THE ASIAN SCHOOL, DEHRADUN
HOLIDAY HOMEWOR- SUMMER VACATION 2022 FOR CLASS IX

English: **INSTRUCTIONS FOR COMPILATION OF HOLIDAY HOMEWORK :.**

1. Update your CW notebook. Complete all your pending Class Work / HW Q/A, Word Meanings, Notes etc
2. **Do all the following questions in English Home-Work Notebook only.**
   HW notebook is to be submitted for checking on the day the school reopens after vacation. A copy of this assignment page should be   pasted in the Holiday Home-work notebook.

MOMENTS: (Supplementary Reader)

Do self study of Chapters marked.

Write down the Central theme, Message, Value points of each chapter and write the answers of the questions given below.
Answer all the questions in about 60 to 70 words.

CH -2 The Adventures of Toto

1) How many pets did the author's grandfather have? Where were they kept?

2) How did Toto use his body parts to his advantage?

3) The brain part devoted to mischief was far more developed in Toto". Do you agree with this observation of the narrator? Support your answer with instances from the text.

4) Describe the situation in which grandfather found himself at the Saharanpur railway station.

5) What human values do you see in Grandmother after reading this story?

CH - 3 Iswaran the Storyteller

1) In what way is Iswaran an asset to Mahendra?

2) How does Iswaran describe the uprooted tree on the highway?

3). How does Iswarannarrate the story of the tusker? Does it appear to be plausible?

4) Why does the author say that Iswaran seemed to more than make up for the absence of a TV in Mahendra's living quarters?

5) Mahendra calls ghosts or spirits a figment of the imagination. What happens to him on a full moon night?

CH-4 In the Kingdom of Fools

1) Why did the disciple decide to stay in the Kingdom of Fools? Was this a good idea? What does it reveal about his character?

2) Name all the people who are tried in the King's court, and give reasons for each of their trials.

3) Who is the real culprit according to the King? Why does he escape punishment?

4) One should not be greedy. How did greed bring the disciple in trouble?

5) A disciple is blessed when he finds the ideal Guru. In the case of the disciple in the story 'In the Kingdom of Fools', despite having an ideal guru, the disciple had drifted away from him. What traits in his character had made him behave in this manner?

CH- 5 The Happy Prince

1) When and how did the Happy Prince realize the true meaning of life? What did this realization prompt him to do?

2) Why is the frost called a 'dreadfully hard frost'?

3) What are the two most precious things that the Angels find in the city?

4) Why did the swallow delay his departure for the second time?

5) How do the councilors and Mayor react on seeing the broken statue?

CH - 7 The Last Leaf

1) How did Johnsy associate herself with the falling leaves?

2) How did Sue pour out her worries to Behrman? What was his reaction?

3) What quality of friendship do you find in Sue as a friend?

4) Why has the story been called 'The Last Leaf? Do you think it is appropriate? Give reasons for your answer?

5) How did Johnsy realize her mistake?

Hindi: साहित्य –

1 कबीरदास की साखियों का भावार्थ लिखिए तथा चित्रों का प्रयोग भी कीजिए।

2. राहुल सांकृत्यायन द्वारा ल्हासा की ओर यात्रा का अनुभव, भौगोलिक स्थिति, वहाँ की जन–जीवन आदि का वर्णन किया है, उसी प्रकार आप अपनी किसी रोमांचिक यात्रा का सचित्र वर्णन कीजिए।

3. दो बैलों की कथा में काँजीहौस के दृश्यो का नाट्य रूपान्तर कीजिए।

व्याकरण–

1. निम्नलिखित शब्दों में मूल शब्द और उपसर्ग अलग कीजिए–

1) पुरातत्व	2) सहगान	3) उनतीस	4) हमशक्ल	5) सबइंसपेक्टर	6) हैडवलर्क
7) ऐनवक्त	8) बिनब्याही	9) बेकसूर	10) सुघड	11) अथाह	12) अधपका

