ARMY PUBLIC SCHOOL SHANKAR VIHAR
SUMMER HOLIDAY HOMEWORK
CLASS X

ENGLISH:-

POWERPOINT PRESENTATION

1. Make an interesting and creative PowerPoint presentation on Literary Devices or Figures of Speech.(1. Simile 2. Metaphor 3. Alliteration 4. Assonance 5. Consonance 6. Personification 7. Irony 8. Pun 9. Imagery 10. Hyperbole). A list of 10 must-haves is given to you. Please feel free to add at least **FIVE** more from your side. You may use audio/video clips, pictures and illustrations to make your presentation interesting.

INTERVIEW

2. If you can turn back the clock and travel to Africa to interview Nelson Mandela on the Inauguration Day, after the ceremony, what would you ask him? Write the conversation that would take place between you and him.

(You: ……
 Nelson Mandela: ….
 You: ……..)

POSTER MAKING

3. Challenge your artistic side and design a digital poster, using any application or platform, on **any one** of the following:
   § All Lives Matter
   § Each One Teach One
   § Precautions Against CoVid

HINDI:-

निर्देश –

- **प्रश्न 1 padlet पर साझा करिए-**
  https://padlet.com/neelimapathak29674/8okuh8kdv3j228z9
- **प्रश्न 2,3,4,5,6,7 उत्तर पुस्तिका में लिखिए | ग्रीष्मावकाश गृहकार्य को आतंरिक मूल्यांकन के अंतर्गत जाँचा जाएगा |**

1) अ पने घर या पड़ोस के किसी वरिष्ठ व्यक्ति के समय की शिक्षा प्रणाली पर चर्चा करते हुए अपनी आधुनिक शिक्षा प्रणाली के साथ तुलना कीजिए | अपनी बातचीत को रिकॉर्ड करिए |

2) बड़े भाई साहब कहानी को चित्रात्मक तरीके से समझाइए |

3) पढ़ाए गए पाठों में से मुहावरे छाँटकर लिखिए तथा उनसे इस प्रकार वाक्य बनाइए की अर्थ स्पष्ट हो जाए |

4) अपनी अथवा अपनी माँ की पसंद का कोई खाद्य पदार्थ अपनी माँ की सहायता से बनाइए तथा उसमें प्रयुक्त सामग्री का विवरण देते हुए बनाने की विधि हिंदी में लिखिए |

5) ‘आप एक योग प्रशिक्षण केंद्र खोलना चाहते हैं। इस संबंध में युवाओं को आकर्षित करने वाला एक विज्ञापन 25-30 शब्दों में तैयार कीजिए।

6) '**भेड़ की चतुराई**' विषय पर दिए गए संकेत बिन्दुओं के आधार पर एक कहानी लिखिए_

संकेत बिंदु - .

· एक शिकारी जंगल में

· साथ में शिकारी कुत्ते

· कुत्तों द्वारा भेड़ियों पर हमला .

