HARI VIDYA BHAWAN

WINTER HOLIDAY HOMEWORK

SESSION - (2021-22)

Class IX

General Instructions: -

- Students do your holiday homework in your subject notebook.
- Neatness and presentability of the work are common parameters for the activities assigned.
- Revise the whole syllabus thoroughly.

SUBJECT – ENGLISH

1. Story Writing:

- You encountered two strange people. They were different from normal human beings but they were quite interesting and exciting. As Manish\Manisha, using your ideas, write a story in about 150-200 words narrating your experience with them.

2. Paragraph Writing:

- Describe your favorite musician in about 100-150 words.

3. Literature Questions:

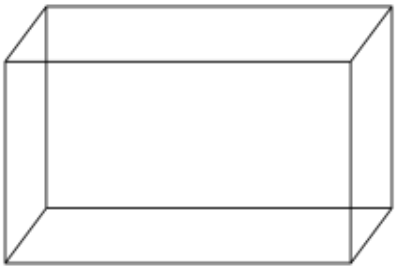
- Write a character sketch of the sloth bear 'Bruno' from the story "The bond of love".
- "If I chose a correct and a rational path, the others around me had to change, not me", said Santosh Yadav. How does her life justify her words?
- Write about Maria Sharapova's journey to the top.
- Imagine that you are Gerrard. Tell your friend what happened when the intruder broke into your house. Describe the entire incident in your own words.
- Of the three, Jerome, George and Harris, who do you think is the best or the worst packer? Support your answer with details from the text.
- Justify the title of the poem 'On Killing a Tree'.

विषय - हिंदी

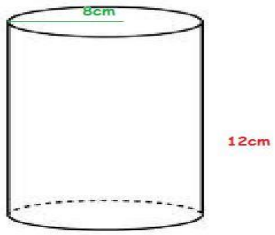
प्रश्न1) छात्रावास की दिनचर्या के बारे में बताते हुए अपने पिताजी को पत्र लिखिए ।
प्रश्न2) अनुशासन का महत्व बताते हुए अपने छोटे भाई को पत्र लिखिए।
प्रश्न3) अनुच्छेद लिखिए
जीवन - मूल्यों का अर्थ
संकेत बिंदु - ◆जीवन मूल्यों का अर्थ ◆जीने के लिए मूल्यों की आवश्यकता क्यों ◆युवा पीढ़ी और जीवन मूल्य
प्रश्न4) (क) 'नारी सुरक्षा और वर्तमान युग ' विषय पर नारी सुरक्षा समिति के दो कार्यकर्ताओं के बीच संवाद लिखिए|
(ख) बढ़ती महंगाई के संबंध में मित्र से हुए वार्तालाप को संवाद के रूप में लिखिए।
प्रश्न5) वार्षिक परीक्षा में अच्छी सफलता के लिए अपने छोटे भाई को शुभकामना देते हुए संदेश लिखें।
प्रश्न6) अपने मित्र को क्रिसमस की शुभकामना देते हुए संदेश लिखें।
प्रश्न7) बालक - बालिकाओं को खेलकूद प्रतियोगिता में भाग लेने के लिए प्रेरित करते हुए नारा लिखिए ।
प्रश्न8) बाल श्रम की कुप्रथा को रोकने के लिए लोगों को जागरूक करते हुए नारा लिखिए

SUBJECT – MATHEMATICS

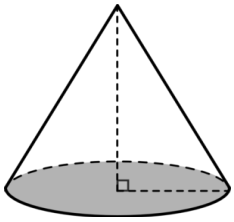
1. Do the activity To show that the quadrilateral formed by joining the mid-points of the adjacent sides of a quadrilateral is a parallelogram by paper folding.
   Click on the given link for activity : https://www.cbsesamplepapers.info/cbse/cbse-class-9-maths-lab-manual-quadrilateral-formed-by-joining-mid-points
2. A chord is at a distance of 8 cm from the center of a circle of radius 17 cm. The length of the chord is
   (a) 25 cm (b) 12.5 cm (c) 30 cm (d) 9 cm
3. An equilateral triangle of side 9 cm is inscribed a circle. The radius of the circle is
   (a) 3 cm (b) 3√2 cm (c) 3√3 cm (d) 6 cm
4. Make formula chart of chapter no 2 Polynomial. (use A3 sheets)
5. Click photos of things around you which resembles shapes given below (two photos each) and make a collage of it.



