GURU GOBIND SINGH PUBLIC SCHOOL, CHAS

HEALTH & PHYSICAL EDUCATION (summer assignment)

CLASS – 9

- Enlist the factor or condition in your colony which may be harmful for the health of people.
- Draw balance diet chart & describe why it is important for us.

Class-IX   Summer Vacation Assignmemt

Subject: Artificial intelligence

Do all questions and answers in computer/AI copy only:

(1) How do you think Artificial Intelligence can help you as you go about your daily life?
(2) What is communication Skill ?
(3) Write all types of communications .Give suitable example of each.
(4) How can you improve your leadership skill ?
(5) What are interpersonal skills?
(6) Design a digital info graphics showing the Human Intelligence vs. Artificial Intelligence.

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GURU GOBIND SINGH PUBLIC SCHOOL, CHAS

SESSION -2024-25

HOLIDAY ASSIGNMENT

SUBJECT -CHEMISTRY

CLASS- IX

Q.1-It is a hot summer day,Priyanshi and Ali are wearing cotton and nylon clothes respectively.Who do you think would be more comfortable and why?

Q . 2 – Comment on the following statements:

(a) Evaporation produces cooling.
(b) Rate of evaporation of an aqueous solution decreases with increase in humidity.
(c) Sponge though compressible is a solid.

Q .3-(a)Tabulate the difference in characteristics of states of matter.

   (b) Comment upon the following: rigidity, compressibility, fluidity, kinetic energy and density

Q.4-Define sublimation. With the help of an activity describe the sublimation of a solid substance.Name two substances from our daily life that sublime on heating.

Q.5-Decribe the continuous motion of particles of matter with the help of an activity.

Q.6-Liquids generally have lower density as compared to solids.But you must have observed that ice flots on water.Find out why?

Q.7. Arrange the following substances in increasing order of forces of attraction between the particles _ water, sugar, oxygen.

Q.8.Rate of evaporation decreases when common salt is added to water Why?

Q.9.Why does our palm feel cold when we put some acetone or nail polish remover or petrol or perfume on it?

Q.10.Write a short note on the following states of matter:

   (i) Plasma

    (ii) Bose – Einstein Condensate

   _____x_____

SUMMER VACATION ASSIGNMENT (2024-25)

CLASS - IX

SUBJECT : BIOLOGY

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Chapter : IMPROVEMENT IN FOOD RESOURCES

INSTRUCTIONS: Do all the written work in A4 sheets and staple it together . Add front page that will include your details . Don't put it in file
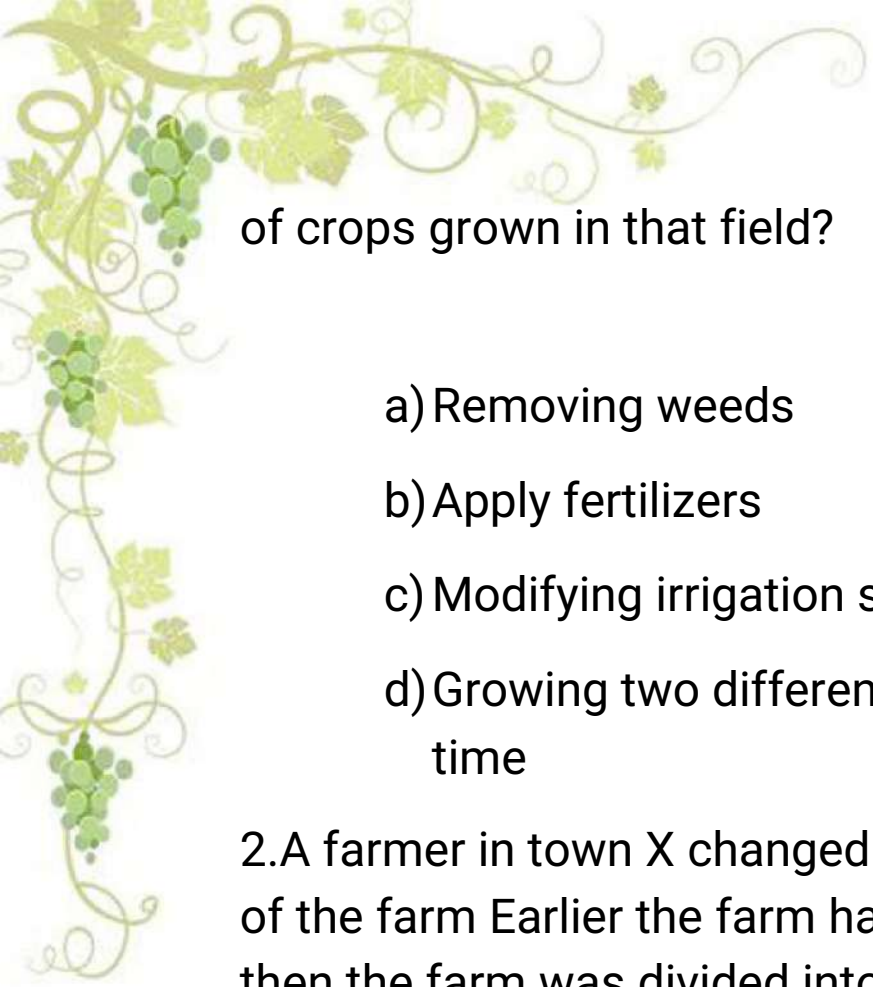
ANSWER THE FOLLOWING QUESTIONS :

