

ARMY PUBLIC SCHOOL FATEHGARH

SUMMER VACATION HOLIDAY HOME WORK 2020-21

Class IX

HINDI

१. संवाद लेखन:-

क) माता और पुत्री के बीच कोरोना वायरस के विषय में चर्चा करते हुए।

ख) डॉक्टर व मरीज के बीच हृदय रोग के विषय में चर्चा करते हुए।

२. स्पर्श के गद्य खंड के प्रश्नोत्तर याद करें।

३. स्पर्श में काव्य खंड के प्रश्नोत्तर व व्याख्या याद करें।

४. संचयन के प्रश्नोत्तर याद करें।

५. दो - दो स्लोगन (नारा लेखन) लिखें:-

क) बेटी बेटों से कम नहीं।

ख) वनों को ना काटें।

६. नई तकनीक और शिक्षा - विषय पर अनुच्छेद लिखें।

७. निम्नलिखित शब्दों के ३-३ पर्यायवाची लिखें:-

आग, पानी, पर्वत, नदी, दुख, हिम, सर्प, पक्षी, पशु, वृक्ष।

ENGLISH

1. Listening activity - You are requested to watch English News channel on Television or Mobile everyday at least 20 minutes. While listening news, pick up and Write down unfamiliar words and their meaning with the help of dictionary and learn them.

2. Revision for preparing Periodic Test First.

	Work to Learn	Work to Write
June 1 st week	Beehive unit -1 Ch.1. The Fun they have Poem.1. The Road Not Taken	After learning Unit 1 , note down important points of the chapter and poem.
June 2 nd week	Moments 1. The Lost Child 2. The Adventure on Toto 3. Iswaran the Story teller.	Imagine That you Had lost Your parents in a fair. Write down a diary how you felt that day and what step was taken by you to get your parents.
June 3 rd week	Beehive Unit -2 Ch.2. The Sound of Music Part. 1. Evelyn Part 2. Bismillah khan Poem 2. Wind	Write down Sentence structure of Zero, First , Second and Third Conditional sentences with 5 examples.
June 4 th week	Beehive unit -3 Ch.3 The Little Girl Poem 3. Rain on the Roof	Describe Person- Describe all about a little girl whom you met recently. Hint – her Name, about her study , appearance, behavior Etc.

Note – All Students are requested to complete writing work in your Grammar Notebook.

MATHS

Q.1 If R_1 & R_2 are the remainders when $x^3+2x^2-5ax-7$ and $x^3+ax^2-12ax+6$ are divided by $(x+1)$ & $(x-2)$ and if $2R_1+R_2=6$, then find the value of a .

Q.2 If $a+b+c=8$ and $ab+bc+ca=25$ then find the value of $a^3+b^3+c^3-3abc$.

Q.3 If $x-y=4$ and $xy=21$ then find x^3-y^3 .

Q.4 What must be subtracted from $4x^4-2x^3-6x^2+x-5$ so that the result is exactly divisible by $2x^2+x-2$.

Q.5 Find the value of $(6.5 \times 6.5 - 2 \times 6.5 \times 3.5 + 3.5 \times 3.5)$.

Q.6 Find the value of $(a+b)^3 - (a-b)^3 + 6a(a^2 - b^2)$.

Q.7 Factorize $x^2+xy-2xz-2yz$.

Q.8 Simplify: $\frac{(a^2 - b^2)^3 + (b^2 - c^2)^3 + (c^2 - a^2)^3}{(a-b)^3 + (b-c)^3 + (c-a)^3}$.

Q.9 Simplify: $(\sqrt{5}-4)(\sqrt{5}+4)$.

Q.10 Write 14.2777777..... in $\frac{P}{Q}$ form .

Q.11 Arrange $\sqrt[3]{4}$, $\sqrt[4]{5}$, $\sqrt[4]{3}$ in ascending order.

Q.12 Find the value of 'a' and 'b' if $\frac{3-\sqrt{5}}{3+2\sqrt{5}} = a\sqrt{5} - b$.

Q.13 Find the value of $(\sqrt{2} + \sqrt{3})^2$.

Q.14 The possible value of 'p' and 'q' for the equation $\frac{\sqrt{3}-1}{\sqrt{3}+1} = p + q\sqrt{3}$.

Q.15 If $x = 1 + \sqrt{2}$ then find the value of $x + (\frac{1}{x})$.

Q.16 Find the value of $(\frac{\sqrt{6}+\sqrt{3}}{\sqrt{8}-\sqrt{3}})(\frac{\sqrt{6}-\sqrt{3}}{\sqrt{8}+\sqrt{3}})$.

Q.17 Rationalize $\frac{2+\sqrt{4}}{3-2\sqrt{5}}$.

Q.18 Find the value of $\sqrt{U^{-1} \times V} \sqrt{V^{-1} \times W} \sqrt{W^{-1} \times U}$.

Q.19 Find the value of $(\frac{1024}{32})^{\frac{4}{5}}$.

Q.20 Find the value of $\frac{(a^{x+y})^3 (a^{y+z})^3 (a^{z+a})^3}{(a^x a^y a^z)^6}$.