13) अनहोनी   14) आहट   15) कुसंग   16) निहत्था   17) भरमार   18) परपोता
19) बदतमीज   20) गैरकानूनी

2. निम्नलिखित शब्दों से मूल शब्द और प्रत्यय अलग कीजिए—

1) भिक्षुक	2) दाता	3) भुलक्कड़	4) उड़ाऊ	5) होनहार	6) चटनी
7) पहचान	8) बोली	9) अमन	10) फाँसी	11) कथनीय	12) गन्तव्य
13) मनुष्यत्व	14) योग्यता	15) कड़वाहट	16) जहरीला	17) शौकीन	18) मोटापा
19) डिबिया	20) रस्सी				

3. निम्नलिखित समस्तपदों का विग्रह कर समास का नाम लिखिए—

1) राष्ट्रपतिभवन	2) जगबीती	3) महात्मा	4) कालीमिर्च	5) अंधकूप	6) घनस्याम
7) विद्याधन	8) तिरंगा	9) पंजाब	10) शताब्दी	11) खट्टामीठा	12) आमरण
13) मेघनाथ	14) बेखटके	15) सतधर्म	16) नदी नाले	17) अठन्नी	18) गिरिधर
19) यथाशक्ति	20) त्रिलोक				

4. पत्र लेखन (शब्द सीमा 150)
   1) आपके आस-पास की दुकानों में मिलावटी सामान बेचा जा रहा है। इसकी सूचना देते हुए जिला स्वास्थ्य अधिकारी को पत्र लिखिए।
   2) आपके मित्र का चयन जिला स्तरीय क्रिकेट टीम में हो गया है। मित्र को बधाई देते हुए पत्र लिखिए।

Note : सम्पूर्ण कार्य आन्तरिक मूल्यांकन के अन्तर्गत जाँचा जायेगा।

Mathematics

Note:
i)   The Holiday Hw Has To Be Done In The Maths Hw Notebooks.
ii)   Use The Graph Sheets Wherever Required.

Q.1 Is zero a rational number? Can you write in the form p/q, where p and q are integer and q≠0 ?

Q.2 Find five rational numbers between $\frac{2}{5}$ and $\frac{3}{5}$?

Q.3 State whether the following statements are true or false give reasons for your answers.
     (i) Every natural no. is whole number.
     (ii) Every integer is a whole number.
     (iii) Every rational number is a whole number.
     (iv) Every irrational number is a real number.
     (v) Every real number is an irrational number.
     (vi) Every point on the number line is of the form where m is a natural no's.

Q.4 Show how $\sqrt{5}$ can be represented on the number line?

Q.5 Find the decimal expansion of $\frac{10}{3}$, $\frac{7}{8}$ and $\frac{1}{7}$? What kind of decimal expansion each has.

Q.6 Show that 1.272727.... = can be expressed in the form p/q, where p and q are integers and q≠0

Q.7 Write three numbers whose decimal expressions are non-terminating & non recurring?

Q.8 Find three different rational between 3/5 and 4/7.

Q.9 Classify the following numbers as rational or irrational.
     (a) $\sqrt{23}$ (b) $\sqrt{225}$ (c) 0.6796   (d) 1.101001000100001....

Q.10 Visualize 3.765 on the number line using successive magnification.

Q.11 Visualize $4.\overline{26}$ on the number line upto 4 decimal places.

Q.12 simplify the following expressions.   (i) $(5 + \sqrt{7})(2 + \sqrt{5})$ (ii) $(5 + \sqrt{5})(5 - \sqrt{5})$
     (iii) $(\sqrt{3} + \sqrt{7})^2$ (iv) $(\sqrt{11} - \sqrt{7})(\sqrt{11} + \sqrt{7})$

Q.13 Rationalize the denominator of $\frac{5}{\sqrt{3}-\sqrt{5}}$.

Q.14 Represent $\sqrt{6.3}$ on number line.