· भेड़िए जान बचा कर भागा ...... भेड़िए ने एक भेड़ को चालाकी दिखाई

· समझदार भेड़ जान बचाकर भागी

7)निम्नलिखित समस्त पदों का विग्रह कर समास का नाम लिखिए :-

(i) अंशुमाली

(ii) धनहीन

(iii) दशानन

(iv) शताब्दी

(v) मृगनयनी

(vi) आजन्म

(vii) कलम-दवात

(viii) प्रतिजन

(ix) रथ यात्रा

(x) चाँद-सूरज

(xi) भवसागर

(xii) दिन-रात

(xiii) आसमुद्र

(xiv) रसोईघर

(xv) आमरण

(xvi) गजानन

(xvii) गुरुदक्षिणा

(xviii) धनहीन

(xix) त्रिफला

(xx) दाल-रोटी

MATHEMATICS:-

LAB ACTIVITY(Sub enrichment 1):-To be done in Practical Files
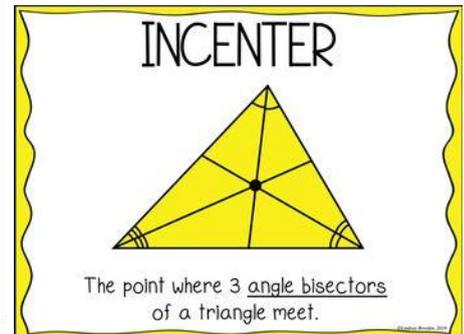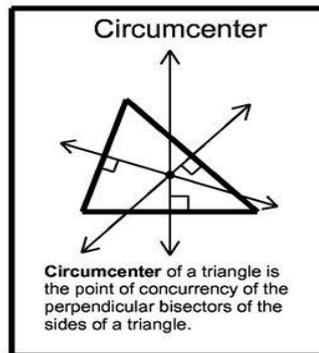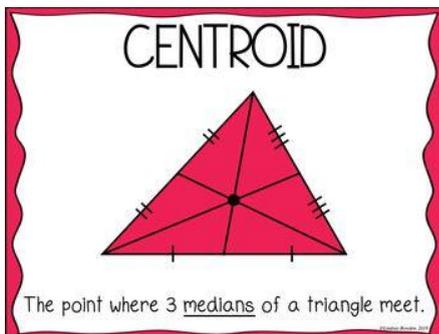Draw the graph for the following quadratic equation and find the zeroes.

1. $y = x^2 + 2x - 3$

2. $y = -2x^2 + 5x + 3$

2.PORTFOLIO1-Create a handmade colorful **doodle page** for showing "centres of triangles" on A4 SIZE drawing sheets.Upload as teams assignment.
- Include definitions and figures of median, altitude, angle bisectors perpendicular bisectors of sides ,incentre,centroid,circumcentre,orthocentre(few figures given

below)

3.Solve the following questions in the Math Notebook/Register.

CLASS - X
MATHEMATICS WORKSHEET
CHAPTER – 2 : POLYNOMIALS

VERY SHORT ANSWER TYPE QUESTIONS
Q1. If one zero of the quadratic polynomial x^2-5x-6 is 6, then find the other zero.
Q2. If both the zeroes of the quadratic polynomial $ax^2 + bx + c$ are equal and opposite in sign, then find the value of 'b'?
Q3. Can $x^2 - 1$ be the quotient on division of $x^6 + 2x^3 + x - 1$ by a polynomial in x of degree 5?
Q4. If 1 is a zero of the polynomial $p(x) = ax^2 - 3(a-1)x - 1$, then find the value of 'a' ?
Q5. If on division of a polynomial $p(x)$ by a polynomial $g(x)$ the quotient is zero, what is the relation between degree of $p(x)$ and $g(x)$?
Q6. If one root of the polynomial $p(y) = 5y^2 + 13y + m$ is reciprocal of other, then find the value of 'm'?
Q7. If the graph of a polynomial intersects the x – axis at only one point, can it be a quadratic polynomial?

SHORT ANSWER TYPE QUESTIONS
Q8. What number should be added to the polynomial x^2-5x+4, so that 3 is the zero of the polynomial?
Q9. If α and β are zeros of $p(x) = x^2 +x-1$, then find $1/α+ 1/β$?
Q10. If α and β are the zeros of the quadratic polynomial $f(x) = 2x^2 -5x + 7$, find a polynomial whose zeros are 2α+ 3β and 3α+ 2β?
Q11. If one of the zeros of the cubic polynomial $x^3 + ax^2 + bx + c$ is -1, then what will be the product of the other two zeros?
Q12. What must be subtracted from $p(x) = 8x^4 + 14x^3 - 2x^2 +7x -8$, so that the resulting polynomial is exactly divisible by $g(x) = 4x^2 + 3x -2$?
Q13. What must be added to $f(x) = 4x^4 + 2x^3 -2x^2 +x - 1$, so that the resulting polynomial is divisible by $g(x) = x^2 +2x -3$?
Q14. If the polynomial $x^4 + 2x^3 +8x^2 +12x+18$ is divided by another polynomial x^2+5, the remainder comes out to be px+ q. Find the values of' p' and ' q'?
Q15. If α, β, γ be zeros of the polynomial $6x^3 + 3x^2 -5x+1$, then find the value of $α^{-1}+ β^{-1} + γ^{-1}$?
Q16. If α, β are the two zeros of the polynomial $f(y) = y^2 - 8y +a$ and $α^2 + β^2 = 40$, find the value of 'a'?

LONG ANSWER TYPE QUESTIONS

Q17. Obtain all other zeros of the polynomial $2x^4 - 9x^3 + 5x^2 + 3x - 1$, if two of its zeros are $2-\sqrt{3}$ and $2 + \sqrt{3}$? (CBSE 2018)

Q18. Find the zeros of the polynomial $f(x) = x^3 - 5x^2 - 2x + 24$, if it is given that the product of its two zeros is 12?