1.A soil sample has adequate water holding capacity but is deficient in phosphorus and potassium Which of these would improve the quality

of crops grown in that field?

a) Removing weeds

b) Apply fertilizers

c) Modifying irrigation system
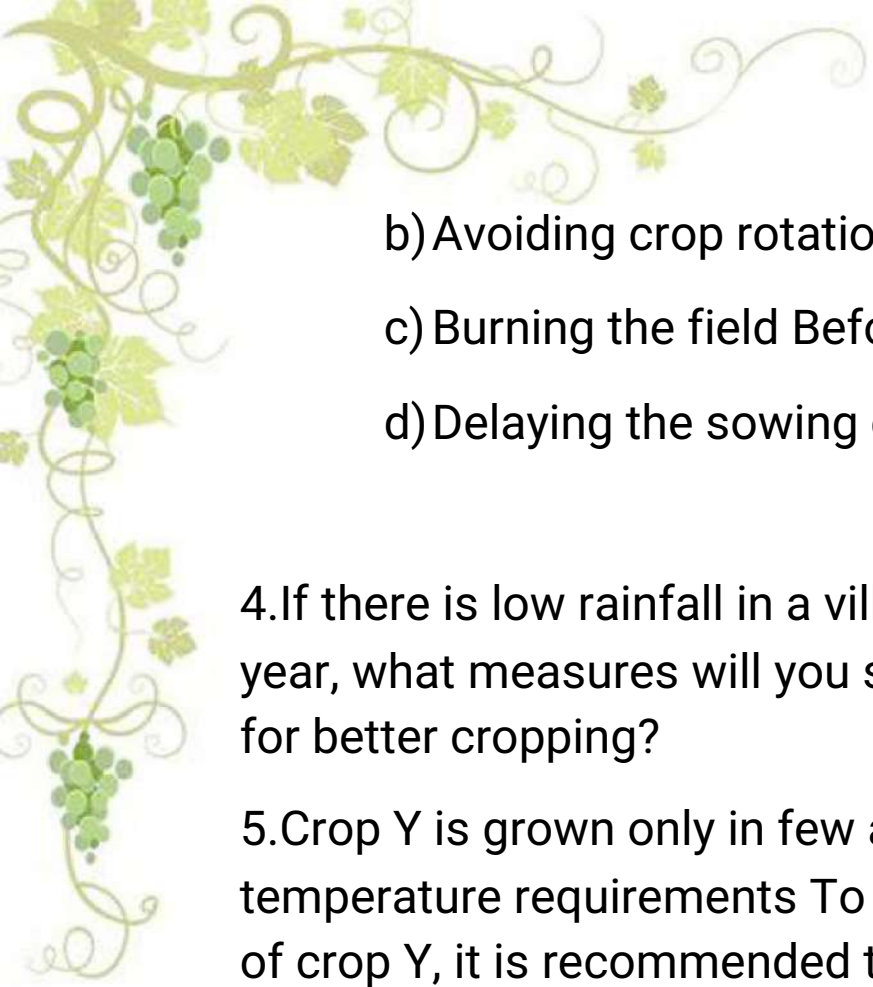
d) Growing two different crops at the same time

2. A farmer in town X changed the cropping pattern of the farm Earlier the farm had only Soyabean but then the farm was divided into rows of different crops Two rows of Soyabean and alternate two rows had Maize and the next two had cowpea What would be the most likely effect of the new cropping pattern?

a) Increase in yield

b) Degradation of land

c) Increase growth of weeds

d) Reduced intake of nutrients by crops

3. A crop X is to be grown in a field It is seen that Parthenium, a type of weed usually affects crop X What measures would help to protect crop X from Parthenium?

a) Spraying pesticides

b) Avoiding crop rotation

c) Burning the field Before sowing the crop

d) Delaying the sowing of crops by a few days

4.If there is low rainfall in a village throughout the year, what measures will you suggest to the farmers for better cropping?