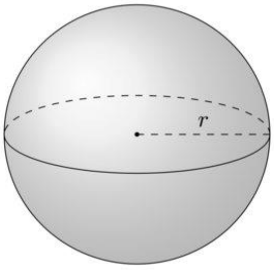
cuboid



cylinder



cone



sphere

6. Write True or False: Give reasons for your answers.
   a. Line segment joining the center to any point on the circle is a radius of the circle.
   b. A circle has only finite number of equal chords.
   c. If a circle is divided into three equal arcs, each is a major arc.
   d. A chord of a circle, which is twice as long as its radius, is a diameter of the circle.
   e. Sector is the region between the chord and its corresponding arc.
   f. A circle is a plane figure.

7. Fill in the blanks:
   (i) The coordinates of the origin are _____.
   (ii) Coordinates of a point on the x-axis are of the form _____and that of the point on the y-axis are _____.

(iii) The coordinates of a point are of the form (+ , +) in the _____ , (–, +) in the _____ , (–, –) in the _____ and (+, –) in the _____ , where + denotes a positive rea l number and – denotes a negative real number.

(iv) The horizontal line is called the _____ , and the vertical line is called the _____.

8. A box contains 50 bolts and 150 nuts. On checking the box, it was found that half of the bolts and half of the nuts are rusted. If one item is chosen at random, find the probability that it is rusted.
9. The probability of guessing the correct answer to a certain question is x/ 2 . If probability of not guessing the correct answer is 2 /3 then find x.
10. In a survey of 364 children aged 19-36 months, it was found that 91 liked to eat potato chips. If a child is selected at random, compute the probability that he/she does not like to eat potato chips.
11. A bag contains x white, y red and z blue balls. A ball is drawn at the random, then what is the probability of drawing a blue ball.
12. A bag-I contains four cards numbered 1, 3, 5 and 7 respectively. Another bag-II contains here cards numbered 2, 4 and 6 respectively. A card is drawn at random from each bag. Find the probability that the sum of two cards drawn is 9.
13. A die was rolled 100 times and the number of times, 6 came up was noted. If the experimental probability calculated from this information is 2 /5 then how many times 6 came up ? Justify your answer.
14. Show that if the diagonals of a quadrilateral are equal and bisect each other at right angles, then it is a square.
15. If the diagonals of a parallelogram are equal, then show that it is a rectangle.
16. There is a group of 75 people who are patriotic, 35 people believe in violence. What is the probability of people who believe in non-violence? Which value you will develop in your character?
17. A wall of length 10 m is to be built across an open ground. The height of the wall is 5 m and thickness of the wall is 42 cm. If this wall is to be built with brick of dimensions 42 cm × 12 cm × 10 cm, then how many bricks would be required?
18. Salim provides water to a village, having a population of 4000 which requires 150 litres of water per head per day. He has storage tank measuring 20 m × 15 m × 6 m. For how many days will the water of his tank last? He increased the rate for providing water as the dependence of villagers increased on him. Which value is depicted by Salim?
19. Factorize:
    (i) $4x^2 + y^2 + z^2 – 4xy – 2yz + 4xz$
    (ii) $4x^2 + 9y^2 + 16z^2 + 12xy – 24yz – 16xz$
20. Write $(3a + 4b + 5c)^2$ in expanded form.

SUBJECT – SCIENCE

PHYSICS :

Answer the following questions:

1. How is gravitation different from gravity?
2. When we move from the poles to the equator, the value of g decreases. Why?
3. The weight of a body is 50 N. What is its mass? (g = 9.8 m/s^2)
4. Mention any four phenomena that the universal law of gravitation was able to explain.
5. Give three differences between acceleration due to gravity (g) and universal gravitational constant (G).
6. A stone dropped from the roof of a building takes 4s to reach the ground. Calculate the height of the building.
7. Raman went to Goa and he saw tides in the sea. He asked his teacher about the reason behind

the formation of tides in sea. His teacher explained the phenomenon of the formation of tides.

- Explain the reason for the formation of tides in the sea.
- Write down the values shown by Raman and his teacher.

8. What happens to the gravitational force between two objects when the distance between them is :
   (i) doubled?
   (ii) halved?