Q19. If α, β are zeros of the quadratic polynomial $f(x) = 2x^2 + 11x + 5$, find
   a) $\alpha^4 + \beta^4$ b) $1/\alpha + 1/\beta - 2\alpha\beta$

Q20. If the zeros of the polynomial $f(x) = x^3 - 3x^2 - 6x + 8$ are of the form a-b, a, a+b, then find all the zeros.

SCIENCE:-PHYSICS
CASE BASED QUESTIONS
Q1The following article refers to a subsidy scheme proposal suggested by the power department of a state. Read it carefully and answer the questions that follow:

THE SUBSIDY SCHEME

- Households that use up to 200 units of electricity a month or have a monthly bill of up to ₹800 do not have to pay bills starting August as they will be covered under 100% subsidy.

- Households which consume 201 to 400 units of electricity every month (on an annual average) continue to a maximum subsidy of 50% on their monthly power bills.

A list of home appliances and its power rating is given below:-

1.1.   To avail the subsidy in the electricity bill as mentioned , what kind of appliances a household should purchase?
a)   appliances that draw low power
b)   appliances that produce less heat
c)   appliances that operates at high voltage
d)   appliances that draws high amount of current

1.2   A "unit" mentioned in the above article refer to which quantity?
a)Power
b)Voltage
c)Current
d)Electrical Energy

1.3How much is the maximum consumption in joules for a household which is eligible for 50 % subsidy?
a) 1000 x 10^6 J
b) 1400 x 10^6 J
c) 1440 x 10^6 J
d) 1400 x 10^8 J

1.4 Assuming that the above listed appliances are operated on 220 V ,

Which among the following will be the amount of current drawn by the washing machine ?
a)   0.27A
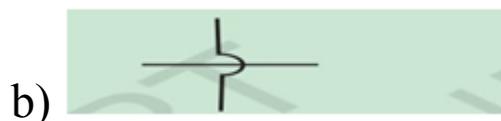b)   0.9A
c)   10.9 A
d)   4.09A

1.5. With reference to the above list, if the refrigerator and laptop   were operated for 24 hours, what would be the total monthly consumption in "units"?
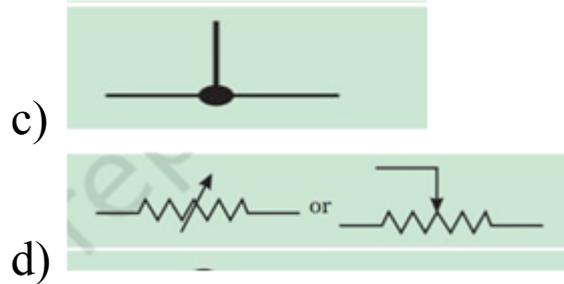a) 648 units
b)180 units
c)144 units
d)72 units

Q2 A circuit is the complete path where electricity can flow. A basic circuit is made up of a power source, a device which will use the power source and the wires to connect them. Electricity moves inside the wire and its flowing movement is called electric current. Power source provides the energy which helps the electrons to flow. Voltage is the name for the electric force which makes the electrons to flow. Many of the circuit have the switch which is used to make and break the circuit. Switch creates an air gap when it breaks the circuit and does not allow the current to flow.

Read the passage and answer any four questions

i)   Identify the symbol of Variable resistance.

a)

b)

c)

d)

ii) What do we call to the movement of electricity?
(a)Potential Difference
(b) Electric Power
(c)Electric Current
(d)Resistance
iii) What is the name of the component which provides the energy to the electrons to flow?
(a)Ammeter
(b)Voltmeter
(c)Battery
(d)Galvanometer
iv)If there is the air gap in the circuit, the circuit is called
(a)Closed circuit
(b)Open Circuit
(c)Either Closed or open
(d)None of these
v) Name the Electric Force which Helps the electrons to move in the circuit
(a)Electric current
(b)Electric Power
(c)Potential Difference
(d)Resistance

Q3The filament of an electric lamp draws a current of 0.4 which lights for 3 hours. Calculate the amount of charge that flows through the circuit.
Q4 Three resistors are connected in such a way that 10 Ω and 15Ω are in parallel and together they are connected in series to 5Ω. Through

the resistor of 5 ohms , a current of 1A is flowing:
a) What is the total potential difference across 5 ΄Ω ?
b) What is the current through the other two resistors?
c) What is the total resistance?
Q5Two bulbs A and B are rated 100w, 120 v and 10W, 120 v respectively. They are connected across a 120 v source in series. Which will consume more energy?