5.Crop Y is grown only in few areas due to specific temperature requirements To increase productivity of crop Y, it is recommended to develop its different varieties Which features should be included while developing the different varieties of Crop Y in order to increase its productivity?

a) Developing varieties with strong biotic resistance

b) Developing varieties with less dependence on water

c) Developing varieties with extended maturity duration

d) Developing varieties adaptable to different climatic conditions

6)Figure given below shows the two crop fields [Plots A and B) have been treated by manures and chemical fertilizers respectively, keeping other environmental factors same. Observe the graph and answer the following questions.

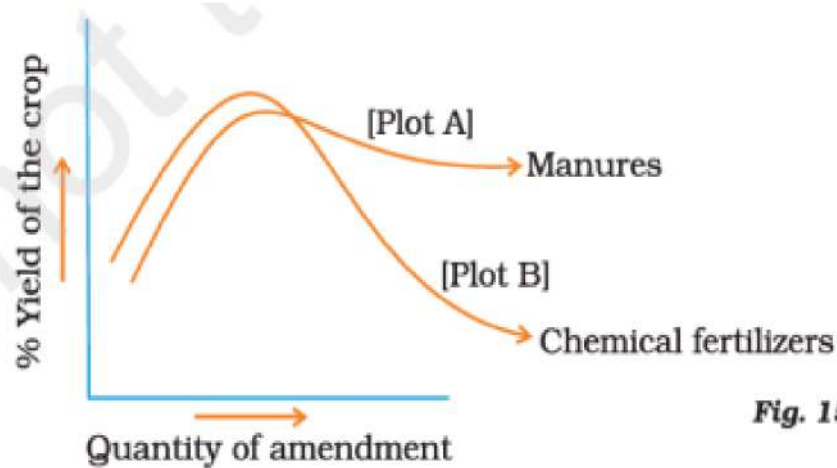

Fig. 15.1

(i) Why does plot B show sudden increase and then gradual decrease in yield?

(ii) Why is the highest peak in plot A graph slightly delayed?

7)Explain the following :

- Green revolution

- Blue revolution

- White revolution

_____

PREPARE A COLOURFUL POSTER ON

a. Benefits of ORGANIC FARMING

OR

b. FROM GARBAGE TO GARDEN : COMPOST

_____

Sow seeds of leguminous crop , after the growth of small sapling from it , uproot it and observe the nodules in roots . Click picture of the roots having nodules and paste it.