BIOLOGY :

1. Differentiate between congenital disease and acquired disease.
2. Children living in slum areas frequently suffer from symptoms of abdominal pain, diarrhoea,vomiting and loss of appetite.
   (a) Name the target organ for the occurrence of these symptoms.
   (b) What should be done to improve the health status of these children?
   (c) What is ORS?
3. No case of Polio has been reported from India since the last few years. On that basis, WHO has presented certification of polio free status to India.
   a. Which pathogen is responsible for causing polio in children?
   b . How immunisation can eliminate polio?
   c. What is OPV?
4. Conduct a survey in your neighborhood to find out what the common diseases are. Name the diseases, their causative agent, symptoms, preventive measures and treatments of the diseases. Suggest some steps that should be taken by your local authorities to bring down the incidence of these diseases.
5. Strong immune system is the need in today's Covid-19 times. Give reasons.
6. If someone in the family gets infectious disease, what precautions will you advice to the other family members?
7. Why villagers suffer with cholera more than urban people?
8. "Antibiotics are not effective for viral diseases". Justify this statement.

CHEMISTRY :

1. A student was asked by his teacher a verify the law of conservation of mass in the laboratory. He prepared 5% aqueous solutions of NaCl and Na_2SO_4. He mixed 10 mL of both these solutions in a conical flask. He weighed the flask on a balance. He then stirred the flask with a rod and weighed it after sometime. There was no change in mass. Read this narration and answer the questions given below :
   I. Was the student able to verify the law of conservation of mass ?
   II. If not, what was the mistake committed by him ?
   III. In your opinion, what he should have done ?
   IV. What is the value based information associated with this ?
2. Calculate the formula mass of sodium carbonate ($Na_2CO_3.10H_2O$).
3. (a) Calculate the mass of 0.5 mole of sulphuric acid.
   Atomic mass (H = 1 u, S = 32 u, O = 16 u).
   (b) Find the number of atoms in 12 g of carbon.
   (c) How many atoms are present in (i) H_2S molecule (ii) PO_{3-}^{4} ions.
4. Classify each of the following on the basis of their atomicity.
   (a) F_2 (b) NO_2 (c) CO2−3 (d) C_2H_6 (e) CO (f) H_2O_2
   (g) P_4O_{10} (h) O_3 (i) HCl (j) CH_4 (k) He (l) Ag
5. Calculate the mass per cent of each element present in the molecule of calcium carbonate.
6. Draw the atomic structure of (i) an atom with same atomic number of sub-atomic particles ,

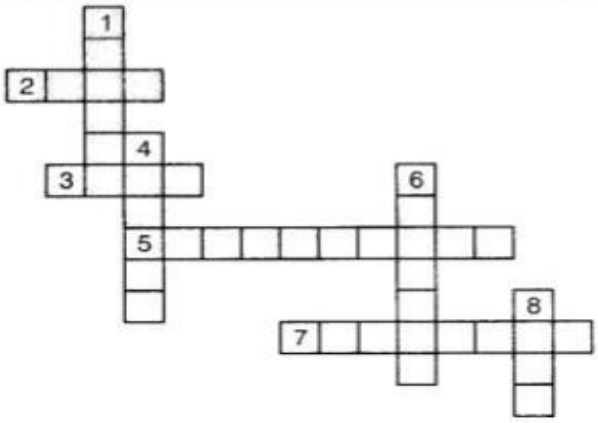
atom with same number of electrons in L shell and M shell .

7. Complete the following gaps in the given table:

Elements	Protons	Electrons	Neutrons	Atomic Number	Mass Number
A	–	–	10	8	–
B	15	–	–	–	31
C	1	–	–	–	3
D	–	11	12	–	–

8. Solve the following Crossword Puzzle:-

Across	Down
2. The element used by Rutherford during his α –scattering experiment.	1. A white lustrous metal used for making ornaments and which tends to get tarnished black in the presence of moist air.
3. An element which forms rust on exposure to moist air.	4. Both brass and bronze are alloys of the element.
5. A very reactive non-metal stored under water.	6. The metal which exists in the liquid state at room temperature.
7. Zinc metal when treated with dilute hydrochloric acid produces a gas of this element which when tested with burning splinter produces a pop sound.	8. An element with symbol Pb.



Note:

- Revise the chapters 13 and 10 for PT-3 examination.

SUBJECT – SOCIAL SCIENCE

- **MAP WORK**
  - **SUBJECT-HISTORY**
    Chapter-2: -Socialism in Europe and the Russian Revolution
    On the political map of world (For locating and labelling/Identification)
  - **Major countries of First World war**
    Central Powers -Germany, Austria-Hungary, Turkey (Ottoman Empire)
    Allied Powers-France, England, Russia, U.S.A.

  - **SUBJECT-GEOGRAPHY**
    Chapter-4: - Climate
    On the Political map of India (Identification)
    Areas receiving rainfall less than 20 can and over 400 cm.

