prefect and incharge of the school library. You have been asked to place an order for textbooks on Mathematics. Write a letter to M/s Future Books (P) Ltd., 42734B/2, Ansari Road, Daryaganj, New Delhi placing an order for the books. Invent the necessary details.

(D) India is a highly populated country. People lack in maintaining proper sanitation and hygiene as a result they suffer from various diseases. India has a serious sanitation challenge; around 60 per cent of the world's open defecation takes place in India. Poor sanitation causes health hazards including diarrhea, particularly in children under 5 years of age, malnutrition and deficiencies in physical development and cognitive ability. You are Nitin/Nikita, head boy/girl of Vikas Public School, Jaipur. Write a letter to the editor of a national daily, highlighting the problem and suggesting practical ways to ensure public sanitation and the right to dignity and privacy. (100-150 words).

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# केन्द्रीय विद्यालय सीकर

# <u>ग्रीष्मकालीन अवकाश गृहकार्य (कक्षा – दसवीं ब)</u> विषय : हिन्दी सत्र : 2021-22

प्रश्न:1. 'भ्रष्टाचार: कारण और निवारण' एवं 'विज्ञान वरदान या अभिशाप' विषयों पर 150 से 250 शब्दों तक निबन्ध लिखो I

प्रश्न:2. (क) विद्यालय में भौतिक सुविधाओं की कमी का उल्लेख करते हुए उनकी पूर्ति हेतु अपने विद्यालय के प्राचार्य महोदय को पत्र लिखिए I

(ख) स्वयं को नगरपालिका सुभाष कालोनी (अम्बाला) के वार्ड 14 का निवासी मानते हुए स्वास्थ्य अधिकारी को वार्ड की अस्वच्छता की शोचनीय स्थिति से अवगत कराते हुए सफाई की समुचित व्यवस्था कराने के लिए पत्र लिखिए I

प्रश्न:3. अपने विद्यालय के वार्षिक उत्सव पर एक प्रतिवेदन ( रिपोर्ट ) तैयार कीजिए I प्रश्न:4. 'नेता जी का चश्मा , बालगोबिन भगत और माता का अंचल' पाठों को ध्यानपूर्वक पढ़ो और सारांश लिखो I

प्रश्न:5. अपठित गद्यांश (02) और पद्यांश (02) लिखिए , ध्यानपूर्वक पढ़िए और प्रत्येक के लिए कम से कम पाँच-पाँच प्रश्न-उत्तर लिखिए I

प्रश्न:6. कोई भी दस (10) सरल/साधारण वाक्य लिखो और प्रत्येक से एक संयुक्त और एक मिश्र/मिश्रित वाक्य बनाओ I

विषयाध्याप

क

सन्दीप कुमार ( टी.जी.टी. हिन्दी )

### KENDRIYA VIDYALAYA ,SIKAR

### SUMMER VACATION HOMEWORK

### CLASS – X A SOCIAL SCIENCE

1. Prepare a project file on 'ASSAM'

Topics are - General introduction

History

Land and climate

Culture (Dance, music, handicrafts etc.)

Important festivals

Heritage

Economy

Famous food

Tourism

Famous Personalities

Some important facts about ASSAM

## <u>Note</u>

a) Project file should be well decorated

b) Handwriting should be good

c) Map, pictures, paintings can be used wherever needed.

d) In cover page ASSAM will be written in very big and bold letters.

Students will also mention their name, class, section and roll no. in same page at the bottom. They can also paste their passport size photographs there. 2. Write an essay on 'Swadeshi movement' and relate it with 'Aatmanirbhar Bharat'. (A3 sheet)Pictures can also be pasted.

**3.** Identify and mark all the European countries on Europe map or world map.

4. Write an article on Napoleon Bonaparte. (A4 sheet)

**5.** Prepare 20 objective type questions with answers in your notebook from the following chapters

- Resources and Development
- Nationalism in Europe
- 6. What were Gandhiji's views on conservation of resources?
- 7. Complete all your history and geography work.
- **8**. Prepare 15 mcqs from 'Power sharing
- 9. Answer all the questions given at the end of the chapter.

**10.** Collect the symbols and manifestoes of any 5 national and regional political parties. Collect the photos of political leaders of those parties.

## KENDRIYA VIDYALAYA SIKAR HOLIDAY HOMEWORK FOR SUMMER BREAK 2021-22 SUBJECT SCIENCE. CLASS X SUBJECT TEACHER MOHANLATA B.

Q.1 Make a diagram gallary of following diagrams - This is art integrated project and must do it in a artistic and informative way.

- a human digestive system
- B human respiratory system

C human heart

- D Human excretory system
- E Nephron
- F structure of stomata
- G Cross section of leaf showing stomata

Q.2 Make a list of immunity boosting food easily accessible in our habitat.

Q.3 make a list of traditional food habits of Rajasthan and their significance. For example dal, bati ,churma, rabdi with different variety, varoius type of laddus, variety of lassi etc

Q. 4 (a)Write the formula of sulphates, oxides, carbonates and chlorides of zinc(ii), iron(ii), sodium, calcium

(B)write the formula of nitrates. Iodide, chloride and oxide of lead, pottasium, sodium, silver

STAY AT HOME , STAY SAFE - BE STRONG