_____
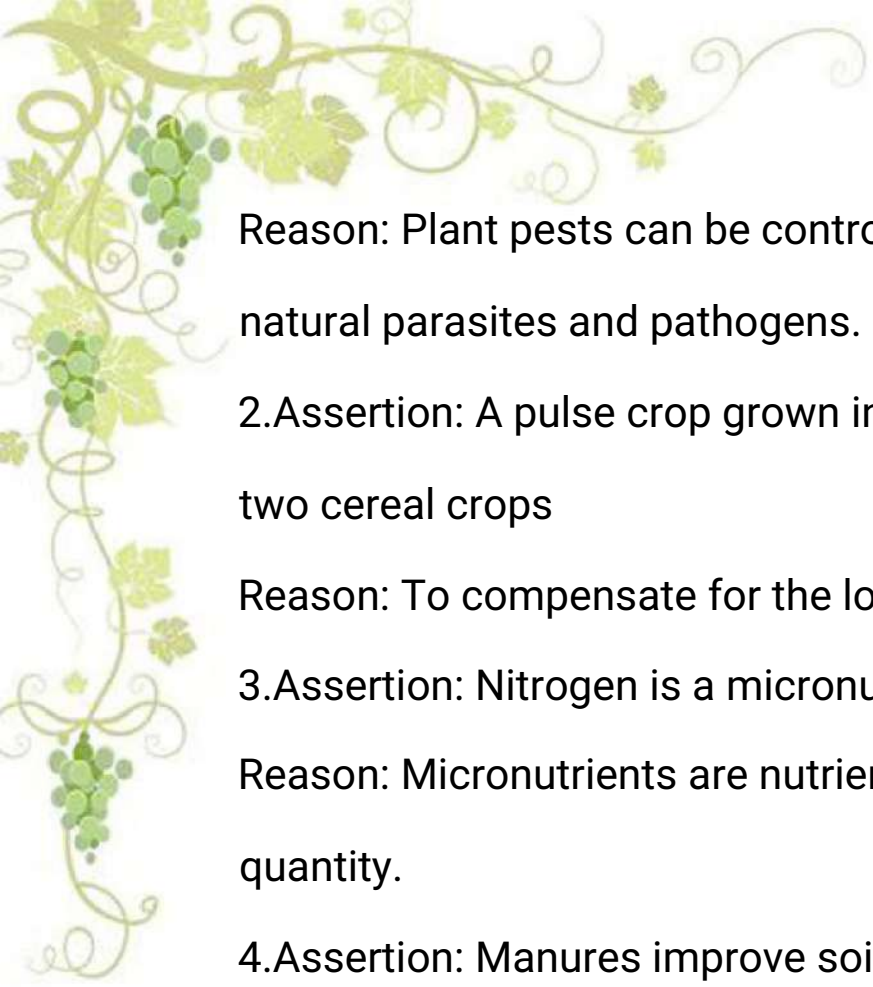
ASSERTION REASON QUESTIONS :

Directions: In each of the following questions, a statement of Assertion is given, and a corresponding statement of Reason is given just below it. Of the statements, given below, mark the correct answer as:

(a) Both assertion and reason are true, and reason is the correct explanation of assertion.

(b) Both assertion and reason are true, but reason is not the correct explanation of assertion.

(c) Assertion is true, but reason is false.

(d) Assertion is false, but reason is true.

1.Assertion: Inter cropping prevents pests.

Reason: Plant pests can be controlled biologically by their natural parasites and pathogens.

2.Assertion: A pulse crop grown in a time interval between two cereal crops

Reason: To compensate for the loss of nitrogen

3.Assertion: Nitrogen is a micronutrient.

Reason: Micronutrients are nutrients required in small quantity.

4.Assertion: Manures improve soil conditions.

Reason: In manures, elements are not present in adequate proportions.

5.Assertion: Legumes increases the soil fertility.

Reason: Microbes in the root nodules of leguminous plants fix atmospheric nitrogen.

6.Assertion: Presence of weeds affects the crop field.

Reason: Weeds compete for food, space and light.

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गुरु गोविंद सिंह पब्लिक स्कूल, चास

ग्रीष्मावकाश गृहकार्य - 2024

विषय-संस्कृत

कक्षा- 9

1.) संस्कृतभाषायां अनुवादं कुरु –

क) हमलोग विद्यालय जाते हैं।

ख) राधा सुन्दर नृत्य करती है।

ग) मैं पुस्तक पढती हूँ।

घ) पेड़ से पत्ते गिरते हैं।

ङ) तुमदोनों कहां पढते हो ?

2.) अधोलिखितान् धातुरुपैः वाक्यानि पूरयत।

क) वयम् विद्यालयं गत्वा गुरुं _____।

(नामः, नमामः)

ख) विद्या विनयम् _____।

(ददाति, दत्तः)

ग) शिशुः दुग्धं _____।

(पास्यतः, पास्यति)

3.) अधोलिखितान् शब्दरुपैः वाक्यानि पूरयत ।

क) अत्र _____ अस्ति।

(बालकः, बालकाः)

ख) एते _____ सन्ति।

(अध्यापकौ, अध्यापकाः)

ग) विद्यालये मया _____ वृक्षाः आरोपिताः।

(चत्वारि, चत्वारः)

घ) तत्र _____ स्तः।

(महिला, महिले)

ङ) _____ प्रकाशेन अन्धकारः नश्यति।

(सूर्यस्य, सूर्यम्)

च) _____ शोभते नरः।

(विद्यया, विद्यायाः)

4.) उचितैः विभक्तिपदं चित्वा वाक्यानि पूरयत ।

क) _____ सह सीता वनं अगच्छत्।

(रामेण, रामः)

ख) _____ अलम्।

(कोलाहलेन, कोलाहलम्)

ग) _____ परितः बालकाः क्रीडन्ति।

(गृहात्, गृहम्)

घ) _____ निकषा खगाः सन्ति।

(वृक्षम्, वृक्षस्य)

5.) अधोलिखितेषु वाक्येषु प्रकृति – प्रत्यय संयोज्य – वियोज्य वा लिखत।

क) सः प्र + विश + ल्यप् अवदत्।

ख) विद्वान् भूत्वा सः प्रासीदत्।

ग) सः देवं नम् + तुमुन् देवालयं गच्छति।

6) वर्णानाम् उच्चारणस्थानानि सचित्र तालिका।

7) परियोजना कार्यम्-

झारखण्ड राज्यं, तेलगाना राज्यं "भोजनम्, कला, संस्कृति विषये तुलनात्मकं अध्ययनम्"।