- **Writing Work**

Short questions

Q1. What are elections?
Q2. What is the difference between a voter and a candidate?
Q3. What are thunderstorms called in West Bengal?
Q4. Where is equable type of climate found?

Long questions

Q.1 State three dominant characteristics of the Indian monsoon.
Q.2 Give a brief account of the hot weather season in India.

Q.3 What is a reserved constituency? Why is there need for a reserved constituency?
Q.4 "Sanjay Kumar, a citizen of India was not allowed to cast his vote as he was not having an Election Photo Identity Card (EPIC)." What is the purpose of an EPIC and what were the options available to Sanjay Kumar?

INFORMATION TECHNOLOGY

Write answers to the following question in your notebook.

Q.1 What is mail merge? explain how it can be used in libre writer by giving an example.
Q.2 List five important uses of social media in your education?
Q.3 Define green skill. What is its main vision?
Q.4 Why BPO industries doing exceptionally well in India?
Q.5 Define extended mode selection. what is its benefit?
Q.6 Explain five characteristics of an entrepreneur.
Q.7 What is subscript and superscript in MS-Word text formatting? Explain with example of each?
Q.8 Name five factor that affects in communication.
Q.9 Write steps to hide and unhide column or row in spreadsheet.

HARI VIDYA BHAWAN

HOLIDAY HOMEWORK

Session –(2021-2022)

Class – X

Instructions to be followed:

- Students do your holiday homework in your particular subject notebook .
- Neatness is the common parameter for the completion of work. Please maintain the quality of work done.

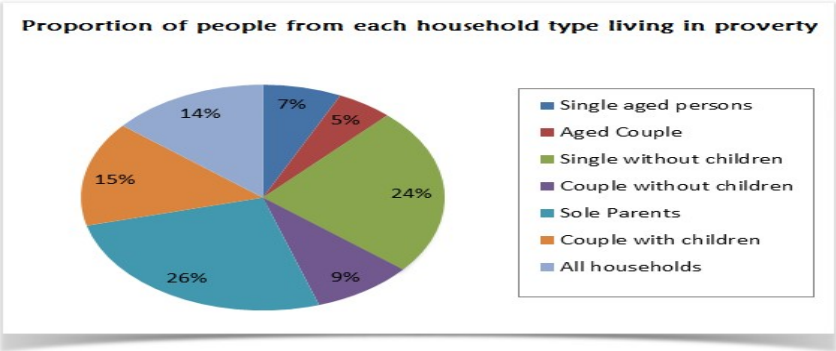
English

1. Letter Writing:

- Write a letter to Delhi Sports, Darya Ganj, New Delhi, placing an order for sports articles like footballs, cricket balls, Tennis balls and cricket bats to be supplied to your school. Sign as Ravi/Raveena, Sports Secretary.
- You are Sunil/Sunita, a student of class X and resident of 56 D, Ring Road, ITO, New Delhi, and wants to be a choreographer. Write a letter to the director, National Institute of Choreography, Noida, seeking information about their course, admission procedure, eligibility criteria and other necessary details.

2. Paragraph Writing:

- **The pie chart shows the proportion of people from different households living in poverty in the UK in 2002. Write an analytical paragraph to describe the information in 100-120 words.**



3. Literature Questions:

- Write a character sketch of Valliammai(Valli) from the chapter “Madam Rides the Bus”.

- What is the role of a baker in a Goan village?
- Describe the physical geographical features of Coorg. What does the author say about the people of Coorg? Describe its Natural Beauty.
- According to the text, Assam is said to be 'tea country'. Do you believe that Assam has some of the best plantations in the world that makes it a unique country?
- Discuss the importance of proper upbringing with reference to the poem Amanda" by Robin Klein.

हिंदी

सामान्य निर्देश –दिया गया कार्य अपनी व्याकरण की कॉपी में करिए।

प्रश्न-1. प्रधानाचार्य को विद्यालय में पुस्तकालय बनवाने की प्रार्थना करते हुए पत्र लिखिए।
प्रश्न-2. आपके मोहल्ले में आए दिन चोरियाँ हो रही है, उनकी रोकथाम के लिए थाना अध्यक्ष को गश्त बढ़ाने हेतु पत्रलिखिए।
प्रश्न-3. आपका अपना एक खेल क्लब है।उसमें नई सदस्यता संबंधी सूचना पट्ट के लिए लिखिए।
प्रश्न-4. विद्यालय के वार्षिक दिवस की सूचना लिखें जिसमें उत्सव का समय तथा अभिभावकों के आने की जानकारी भी हो।
प्रश्न-5. दिए गए बिंदु के आधार पर लघुकथा लिखिए-