Q.21 If $2X - 4 \times 52X - 13 = 100000$ then find the value of x.

Q.22 Simplify

(i) $\frac{3}{\sqrt{3}+1} + \frac{5}{\sqrt{3}-1}$

(ii) If $\frac{\sqrt{7}-1}{\sqrt{7}+1} + \frac{\sqrt{7}+1}{\sqrt{7}-1} = a + b\sqrt{7}$, find the value of a and b.

Q.23 Find the value of x if $(\frac{3}{5})^x \times (\frac{5}{3})^{2x} = \frac{125}{27}$.

Q.24 Simplify $\frac{(25)^{\frac{3}{2}} \times (243)^{\frac{3}{5}}}{(16)^{\frac{5}{4}} \times (27)^{\frac{4}{3}}}$

Q.25 Visualize the following by successive magnification method.

(1) 7.825

(2) 3.377

Q.26 Show :-

(1) $\sqrt{7.7}$ on a number line and justify it.

(2) $\sqrt{4.3}$ on a number line and justify it.

Q.27 Do the following questions of exercise 2.5

1-(iv,v)

2-(ii,iii)

4-(iv,vi)

5-(ii)

6-(iii,iv)

7-(ii,iii)

8-(iii,v)

10-(I,ii)

12, 13, 14-(I,ii) 15-(i) 16-(ii)

Q.28 Find $P(0) + P(-1)$ if $P(x) = 8x^3 - x^2 + 5x - 3$

Q.29 Find the value of a if $(x+a)$ is the factor of $P(x) = x^3 + ax^2 + 2x + a + 4$.

Q.30 Find the remainder when $P(x) = 8x^3 - x^2 + 2x - 3$ is divided by $(2x-1)$

Q.31 Factorise the polynomial:

$$P(x) = 6x^3 + x^2 - 12x + 5$$

Q.32 Find the Zero of $P(X) = 2x + 5$

Q.33 Find the value of $(-17)^3 + (12)^3 + (5)^3$ by using identity.

Q.34 Give possible expressions for length & breadth of rectangle if Area = $6x^2 + 5x - 6$.

Q.35 If $a + b + c = 10$ and $ab + bc + ca = 12$ then find the value of $a^3 + b^3 + c^3 - 3abc$.

Q.36 If $\frac{\sqrt{3}-1}{\sqrt{3}+1} + \frac{\sqrt{3}+1}{\sqrt{3}-1} = a + b\sqrt{3}$, find the value of a and b.

Q.37 Factorize by using factor theorem.

$$P(x) = x^3 - 23x^2 + 142x - 120$$

Q38. Define angle and its properties.

Q39. If two lines intersect each other, then the vertically opposite angles are equal.

Q40. Solve example no. 1 at page no. 95.

Q41. Solve question no. 2, 4, 5 and 6 of Ex: 6.1 .

Q42. Solve example no. 6 at page no. 103 .

Q43. Solve question no. 3, 4, 5 and 6 of Ex: 6.2 .

Q44. Prove that the sum of all the angles of a triangle is 180° .

Q45. Solve the example no. 8 at page no. 106 .

Q46. solve question no. 1, 3, 5 and 6 of Ex: 6.3 .

SCIENCE

1. Draw the diagram of plant cell and animal cell .
2. Do all ncert numericals of chapter Motion.
3. Learn all ncert questions and answers.
4. Make a project file on characteristics of particles of matter with activity.

Note: Make a separate notebook for holiday homework.

SOCIAL SCIENCE

Write the answers of the following questions:

1. Describe the condition of France before revolution.
2. What were the causes of the French Revolution?
3. How did France become a constitutional monarchy?
4. Describe the Reign of Terror.

5. What was the main objective of National Assembly?
6. "India's land routes have been important since ancient times." Explain.
7. What do you know about India and her neighbors?
8. Differentiate between bhangar and khaddar.
9. Describe how Himalayas were formed?
10. Differentiate between Western Ghats and Eastern Ghats.
11. What are merits of democracy?
12. What do you understand by Universal Adult Franchise?
13. Differentiate between democratic and non-democratic government.
14. Describe non-farming activities of village Palampur.
15. What are the negative impacts of modern farming?
16. On the outline map of India locate and label the following: a. Tropic of Cancer b. IST c. K2 d. Tapti river e. Lakshadweep f. Chilka Lake g. gulf of Mannar

IT(402)

(A)

Find the pictures of Input & Output devices and paste it on a Chart

OR

Make a **Power point presentation** explaining the working of Input and Output devices.

(B)

Find the pictures of types of Ports used in a computer and paste it on a Chart

OR

Make a **Power point presentation** explaining various types of Ports used in a computer.

(C)

Draw a Client – Server Model and a P2P network model on a chart paper/ file sheet.

OR

Draw a Client – Server Model and a P2P network model on a computer.

(D)

Read Session 5 & 6

DRAWING

1. Make a still life composition and shade it by using pencils- 2B, 4B, n 6B
Object- Home Utensils
2. Make a Landscape drawing including the following - Mountain, Tree, River, House. (Pencil shading /Pencil Colours).