SECTION-A

1. Find an irrational number between $\frac{1}{7}$ and $\frac{2}{7}$. Given that $\frac{1}{7} = 0.\overline{0.142857}$.

2. Simplify $\sqrt{72} + \sqrt{800} - \sqrt{18}$.

3. Simplify $64^{\frac{-1}{3}} [\ 64^{\frac{1}{3}} - 64^{\frac{2}{3}}\ ]$

4. In the following equations, examine whether x, y and z represents rational or irrational number   i) $x^3 = 27$ ii) $y^2 = 7$ iii) $z^2 = 0.16$

5. If $2^x \times 4^x = 8^{\frac{1}{3}} \times 32^{\frac{1}{5}}$,then find the value of x.

SECTION-B

6. Find the value of $\sqrt{\dfrac{2+\sqrt{3}}{2-\sqrt{3}}}$, if $\sqrt{3} = 1.73$.

7. Represent on number line: i) $\sqrt{2}$ ii) $\sqrt{7}$

8. If $x = 3 + 2\sqrt{2}$, then find whether $x + \frac{1}{x}$ is rational or irrational.

9. Express the following in the form of $\frac{p}{q}$, where p and q integers and $q \neq 0$:

   i) $3.\overline{2}$ ii) $18.\overline{48}$

10. Visualise the representation of $6.4\overline{7}$ on the number line up to 5 decimal places, which is up to 6.47777. Draw figure only.

SECTION-C

11. Find the value of a and b, if $\dfrac{\sqrt{3}-1}{\sqrt{3}+1} = a + b\sqrt{3}$

12. Represent $\sqrt{10.5}$ on then number line.

13. Simplify $\sqrt[4]{81} - 8(\sqrt[3]{216}) + 15(\sqrt[5]{32}) + \sqrt{225}$.

14. Which is greatest amongst $\sqrt{2}, \sqrt[3]{4}, and \sqrt[4]{3}$?

15. Prove that $\dfrac{2^{30}+2^{29}+2^{28}}{2^{31}+2^{30}-2^{29}} = \dfrac{7}{10}$

SECTION-D

16. If $x = \dfrac{\sqrt{2}+1}{\sqrt{2}-1}$ and $y = \dfrac{\sqrt{2}-1}{\sqrt{2}+1}$, find the value of $x^2 + y^2 + xy$.

17. Prove that $\dfrac{2^{36} + \left(\frac{1}{4}\times 2^{35}\right) + \left(\frac{1}{8}\times 2^{37}\right)}{\left(\frac{1}{16}\times 2^{39}\right) + \left(\frac{1}{8}\times 2^{38}\right)} = \dfrac{11}{8}$

18. If $x = \dfrac{5-\sqrt{21}}{2}$, then prove that $(x^3 + \frac{1}{x^3}) - 5(x^2 + \frac{1}{x^2}) + (x + \frac{1}{x}) = 0$

19. Prove that $\dfrac{1}{3-\sqrt{8}} - \dfrac{1}{\sqrt{8}-\sqrt{7}} + \dfrac{1}{\sqrt{7}-\sqrt{6}} - \dfrac{1}{\sqrt{6}-\sqrt{5}} + \dfrac{1}{\sqrt{5}-2} = 5$

20. Rationalise the denominator of $\dfrac{4}{2+\sqrt{3}+\sqrt{7}}$

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Class: IX   MATHEMATICS
ASSIGNMENT Chap – 2 POLYNOMIALS

Q1 Write the degree of $5x^7 + 6x - 7$ & coefficient of x.

Q2 Find p(1), p(-1) of the following : $3x^2 + 4x + 1$. Which of these values is a zero of the given polynomial?

Q3 Find the remainder by remainder theorem when $4x^3 - 6x^2 + 2x - 8$ is divided by g(x)= x-2.

Q4 If x -2 is a factor of $4x^4 - 2x^3 - 3x^2 - 3x + k$, find the value of k.