CHEMISTRY
 In Q1,Q2 and Q3, the Assertion and Reason have been put forward. Read the statements carefully and choose the correct alternative from the following: (a) Both the Assertion and Reason are correct and the reason is the correct explanation of the Assertion. (b) The Assertion and the reason are correct but the Reason is not the correct explanation of the Assertion. (c) Assertion is true but the Reason is false. (d) The statement of the Assertion is false but the reason is true.

Q1 Assertion : AgBr is used on photographic and X-ray film
Reason : AgBr is photosensitive and changes to Ag and bromine in presence of sunlight and undergoes decomposition reaction.

Q2 Assertion: Magnesium ribbon keeps on burning in atmosphere of nitrogen.
Reason : Magnesium reacts with nitrogen to form magnesium nitride and this reaction is combination reaction.

Q3 Assertion :Zinc reacts with sulphuric acid to form to form zinc sulphate and Hydrogen gas and it is displacement reaction.
 Reason : Zinc reacts with oxygen to form Zinc oxide

Q4 CASE STUDY BASED QUESTION:

Calcium oxide reacts vigorously with water to produce slaked lime, releasing a large amount of heat. In this reaction, calcium oxide and water combine to form a single product, calcium hydroxide. Such a

reaction in which a single product is formed from two or more reactants is known as a combination reaction.is given out along with the formation of a single product. A solution of slaked lime produced by the reaction is used for white washing walls. Calcium hydroxide reacts slowly with the carbon dioxide in air to form a thin layer of calcium carbonate on the walls. Calcium carbonate is formed after two to three days of white washing and gives a shiny finish to the walls.
Answer the following questions:

(a)The chemical name of slaked lime is:
    i) Calcium hydroxide ii) Calcium oxychloride
    iii) Calcium carbonate iv) Calcium nitrate

(b)The reaction of calcium oxide and water is:
    i) Endothermic   ii) Exothermic
    iii) Both endo and exothermic iv) Cannot be predicted

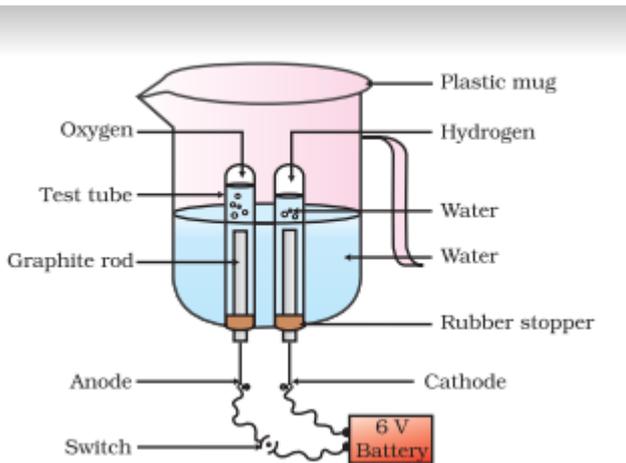(c)Write the equation for the reaction of calcium oxide and water
(d)Which is the type of reaction occurring in (c)?
(e)Write the equation for the reaction of calcium hydroxide with
    carbon dioxide in air.
(f)Marble chips on heating release a colourless gas. Name the gas
    and write the equation for the reaction.
(g)What is a very dilute solution of slaked lime called?

Q5

Write the equation for the reaction shown in the figure. Name the type of reaction illustrated.

BIOLOGY

Q1 Complete the notes:

Geetanjali made some notes on the photosynthesis. Unfortunately, she accidentally spilled water over the page and smudged some of the key words. You have to rewrite her notes by completing those smudged words.

Green plants are primary p…………. of food. They use the c…………. in the air and w……… from the soil. They also need a g……… coloured substance called chlorophyll which is found in the ch……… of the cells of plants. Chlorophyll traps su………. . The food (glucose) made in the leaf is stored as st……… . during this photosynthesis process o……. gas is released into the air.

Q2 A student observed green dot like structures when he viewed a leaf peel under a microscope. What are these dot like structures known as? Draw a well labeled diagram and list its two functions .

