HOLIDAY HOMEWORK
CLASS :- IX
Let's Pen The Pandemic : Covid - 19

"Start where you are. Use what you have. Do what you can."

GENERAL INSTRUCTIONS TO BE FOLLOWED WHILE DOING HOLIDAY HOMEWORK:

- It is compulsory to attempt each subject.

- Summer vacations are going to be started from June 10 to 25, 2020.

- Submit your assignments to Subject teachers as the school reopens.

- Holiday homework should be done as per the given instructions

- Label properly the name, class roll no and subject.

- The work will be assessed for the neat handwriting, presentation, creativity and submission of the work on time.

ENGLISH

Q1. Read the book Wings of Fire by A.P.J.ABDUL Kalam and write a book review for the same. Make sure you include your personal response to the review. Also make a creative book jacket and put the review in it . Do not replicate the original cover of the book.

Q2. Collect any five news item on the given issues. Paste them in a scrape book /notebook and comment on any two in 120 -150 words. The given roll numbers will work on the following topics.

▪Environmental Issues (roll no.1- 15)

▪Technological Developments (roll no. 16 -30)

▪Women Centric Issues (roll no. 31 and above)

हिंदी

रचनात्मक कार्य (एक्टिविटी कोरॉना शब्दावली)

प्रश्न - दिए गए कॉरोना से संबंधित शब्दों के अर्थों को जानिए तथा शब्दों व उनके अर्थों को लिखकर चित्रों के माध्यम से एक फाइल तैयार कीजिए।

1 - virus - विषाणु

2- novel - नया

3 - infection- संक्रमण

 4 - droplets बूंदे

5 - contagious- संक्रामक

6 - outbreak प्रकोप

7 - screening जांच

8- symptoms लक्षण

9- patient zero सबसे पहला बीमार व्यक्ति

10- diagnose निदान

11- contact tracing संक्रमित व्यक्ति किस - किस के संपर्क में आया

12- epidemic महामारी

13- pandemic सर्वव्यापी महामारी

14- fomit संक्रमित वस्तुएं

15- quarantine संगरोध

16- isolation एकांत

17- social distance सामाजिक दूरी

18- community spread पूरे समुदाय में रोग का फैलना

19- sanitizer प्रक्षालक

20- PPE (personal protective equipments) बीमारी से बचने के लिए डॉक्टर द्वारा प्रयोग की जाने वाली वस्तुएं

MATHEMATICS

Q.1 Find a rational number lying between $\sqrt{2}$ and $\sqrt{3}$.

Q.2 When $15\sqrt{15}$ is divided by $3\sqrt{3}$, then find the quotient.

Q.3 Express $0.\overline{57}$ in the form p/q, where p and q are integers and $q \neq 0$.

Q.4 If $x^2 + kx + 6 = (x+2)(x+3)$ for all x, then find the value of k.

Q.5 What is the remainder when $x^3 - 2x^2 + x + 1$ is divided by $(x-1)$?

Q.6 If $x^2 + \dfrac{1}{x^2} = 38$, then find the value of $\left(x - \dfrac{1}{x}\right)$.

Q.7 Factorise :- $x^2 + 3\sqrt{3}\,x + 6$.

Q.8 If (-1) is a zero of the polynomial $p(x) = ax^3 + x^2 + x + 4$, find the value of a.

Q.9 If $x = 3 + 2\sqrt{2}$, check whether $\left(x + \dfrac{1}{x}\right)$ is rational or irrational.

Q.10 Simplify :-

(i) $2\sqrt{50} + 3\sqrt{32} + 4\sqrt{18}$

(ii) $\left(\dfrac{15^{1/3}}{9^{1/4}}\right)^{-6}$

Q.11 Prove that $\dfrac{1}{2+\sqrt{3}} + \dfrac{2}{\sqrt{5}-\sqrt{3}} + \dfrac{1}{2-\sqrt{5}} = 0$

Q.12 Locate $\sqrt{4.7}$ on the number line.

Q.13 If $a=2$, $b=3$ then find the values of the following :-

(i) $\left(a^{b} + b^{a}\right)^{-1}$

(ii) $\left(a^{a} + b^{b}\right)^{-1}$

Q.14 Factorise : $x^{3} + 6x^{2} + 11x + 6$.

Q.15 Evaluate the following products without multiplying directly :-

(i) 103×107

(ii) 104×96.

Q.16 If both $(x-2)$ and $\left(x-\dfrac{1}{2}\right)$ are factors of $px^{2}+5x+r$, show that $p=r$.