Q.15 Simplify
     (i) $2^{2/3} \cdot 2^{1/5}$
     (ii) $\left(\frac{1}{3^3}\right)^7$
     (iii) $(16)^{\frac{3}{4}}$
     (iv) $7^{1/2} 8^{1/2}$

Q.16 Write the value of
$$\left(\frac{x^a}{x^b}\right)^{a+b} \times \left(\frac{x^b}{x^c}\right)^{b+c} \times \left(\frac{x^c}{x^a}\right)^{c+a}$$

Q.17 Simplify
$$\left\{5\left(8^{\frac{1}{3}} + 27^{\frac{1}{3}}\right)^3\right\}^{\frac{1}{4}}$$

Q.18 If a & b are rational number, find the value of a & b in each of the following equalities.

(a) $\frac{\sqrt{3}-1}{\sqrt{3}+1} = a + b\sqrt{3}$ (ii) $\frac{3+\sqrt{7}}{3-\sqrt{7}} = a + b\sqrt{7}$

Q.19 On which axes do the given points lie?

(i) (7, 0) (ii) (0, -3) (iii) (0, 6) (iv) (-5, 0)

Q.20 In which quadrants do the given points lie?

(i) (4, -2) (ii) (-3, 7) (iii) (-1, -2) (iv) (3, 6)

Q.21 Is P (3, 2) & Q(2, 3) represent the same point?

Q.22 In which quadrant points P(3,0), Q(6,0) , R (-7.0), S (0,-6), lie

Q.23 If a<0 and b<0, then the point P(a,b) lies in   (a) quadrant IV (b) quadrant II (c) quadrant III (d) quadrant I

Q.24 The points (other than the origin) for which the abscissa is equal to the ordinate lie in

(a) Quadrant I only (b) Quadrant I and II

(c) Quadrant I & III (d) Quadrant II only.

Q.25 The perpendicular distance of the point P(4,3) from the y axis is

(a) 3 Units (b) 4 Units (c) 5 Units (d) 7 Units

Q.26 The area of triangle OAB with O(0,0), A(4,0) & B(0,6) is   (a) 8 sq. unit (b) 12 sq. units (c) 16 sq. units (d) 24 sq. units

Q.27 Draw the lines X'OX and YOY1 as the axes on the plane of a paper and plot the given points.

(i) A(5,3) (ii) B (-3, 2) (iii) C(-5, -4) (iv) D(2,-6)

Q.28 Find the mirror images of the following point using x-axis & y-axis as mirror.

(i) A(2,3)   (ii) B(2,-3)   (iii) C(-2,3)   (iv) D(-2,-3)

Q.29 Draw the graph of the following equations

(i) $y = 3x + 2$ (ii) $y = x$

Q.30 Draw a triangle with vertices O(0,0) A(3,0) B(3,4). Classify the triangle and also find its area.

Q.31 Draw a quadrilateral with vertices A(2,2) B(2,-2) C(-2,-2), D(-2,2). Classify the quadrilateral and also find its area.

Q.32 Find the coordinates of point which are equidistant from these two points P(3,0) and Q(-3,0). How many points are possible satisfying this condition?

Q.33 The point (a, a) always lies on the line (a) y = x (b) y - axis (c) x - axis (d) x + y = 0

Q.34 The point (m, -m) always lies on the line. (a) $x = m$ (b) $y = -m$ (c) $x + y = 0$ (d) $x = y$

Q.35 If x = -2 and y = 3 is a solution of the equation 3x – 5y = a then what is the value of a ?

Q.36 x = -5 can be written in the form of equation in two variable as

(a) $x + o.y + 5 = 0$ (b) $o.x + y = -5$

(c) $o.x + o.y = -5$ (d) $o.x + o.y = +5$

Q. 37 The linear equation 3x – 2y = 5 has

(a) a unique solution   (b) two solutions   (c) no solution   (d) infinitely many solutions.

Q.38 The equation of x-axis is   (a) x = k (b) y = 0 (c) x = 0 (d) y = k

Q.39 Any point on the y-axis is of the form   (a) (x, y) (b) (x,x) (c) (0,y) (d) (x, 0)

Q.40 Draw the graph of the equation x – 2y = 0

Q.41 The cost of a pen is four times the cost of a pencil express the statement as a linear equation in two variables.