1. नीला सियार
संकेतबिंदु: एक सियार भटकते हुए किसी गांव में पहुंचा और धोबी के नील मिले हुए नाँद में गिर गया।
2. बुद्धिमान बुढ़िया
संकेतबिंदु:-एक बार शिवाजी अपने कुछ सैनिकों के साथ मुगलों के किले को जीतने निकले।लड़ाई में उनकी हार हुई और उन्होंने भागकर एक बुढ़िया की झोपड़ी में शरण ली।

प्रश्न-6. निम्नलिखित विषयों पर दिए गए संकेत बिंदु के आधार पर 80 से 100 शब्दों में अनुच्छेद लिखिए।
1. मेरे सपनों का भारत
संकेत -बिंदु:-* उत्तम विकास * शोषण व भ्रष्टाचार से मुक्त भारत *प्रगतिशील समृद्ध भारत
2. कर्म ही पूजा है
संकेतबिंदु:-*कर्म ही पूजा काअर्थ *कर्म का संबंध सभी प्राणियों से *कर्म ईश्वर का रूप

प्रश्न-7. आपने अपने शहर में डिजाइनर बुटीक खोला है उसके प्रचार के लिए एक विज्ञापन तैयार की जिए।

Mathematics

1. Which term of the AP : 21, 18, 15, . . . is – 81? Also, is any term 0?

   Give reason for your answer.

2. Check whether 301 is a term of the list of numbers 5, 11, 17, 23, . . .

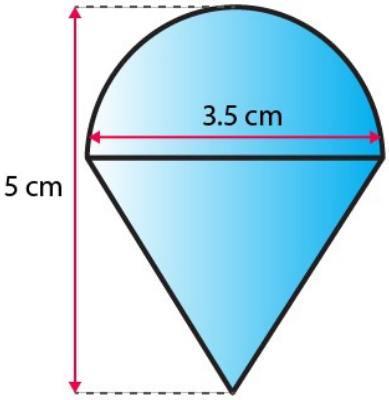
3. Find the sum of 12 terms of an A.P. whose nth term is given by $a_n = 3n + 4$
   (a) 262 (b) 272 (c) 282 (d) 292
4. If 5,k,11 are in A.P., the value of k is:
   (a) 6 (b) 8 (c) 7 (d) 9
5. Evaluate.

   (i) $\sin^2\theta + \frac{1}{(1+\tan^2\theta)} = 1$

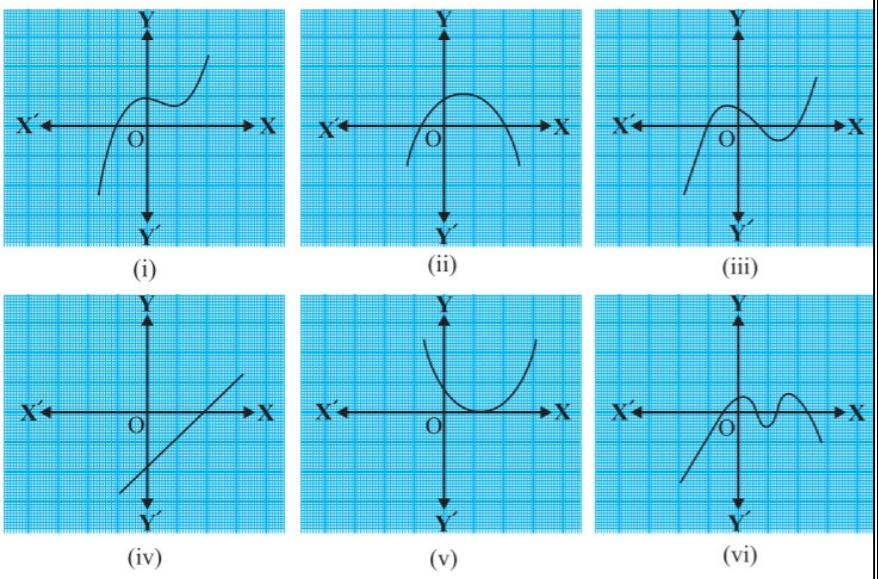
   (ii) $\frac{1}{(1+\tan^2\theta)} + \frac{1}{(1+\cot^2\theta)} = 1$