Q.17 Verify that :-

$$x^3 + y^3 + z^3 - 3xyz = \frac{1}{2}(x+y+z)\left[(x-y)^2 + (y-z)^2 + (z-x)^2\right]$$

Q.18 Without actually finding the cubes find the values of

(i) $(30)^3 + (20)^3 - (50)^3$

(ii) $(-8)^3 + (-7)^3 + (15)^3$.

Q.19 Prove that :-

$$\left(\frac{x^a}{x^b}\right)^{\frac{1}{ab}} \cdot \left(\frac{x^b}{x^c}\right)^{\frac{1}{bc}} \cdot \left(\frac{x^c}{x^a}\right)^{\frac{1}{ca}} = 1$$

Q.20 Express $0.6 + 0.\overline{7} + 0.4\overline{7}$ in the form of p/q, where p and q are integers and $q \neq 0$.

PHYSICS

1. Derive the equations of motion by graphical method.

2. What is the difference between speed and velocity?

3. A car accelerates uniformly from 18 kilometre per hour to 36 kilometre per hour in 5 seconds calculate the acceleration and distance covered by the car in that time.

4. The brakes applied to a car produce an acceleration of 6 metre per second square in the opposite direction to the motion. if the car takes 2 second to stop after the application of brakes calculate the distance it travels during this time.

5. What does the path of an object look like when it is in uniform motion?

6. If action is always equal to the reaction explain how a horse can pull a cart.

7. explain why is it difficult for a Fireman to hold hose ,which is act large amount of water at a high velocity.

8. Why is it advised to tie any luggage kept on the roof of a bus with a rope?

9.from a rifle of mass 4 kilogram a bullet of mass 50 gram is fired with an initial velocity of 30 metre per second calculate the initial recoil velocity of the rifle.

10.an object experiences a net zero external unbalanced force is it possible for the object to be travelling with a non zero velocity? if yes, state the conditions that must be placed on the magnitude and direction of the velocity. if no provide a reason.

CHEMISTRY

1- What is meant by change of state?

2- Convert the following temperatures to kelvin scale:
    (a) 40°C   (b) 325°C

3- Convert the following temperatures to celcius scale:
    (a) 427 K   (b) 310 K

4- Write the characteristics of liquids.

5- Why does evaporation cause cooling.

6- Define latent heat of vaporisation

7- Why are solids closely packed?

8- Why do wet clothes dry earlier in summer?

9- What is the difference between evaporation and boiling?

10- Classify the following as solids, liquid and gases:
    Graphite, milk, oxygen, petrol, chlorine

Chapter-02 (Is Matter Around Us Pure)

1. Write three constituents of milk.
2. Give one example to show that the constituents of a mixture can be separated by physical method.
3. What is meant by concentration of solution.
4. Write the properties of suspension.
5. A solution contains 20 gm of a solute in 200 gm of water. What is the concentration of solution?
6. What is an element? Give two examples.
7. What is Tyndall effect?
8. Name the process that can be used for the separation of Cream from milk.
9. What is the size of particles in a true solution?
10. What type of element is antimony.

BIOLOGY

1-COVID-19 Lockdown -A makeover for 'Mother Nature'   5

(Collect information and write how the corona virus pandemic is affecting

the carbon-di-oxide emission,how the rivers are much clear now,how

ozone layer is healing ,how the animals are roaming freely on the streets,

how the nature is healing during the lockdown).

Support your views by pasting pictures.

2-Write various ways to boost your immune system and three points on   5

about how will you protect yourself from corona virus.

*Learning outcome-

By this activity students will learn about the positive points of

corona virus which have been received by our nature and how

we can increase our immunity power due to corona virus

SOCIAL SCIENCE

Dear Class IX Students as you all know that this year you will have to develope a Project Report in Social Science and your topic is 'DISASTER MANAGEMENT' (prescribed by CBSE) your report will be of maximum 10pages we are also sending you one video related to your project for your assistance .Kindly go through the video before commencing your project and you can also go through the books ,News paper , Magazine. or any relevant sources which you find the best way of collecting information .So make your project attractive and impressive.

9 Class SST project

https://youtu.be/_iXMQRN5LvY

Work out

Students will take two bowls and hang them in the balcony of their house. Everyday.

They need to fill them with grains and water respectively to feed the birds.

Note : This activity will help the students to connect to the nature and they will develop a sense of compassion. Visual and Performing Arts

DP