Q5 Factorize the following: a) $x^2 + 7x - 30$ b) $p^3 - 512 q^3$

Q6 Write in expanded form:

   a) $(-3x + 2y + z)^2$ b) $(3x - 5y)^3$

Q7 Evaluate the following using suitable identity:

   a) 105 x 95   b) $(1002)^3$ c)(x + 4) (x - 5)   d) $64 x^2 - 625 y^2$

Q8 Find the degree of $5x^4 - 6x^3 + 7x^2 - x + 1$

Q9 Find the value of p(x)=$2x^2 + 7x - 8$ at x=0

Q10 Find the zero of the polynomial 3x-5.

Q11 Find the remainder when $2x^4 + 6x^3 + 2x^2 - x + 2$ is divided by x+2

Q12 Find k if (x-3) is a factor of $k^2x^2 - kx - 2$

Q13 Factorise $x^2 - 21x + 20$

Q14 Factorise $(p-q)^3 + (q-r)^3 + (r-p)^3$

Q15 Factorise $x^3 + 13x^2 + 31x - 45$

Q16 Factorise:

   a) $4x^2 + y^2 + z^2 - 4xy - 2yz + 4xz$.   b) $27 y^3 + 125 z^3$

Q17 Divide the polynomial $x^4 - 10x^3 + 35x^2 - 50x + 24$ by (x-4) using long division method.

Q18 The polynomials $ay^3 + 3y^2 - 3$ and $2y^3 - 5y + a$ when divided by (y-4) leave the remainder A
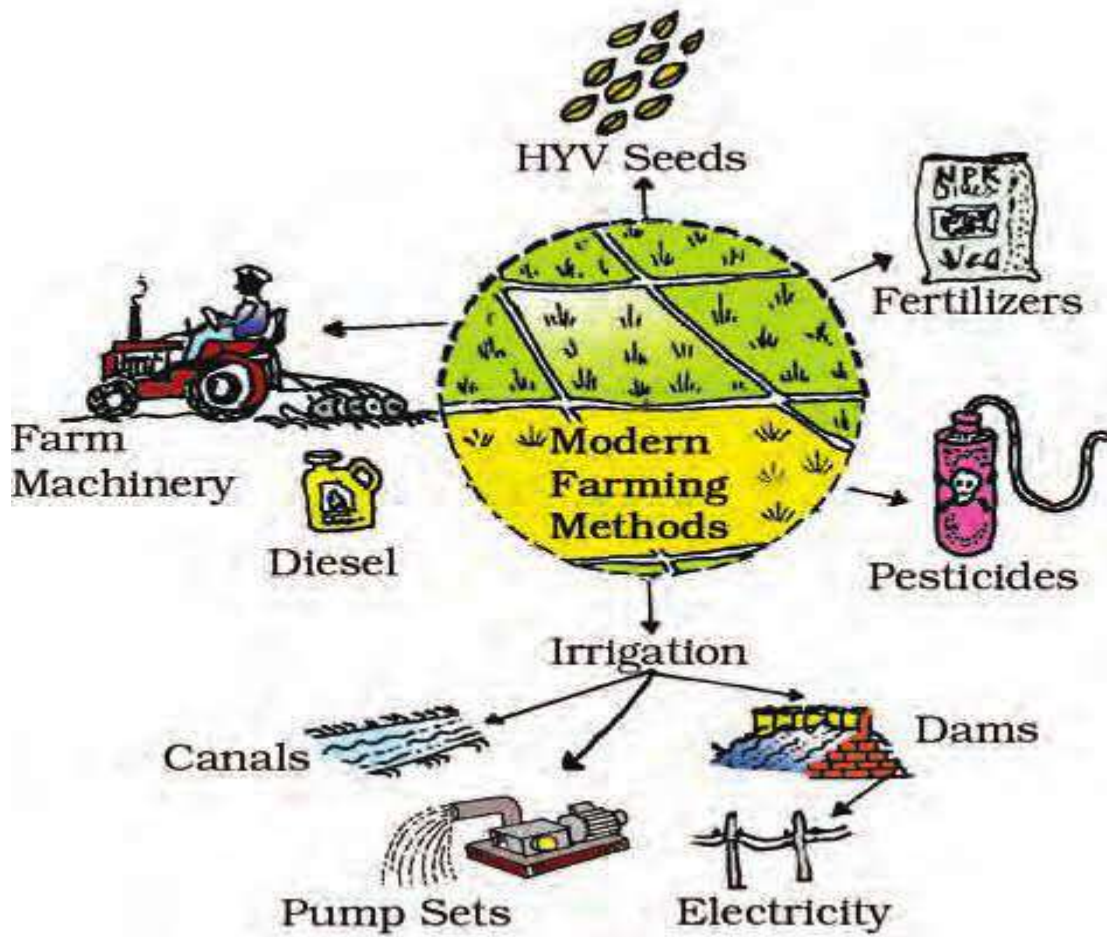
Activity work

1. To construct a square root of any given positive real number x.
2. To verify algebraic identity $(a+b)^3 = a^3 + b^3 + 3a^2b + 3ab^2$.