6. A contractor plans to install two slides for the children to play in a park. For the children below the age of 5 years, she prefers to have a slide whose top is at a height of 1.5 m, and is inclined at an angle of 30° to the ground, whereas for elder children, she wants to have a steep slide at a height of 3 m, and inclined at an angle of 60° to the ground. What should be the length of the slide in each case?
7. A kite is flying at a height of 60 m above the ground. The string attached to the kite is temporarily tied to a point on the ground. The inclination of the string with the ground is 60°. Find the length of the string, assuming that there is no slack in the string.
8. The nth term of an A.P. is given by $a_n = 3 + 4n$. The common difference is
   (a) 7 (b) 3 (c) 4 (d) 1
9. If the sum of three numbers in an A.P. is 9 and their product is 24, then numbers are
   (a) 2, 4, 6 (b) 1, 5, 3 (c) 2, 8, 4 (d) 2, 3, 4
10. Divide $2x^2 + 3x + 1$ by $x + 2$.
11. Find all the zeroes of $2x^4 – 3x^3 – 3x^2 + 6x – 2$, if you know that two of its zeroes are $\sqrt{2}$ and $-\sqrt{2}$.
12. On dividing $x^3 – 3x^2 + x + 2$ by a polynomial g(x), the quotient and remainder were $x – 2$ and $–2x + 4$, respectively. Find g(x).
13. Two cones have their heights in the ratio 1 : 3 and radii in the ratio 3 : 1. What is the ratio of their volumes?
14. A cubical ice-cream brick of edge 22 cm is to be distributed among some children by filling ice-cream cones of radius 2 cm and height 7 cm up to its brim. How many children will get the ice cream cones?
15. Three cubes of a metal whose edges are in the ratio 3:4:5 are melted and converted into a single cube whose diagonal is $12\sqrt{3}$ cm. Find the edges of the three cubes.
16. Find the number of solid spheres each of diameter 6 cm that can be made by melting a solid metal cylinder of height 45 cm and diameter 4 cm.
17. Rasheed got a playing top (lattu) as his birthday present, which surprisingly had no colour on it. He wanted to colour it with his crayons. The top is shaped like a cone

surmounted by a hemisphere. The entire top is 5 cm in height, and the diameter of the top is 3.5 cm. Find the area he has to colour. (Take π = 22/7)



18. Two poles of equal heights are standing opposite each other on either side of the road, which is 80 m wide. From a point between them on the road, the angles of elevation of the top of the poles are 60° and 30°, respectively. Find the height of the poles and the distances of the point from the poles.
19. An observer 1.5 metres tall is 20.5 metres away from a tower 22 metres high. Determine the angle of elevation of the top of the tower from the eye of the observer.
20. The angle of elevation of the top of a tower from a certain point is 30°. If the observer moves 20 metres towards the tower, the angle of elevation of the top increases by 15°. Find the height of the tower.
21. Q.7: A circus artist is climbing a 20 m long rope, which is tightly stretched and tied from the top of a vertical pole to the ground. Find the height of the pole, if the angle made by the rope with the ground level is 30°.
22. Look at the graphs in Figure given below. Each is the graph of y = p(x), where p(x) is a polynomial. For each of the graphs, find the number of zeroes of p(x).



23. Q5. Divide $3x^2 - x^3 - 3x + 5$ by $x - 1 - x^2$, and verify the division algorithm.
24. From the top of a 7 m high building, the angle of elevation of the top of a

cable tower is 60° and the angle of depression of its foot is 45°. Determine the height of the tower.

25. Complete the activity to verify using a graphical method that a given sequence of numbers is an arithmetic progression (AP)
For activity click on the link : https://www.aplustopper.com/math-labs-activity-sequence-numbers-arithmetic-progression-ap/

Science

PHYSICS

Q.1 Calculate the potential difference between two terminals of a battery if 100 joules of work is done to transfer 20 coulomb from one terminal to another.

Q.2 Calculate the current in a circuit if 500 C of charge pass on through it in 10 minutes .

Q.3 Calculate the amount of charge that would flow in 2 hours through an element of an electric bulb drawing a current of 0.25 A.

Q.4 Define electric circuit . Distinguish between open and closed electric circuits .

Q.5 A piece of wire of resistance 20 ohm is drawn out so that its length is increased to twice its original length . Calculate the resistance of the wire in the new situation .

Q.6 Resistance of a metal wire of length 1m is 26 ohm at 20 degree Celsius . If the diameter of the wire is 0.3 mm , what will be the resistivity of the metal at that temperature ?

Q.7 A toaster of resistance 100 ohm is connected to 220 V line . Calculate the current drawn by the toaster .

CHEMISTRY

Q.8 What is a covalent bond ? What type of bond exists in (i) CCl_4, (ii) $CaCl_2$?

