

ARMY PUBLIC SCHOOL

FATEHGARH CANTT

SUMMER VACATION HOMEWORK 2019-20

CLASS – IX

English

1. Use the correct form of the verbs given in brackets:

1. It must be in mind that it is essential for us to be extremely honest in our dealings. (bear)
2. Before leaving for US, Anil farewell to all his relatives. (bid)
3. The robber broke into the house and the lone occupant with ropes. (bind)
4. He could not sleep because he was by mosquitoes. (bit)
5. The intruder a severe blow on the head. (deal)
6. I work in my own style, not the way you or Shyam . I do not like the way Karim is it today. (do)
7. Ravi the bag out of the window. (fling)
8. Ahmed was severely injured in the accident and he to death if the ambulance had not arrived. (bleed)
9. That he would suffer financial loss was by an astrologer. (foretell)
10. It is cold in this country. As she walked towards the lake, she found it completely while returning she saw a huge bear and she at the sight. (freeze)

Q.2. Fill in the blanks with appropriate active or passive verb forms. Each question is followed by three suggested answers. Choose the most appropriate one.

1. Channel Islanders English and French.
(a) speak (b) is spoken (c) is speaking
2. The roof is by a friend of ours.
(a) repairing (b) being repaired (c) been repaired
3. Your life will by this book.
(a) change (b) be changed (c) be changing
4. The furniture was up for firewood.
(a) Broke (b) Broken (c) Breaking

5. She needs to be care of.
 (a) Take (b) Taken (c) Taking
6. He hates a fool of.
 (a) Be made (b) Being made (c) Being make
7. Too many books about the Second World War.
 (a) Have written (b) Have been written (c) Are writing
8. I by Mary wanting to tell everybody what to do.
 (a) Annoyed (b) Was annoyed (c) Have annoyed
9. Those pyramids around 400 AD.
 (a) Are being built (b) Were built (c) Have built
10. Her attitude me.
 (a) Shocked (b) Was shocked (c) Was shocking
- Q.3. Prepare a project on any burning/ current issue in our country. You can paste pictures regarding the topic and describe about the same. (use chart or file papers)
- Q.4. summarize the story 'The Fun They Had' and 'The lost Child'.
- Q.5. learn vocabulary from your book 'Moment' chapter- 01 and Beehive Unit-2 chapter -01 and use all words in your own sentences. They should not be from the chapters.
- Q.6. learn questions' answer-
 Book 'Moment' Chapter -01
 Book Beehive , unit 01 and 02

विषय—हिन्दी

प्र.1—स्पर्श के सभी पाठों के प्रश्न—उत्तर याद करिए।

2—अनुच्छेद लिखिए—

- क—परिश्रम सफलता की कुंजी।
 ख—इंटरनेट —आज की आवश्यकता।
 ग—मतदान की उपयोगिता।

3—पत्र लिखिए—

- क—छात्रावास में अपनी दिनचर्या के बारे में बताते हुए बड़ी बहन को पत्र।
 ख—परीक्षा में असफल अपने मित्र के प्रति सहानुभूति प्रकट करते हुए पत्र।

4—संवाद लिखिए—

- क—टी. वी. देखना समय की बर्बादी है—इस विषय पर माता—पुत्र के बीच संवाद।
 ख—ग्रीष्मावकाश के बारे में दो मित्रों के बीच संवाद।

Mathematics

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 $\sqrt{U^{-1}} \times \sqrt{V^{-1}} \times \sqrt{W^{-1}} \times \sqrt{U}$.

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 $2^{x-4} \times 5^{2x-13} = 100000$ 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 Plot the following points in the coordinate plane: A (- 4, 3), B (-6, 0), C (-4, -2) and name the figure formed by joining the points A, B and C .

Q.29 Find $P(0) + P(-1)$ if $P(x) = 8x^3 - x^2 + 5x - 3$

Q.30 Find the value of a if $(x+a)$ is the factor of $P(x) = x^3 + ax^2 + 2x + a + 4$.

Q.31 Find the remainder when $P(x) = 8x^3 - x^2 + 2x - 3$ is divided by $(2x-1)$

Q.32 Factorise the polynomial:

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

Q.33 Find the Zero of $P(X) = 2x + 5$

Q.34 Find the value of $(-17)^3 + (12)^3 + (5)^3$ by using identity.

Q.35 Give possible expressions for length & breadth of rectangle if Area = $6x^2 + 5x - 6$.

Q.36 In which quadrant or on which axes does each of the following lie:

$(-2, 6)$ $(-3, 0)$ $(0, -5)$ $(4, -1)$. Verify by plotting them on the graph.

Q.37 If $a+b+c=10$ and $ab+bc+ca=12$ then find the value of $a^3+b^3+c^3-3abc$.

Q.38 Plot the following points in the coordinate plane: A (- 4, 4), B (-6, 0), C (-4, -4), D (-2, 0) and name the figure formed by joining points A, B, C and D.

Q.39 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.40 Factorize by using factor theorem.

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

SCIENCE

- 1 Draw the well labeled diagram of plant and animal cell on a chart paper.
- 2 Solve 20 numerical based on chapter Motion including intex and exercise questions.
- 3 Name the scientist, whom do you like the most. Past his/her picture on a separate file and express your views about his/her famous discoveries.
- 4 Learn all the chapters which have been taught in the class.

SOCIAL SCIENCE

CIVICS

1. General elections are held every five year in the country. You have to collect information about the elections that take place during this session.

Main points:-

General points

Agenda's of any 2 major National Party

Role of Election Commission in elections.

2. Make a Preamble on front page of your civics copy.

ECONOMICS

3. India's position in the world poverty index.
4. Name the top most three countries in this index.
5. Write a short note on any 5 non-farming activities.

GEOGRAPHY

1. Write short note on Cyclone Fani. Also paste pictures & measures taken by the government
2. Pg.no 52 map skills
3. Pg.no 16 map skills
4. Pg. no. 40 map skills.

HISTORY

1. Describe the contribution of the French philosopher in the French revolution.
2. On outline map of France mark:-
Bordeaux
Paris
Nantes
Marseilles

IT (402)

1. Download the softcopy of the book from the CBSE website.
2. Answer the questions given on page no. 72 in your fair note book
3. Solve the exercise given on page no. 81 & 114 after reading the lesson. Do it in your fair note book
4. The following tasks to be done on computer. The work should be shown in PDs or CDs
 - a. Read the instructions given on page no. 208 and write a similar letter.
 - b. Create a list of teachers as given on page 218.