GURU GOBIND SINGH PUBLIC SCHOOL, CHAS

CLASS 9 , ECONOMICS

SUMMER VACATION ASSIGNMENT

1 . Explain the farming methods used in palampur ? And elaborate the given diagram .

2. What is the difference between multiple ? Cropping and modern farming method?

3. What is the working capital required ?By the farmer using modern farming

Methods?

4. Define the following .

A. Land

B. labour

C. Capital

D. Enterprise

5. Modern farming methods require more inputs which are manufactured in Industry. Do you agree?

6. **Competency based questions :**

Land being a natural resource, it is Necessary to be very careful in its use.Scientific reports indicate that the modern Farming methods have overused the Natural resource base. In many areas, Green Revolution is Associated with the loss of soil fertility Due to increased use of chemical Fertilizers. Also, continuous use of Groundwater for tube well irrigation has Reduced the water -table below the Ground. Environmental resources like soil Fertility and groundwater are built up over Many years. Once destroyed it is very Difficult to restore them. We must take Care of the environment to ensure future Development of agriculture.

- Suggested Activity , After reading the following reports from Newspapers/magazines, write a letter To the Agriculture Minister in your own Words telling him how the use of Chemical fertilizers can be harmful.

7. **Competancy based questions**

In the kind of crops grown and facilities Available, Palampur would resemble a Village of the western part of the state of Uttar Pradesh. All land is cultivated in Palampur. No land is left idle. During the Rainy season (kharif) farmers grow jowar And bajra. These plants are used as cattle Feed. It is followed by cultivation of potato Between October and December. In the Winter season (rabi), fields are sown with Wheat. From the wheat produced, farmers Keep enough wheat for the family's Consumption and sell the surplus wheat At the market at Raiganj. A part of the Land area is also devoted to sugarcane Which is harvested once every year. Sugarcane, in its raw form, or as jaggery, Is sold to traders in Shahpur. The main reason why farmers are able To grow three different crops in a year in Palampur is due to the well-developed System of irrigation. Electricity came early To Palampur. Its major impact was to Transform the system of irrigation. Persian wheels were, till then, used by Farmers to draw water from the wells and Irrigate small fields.

A. Define kharif crops ?

B. Define Rabi crops ?

C. What are the types of irrigation used in palampur for farming ?

Guru Gobind Singh Public School, Chas

Class-9

Summer vacation assignment

Sub-Geography

1. Make a kit of mapology on India. By using chat paper, colours and hardboard or thermocol sheet.

2. Show the seven major continents and five major oceans on the physical map of world.

कक्षा नवम   विषय हिन्दी

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हिंदी पाठ्य-पुस्तक :

(1) पाठ 'दो बैलों की कथा: के प्रश्नोत्तरों का अभ्यास करें।

(2) पाठ 'सबद' और 'साखियां' के प्रश्नोत्तरों का अभ्यास करें।

व्याकरण:

(3) 'प्रदूषण की समस्या' पर दो मित्रों के बीच संवाद लिखिए। (व्याकरण की कॉपी में)

(4) 'कंप्यूटर आज के युग की देन' विषय पर अनुच्छेद लिखकर अभ्यास करें। (व्याकरण की कॉपी में)

(5) अर्थ के आधार पर वाक्यों के कितने भेद होते हैं ? उदाहरण सहित व्याकरण की कॉपी में विस्तार से लिखकर अभ्यास करें।

(6) पृष्ठ संख्या 78 से 81 तक के कार्यों को व्याकरण की पुस्तक में भरकर अभ्यास करें।

(7) प्रातः कालीन भ्रमण के लाभ बताते हुए अपनी छोटी बहन को पत्र लिखिए। (व्याकरण की कॉपी में)

(8) अपने क्षेत्र की पेय जल की समस्या की ओर ध्यान आकृष्ट करते हुए जल बोर्ड के प्रमुख अधिकारी को पत्र लिखिए। (व्याकरण की कॉपी में)

परियोजना कार्य:

(9) 'दो बैलों की कथा' की तरह पशु या पक्षी पर आधारित पाँच पाठों के नाम लेखकों सहित लिखें। लेखक के विषय में A4 साईज पेपर पर लिखिए।(फाइल में)

                         अथवा

कबीरदास और मुंशी प्रेमचंद का जीवन परिचय एवं साहित्यिक परिचय A4 साईज पेपर में सचित्र लिखकर फाइल बनाएँ।

निर्देश: उपर्युक्त सभी कार्यों को निर्देशों के अनुसार स्वच्छता, सुव्यवस्थित तरीके से प्रस्तुत करने तथा रचनात्मकता पर विशेष रूप से ध्यान रखा जाना चाहिए।

GURU GOBIND SINGH PUBLIC SCHOOL, CHAS

Summer Holiday Homework (2024-25)

Class- IX.   Subject- Physics

1. Identify the kind of motion in the following case:

(a) A car moving with constant speed turning around a curve.