Q.9 Catenation is the ability of an atom to form bonds with other atoms of the same element. It is exhibited by both carbon and silicon. Compare the ability of catenation of the two elements. Give reasons.

Q.10 Write down the electron dot structure (formula) of sodium chloride and magnesium oxide. Atomic Numbers: Na = 11, Mg = 12, Cl = 17 and 0 = 8

Q.11 Why are unsaturated hydrocarbons more reactive than saturated hydro carbons?

Q.12 Give an example each of
(i) open chain,
(ii) branched chain and
(iii) ring compounds.

Q.13 What is homologous series of carbon compounds ? List its any two characteristics. Write the name and formula of next higher homologous of HCOOH.

Q.14 What is atomic radius? Why does atomic radius decrease across a period?

Q.15Write the formulae of chlorides of Eka-silicon and Eka-aluminium, the elements predicted by Mendeleev.

Q.16Arrange the following elements in the increasing order of their metallic character Mg, Ca, K, Ge, Ga

Q.17 How does the atomic radius of the elements change on going :

(i) from left to right in a period, and

(ii) down a group in the Modern Periodic Table? Give reason in support of your answer.

Q.18 Identify the elements with the following property and arrange them in increasing order of their reactivity.

(a) An element which is a soft and reactive metal.

(b) The metal which an important constituent of limestone.

(c) The metal which exists in liquid state at room temperature.

Q.19 The following table shows the position of six elements A, B, C, D, E and Fin the PeriodicTable.

Groups→ Periods ↴	1	2	3 to 12	13	14	15	16	17
2.	A					B		
3.		D			E			

Using the above table answer the following questions:

(a) Which element will form only covalent compounds?

(b) Which element is a metal with valency?

(c) Which element is a non-metal with valency 3?

(d) Write a common name for the family of elements Cand E.

(e) Out of D and E, which one has a bigger atomic radius and why?

Q.20 The atomic number of an element 'X' in the periodic table.

(ii) Write the formula of the compound formed when 'X' reacts/combines with another element 'Y' (atomic number 8).

(iii) What would be the nature (acidic or basic) of the compound formed? Justify the

Q.21 Four elements P, Q, R and S belong to the third period of the Modern Periodic Table and have respectively 1, 3, 5 and 7 electrons in their outermost shells. Write the electronic configurations of Q and Rand determine their valencies. Write the molecular formula of the compound formed when P and S combine.

Q.22 Calcium is an element with atomic number 20. Stating reason answer each of the following questions:

(i) Is calcium a metal or non-metal?

(ii) Will its atomic radius be larger or smaller than that of potassium with atomic number 19?

(iii) Write the formula of its oxide.

BIOLOGY

Q.23 What is vegetative propagation ?

Q.24 List two functions performed by ovaries in a human female.

Q.25 What is the effect of DNA copying which is not perfectly accurate in the reproductive process ?

Q.26 Name the hormone, secretion of which is, responsible for dramatic changes in

appearance in girls when they approach 10-12 years of age.

Q.27 Why is DNA copying an essential part of the process of reproduction ?

Q.28 Mention the common mode of reproduction found in

1. Amoeba
2. Planaria.

Q.29 Name any two types of asexual reproduction.

Q.30 State the method used for growing rose plants.