Q3 Food does not pass through the digestive system by gravity. This is clear from the fact that we can digest the food even if we are lying down. Explain the logic behind the passage of food through our digestive system.
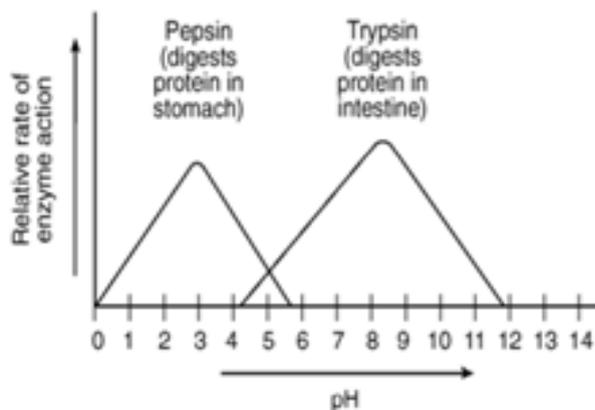
Q4   Guess who I am?

a)   I am secreted from the walls of my stomach. I kill all the harmful germs present in food and help my friend pepsin to work in an acidic medium .

 b)   We push the food forward by rhythmic contraction.

  c)   We are the biocatalysts. We enhance the rate of metabolic activities.

CASE STUDY BASED QUESTION:

Q5. Read the following and answer:

The digestion in stomach is taken care of by the gastric glands present in the wall of the stomach. These release hydrochloric acid, a protein digesting enzyme called pepsin, and mucus. The hydrochloric acid creates an acidic medium which facilitates the action of the enzyme pepsin. The mucus protects the inner lining of the stomach from the action of the acid under normal conditions. From the stomach, the food now enters the small intestine. The food coming from the stomach is acidic and has to be made alkaline for the pancreatic enzymes to act. Bile juice from the liver accomplishes this in addition to acting on fats.

1.   In which medium Pepsin and trypsin are active –

a. basic and acidic medium

b. acidic and basic medium

c. neutral medium

d. sometimes acidic sometimes basic medium

2.   Enzyme pepsin helps in the digestion of …….
a. starch in mouth
b. protein in stomach
c. fat in stomach
d. protein in pancreas

3.   The inner lining of the stomach is protected by
a. enzyme pepsin   b. mucus
c. Hydrochloric acid   d. Muscle

4.   Which statement is a valid conclusion based on the information in the graph –
      a. The maximum rate of human digestion
         occurs at about 450 C.
b. The maximum rate of human respiration occurs at about 570 C
c. Temperature can influence the action of an enzyme.
d. Growth can be controlled by enzyme
5. Small Intestine receives the secretions from ……………. for complete digestion.
a. Mouth and Stomach
b. Stomach and liver
c. Liver and Pancreas
d. All the above

SOCIAL SCIENCE -As per the guidelines of the CBSE , each student of class 10 is required to make a project file on any one of the given topics

1. Project work for section wise :
      X A and X E- Consumer awareness.
      X F and X G - Sustainable development.
      X B, X C and X D - Social issues.
Please don't use any plastic file.Design your own file cover.

+ Art Integrated Project --For your guidance a student making a project file on the topic Consumer Awareness , his/her file must contain the following:

* A cover page with name of school , your name , class , heading, year (2021-22)

* An acknowledgment page

* An index page with the following contents

a) Who is a consumer ?

b) Problems faced by a consumer

c) Consumer movement in India

d) Consumer Protection Act 1986

e) Consumer Rights

f) Redressal Method

g) Consumer Forum and consumer courts

h) Steps taken by the government to protect consumers

i) Responsibilities of a consumer

j) Standard Quality Marks

k) Consumer Awareness

* Bibliography page

Similarly if any other mentioned topic is taken ,it should be well covered.

Kindly Note:

v The file should be made in A4 coloured sheets.

v It has to be handwritten.

v 10-15 pages file should be made.

v Illustrations could be in the form of maps, pictures, graphs etc.

v On the left side of the file pictures , drawings /diagrams , newspaper clippings , maps and relevant material from the web should be there while on the right side , written matter.

v Each illustration should be supported with a write up / relevance to the topic.

v File should be neat and creative.

COMPUTERS:-1. Write the positive and negative impact of the internet in our life.

2. Write short notes on the following

a) Blog

b) Twitter.

c) Video Conferencing

3. Name two free email service providers?

4. What is the difference between INBOX and SENT MAIL BOX?

5. Write one advantage and one disadvantage of Video Conferencing?

Research Based Study

   Google Applications

  Rno 1- 15   : Google Docs

  Rno. 15-30   : Picasa

  Rno. 30 onwards   : Google Blogs

 Students are required to submit a 2- 3 pages Synopsis on the given topic. (Do it in your notebooks)