(b) An electron orbiting around the nucleus.

2. (a) Define average speed.

(b) An artificial satellite is moving in a circular orbit of radius 36,000 km. Calculate the speed of the satellite if it takes 24 hours to revolve around the earth.

3. (a) What are scalar and vector quantities?

(b) What is the difference between distance and displacement?

4. Velocity time graph for the motion of an object in a straight line parallel to the time axis.

(a) Identify nature of motion of the object.

(b) find the acceleration of the body

5. Plot velocity – time graph for uniformly accelerated and non-uniformly accelerated motion.

6. Write the equations of motion.

7.A car Covers half the distance of journey with velocity 40km/hr and another half with velocity 60 km/hr. Find the average speed of the car.

8. A Scooter moving with velocity 54 kmph applies brakes and comes to rest in five seconds. Find the distance covered by the scooter before it comes to rest and the deceleration produced by the brakes.

9. A train starts from rest and moves with constant acceleration of $2m/s^2$ for 10s and then moves with constant velocity for another 10s. Find the total distance covered by the train and the final velocity acquired by the train.

10. Write biography of any one famous physicist on a chart paper.

GURU GOBIND SINGH PUBLIC SCHOOL, CHAS

CLASS- IX   SUMMER ASSIGNMENT   SUBJECT : ENGLISH

(SESSION : 2024 - 25)

PORTFOLIO

PAGE - 1   COVER PAGE – I) NAME OF THE INSTITUTION WITH LOGO

PAGE - 2

 SUBJECT

III) STUDENTS DETAILS :
NAME
CLASS
SECTION
ROLL

....

PAGE – 3   CERTIFICATE OF COMPLETION
PAGE - 4   INDEX
PAGE – 5   ASIGNMENT / PROJECT WORK - TOPIC

ART INTEGRATED PROJECT

PROJECT – 1

Compare and contrast the biography of Evelyn Glennie and Ustad Bishmillah Khan with colourful pictures.

PROJECT – 2

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Pictorial presentatio ASSIGNMENT **n and history of the ancient education system (GURUKUL SYSTEM) to Modern education system (FUTURISTIC SCHOOL) in reference with 'THE FUN THEY HAD ' (Note: paste the picture of different era's classroom and mention the time period with brief description .)**

Last page : Conclusion

 (NOTE : PORTFOLIO SHOULD BE MADE AND PROPERLY ARRANGED IN A BOARD FILE)

TO BE DONE IN SEPARATE STICK FILE:

- **Define at least fifteen Poetic devices along with examples.**
- **You have successfully achieved your goal from the previous experience and the choices you made in your life, With the reference to the poem, The Road Not Taken. share your success story in the form of diary entry.**
- **Imagine yourself the lost child of the fiction, The Lost Child,after being lost you understood the the importance of parents in your life. Share your feelings after the reunion in the form of diary entry.**

Guru Gobind Singh Public School, Chas, Bokaro

(Session: 2024 -2025

Class :IX
History/Civics   **Summer Holiday Assignment**   **Subject:**

Section:- A (Activity Based)

1. Find out more about any one of the Revolutionary figures you have read about in this chapter. Write a short biography of this person. (Ch:1 The French Revolution)

2. Look carefully at the painting and Identify the objects which are political symbols you saw in Box 1(broken chain, red cap, faces charter of the declaration of the Rights). The pyramid stands for equality often represented by a triangle use the symbol to the interpret the painting. Describe your impressions of the female figure of Liberty. (Ch:1 The French Revolution page no:12,13&14)

3. Find out the total number of eligible voters in your Assembly Constituency and your parliamentary constituency.

4. Write a short note on arguments against democracy.

Section- B (Question-Answer Based)

1. Define Democracy.

2. Write five merit and demerit of Democracy.

3. What did become an example for political thinkers in France?

4. What was the representation of the three estates at the Estate General Assembly of 1789?