Lab Work

- **Note: Write lab work in Science lab manual.**

Q.31 **Write the following experiment in lab manual:-**

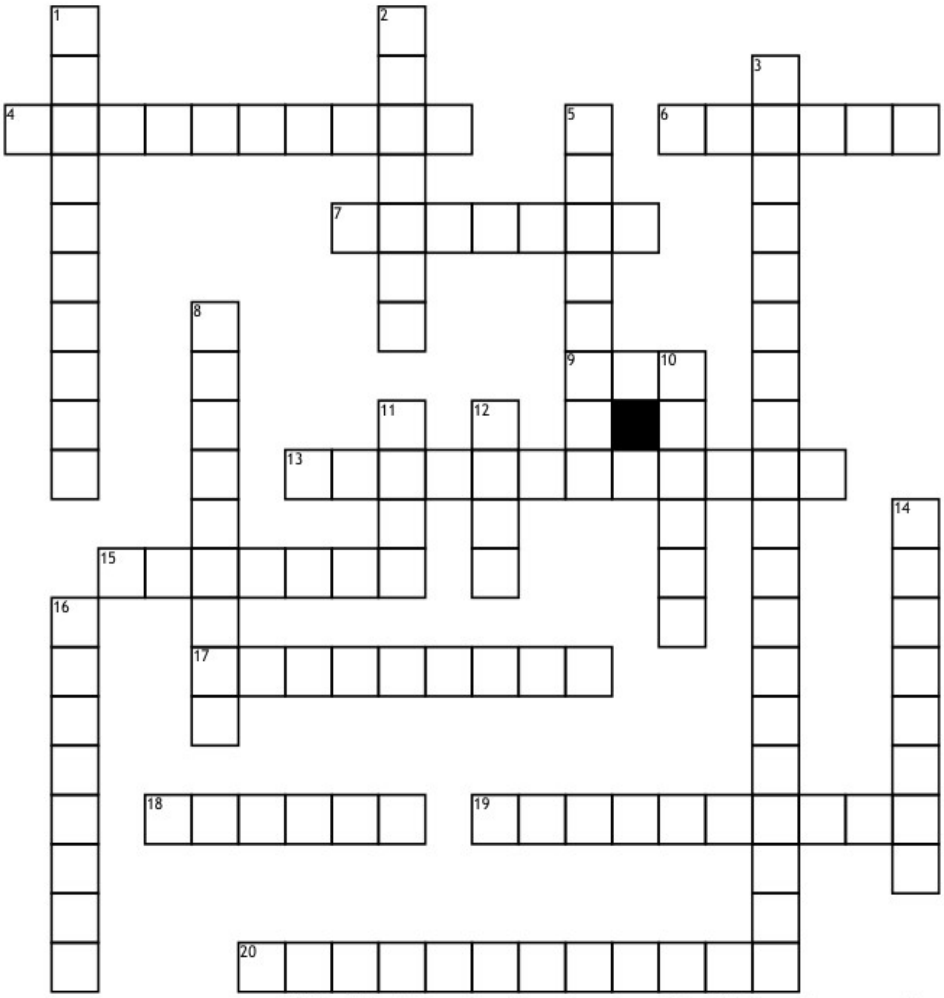
(a) Binary fission in Amoeba

(b) Budding in yeast and Hydra with the help of prepared slides.

Q.32 Solve this crossword puzzle from the chapter-5 : Periodic Classification.

Name: _____ Date: _____

Periodic Table Basics



Across

4. What is column 18?

6. What element has the symbol S?

7. What is another name for rows?

9. What kind of element is Helium?

13. The amount of protons is equal to the what?

15. What are the vertical lines called?

17. All elements have protons neutrons and what?

18. What is another word for columns?

19. Columns 3-12 are what kinda of metals?

20. What is column 1?

Down

1. Weighted average of mass of an element?

2. What is oxygen?

3. What is column 2?

5. What element has the atomic mass of 1.008?

8. Who created the Periodic Table?

10. AU is what for Gold?

11. What are the horizontal lines called?

12. How many protons does boron have?

14. What is column 17?

16. What is hydrogen?

S.S.T

MAP WORK

SUBJECT-HISTORY

Chapter-2: -Nationalism in India

On the political map of India (For locating and labelling/Identification)

1. **Indian National Congress Sessions:**

a. Calcutta (Sept.1920)

b. Nagpur (Dec.1920)

c. Madras (1927)

2. **Important Centres of Indian National Movement**

a. Champaran (Bihar)-Movement of Indigo Planters

b. Kheda (Gujarat)-Peasant Satyagraha

c. Ahemdabad (Gujarat)-Cotton Mill Workers Satyagraha

d. Amritsar (Punjab)-Jallianwala Bagh Incident

e. Chauri Chaura (U.P.)-Calling off the Non-Cooperation Movement

f. Dandi (Gujarat)- Civil Disobedience Movement

Writing Work

LONG QUESTIONS

Q1.Why did Mahatma Gandhi decide to launch a nationwide satyagraha against the proposed Rowlatt
Act? Explain any three reasons.

Q2. How could non-cooperation become a movement? Explain with examples.

Q3. Describe the incident and impact of the Jallianwala Bagh.

Q4. Categorise and discuss the different urban sentiments which joined the Non-cooperation Movement.

Information Technology

Q1.Discuss the components of a database.

Q2. Write two advantages of using database management system for school.

Q3. Explain WIFI and its significance.

Q4. Make a PPT on IT Applications.

Q5. List any five-application based instant messaging software.

Q6. What is a blog? Explain its use.

Q7. Define networking? Give any three advantages of networking.

Q8. What is the meaning of sustainable development?

Q9. Explain five characteristics of an entrepreneur.