Q.42 Write any four solutions for each of the following equations. (a) 5x – 2y = 0,   (b) 3x + y = 7

Q.43 Find the value of a if (-1, 1) is a solution of the equation 3x – ay = 5

Q.44 If (3,1) is a solution of the equation 3x + 2y = k, find the value of k.

Q.45 Verify that x = 2, y = -1, is a solution of the linear equation

Q.46 Write one solution of each of the following equations   (a) 4x – 3y = 0   (b) 2x – y = 3

Q.47 The cost of 2 pencils is same as the cost of 5 erasers. Express the statement as a linear equation in two variables.

Q.48 Give the geometrical representation of the equation y = 3 as an equation. (i) In one variable   (ii) In two variables

Q.49 Ramesh is driving his car with a uniform speed of 80 km/hr. Draw the time distance graph. Form the graph find the distance travelled by him in.   (i) 90 min   (ii) 3 hours

Q.50 Draw the graph of each of the equations 2x – 3y + 5 = 0 and 5x + 4y + 1 = 0 and find the coordinates of the point where the lines meet.

Q.51 Draw the graph of the equation 5x – 6y – 28 = 0 and check whether the point (2,3) lies on the line.

Q.52 The taxi fare in a city is as follows: For the first kilometer, the fare is Rs. 8 and for the subsequent distance it is Rs. 5 per km. Taking the distance covered as x km and total fare as Rs. y, writes a linear equation for this information, and draw its graph.

Q.53 Write three solutions for the equation 7x – 8y = 13

SCIENCE :

Physics:

Instructions :

i) All the questions are to be done in Physics Homework Notebook.
ii) Work should be neat and presentable.

Q1. Give an example of a body which may appear to be moving for one person and stationary for the other.

Q2. What is the difference between uniform velocity and non-uniform velocity?

Q3. What do you understand by instantaneous velocity?

Q4. A particle is moving in a circular path of radius r. What would be the displacement after half a circle?

Q5. Distinguish between speed and velocity.

Q6. How will you show that the slope of displacement- time graph give velocity of the body?

Q7. Deduce the following equation of motion by graphical method:

    a) $v = u + at$

    b) $s = ut + (1/2)at^2$

    c) $v^2 = u^2 + 2as$

Q8. Obtain a relation for the distance travelled by an object moving with a uniform acceleration in the interval between 4th and 5th seconds.

Q9. A farmer moves along the boundary of a square field of side 10 m in 40s. What will be the magnitude of displacement of the farmer at the end of 2 minutes and 20 seconds?

Q10. A body travels along a circular path of radius 70m. After travelling half a revolution in 20s, find the (i) average velocity (ii) average speed.

Q11. A cheetah is the fastest land animal and can achieve a peak velocity of 100 km/h up to distances less than 500 m. If a cheetah sports its prey at a distance of 100 m, what is the minimum time it will take to get its prey, if the average velocity attained by it is 90 km/h?

Q12. A driver of a car travelling at 52 kmh^{-1} applies the brakes and accelerates uniformly in the opposite direction. The car stops in 5s. Another driver going at 30 kmh^{-1} in another car applies his brakes slowly and stop in 10s. On the same graph paper, plot the speed versus time graphs for the two cars. Which of the two cars travelled farther after the brakes were applied?

Q13. The brakes applied to a car produce an acceleration of 6 ms^{-2} in the opposite direction to the motion. If the car takes 2s to stop after the application of brakes, calculate the distance it travels during this time.

Q14. An artificial satellite is moving in a circular orbit of radius 42250 km. Calculate its speed if it takes 24 hrs to revolve around the earth.

Q15. An object starting from rest travels 20m in first 2s and 160 m in next 4 s. What will be the velocity after 7s from the start?

Q16. Explain uniform circular motion with the help of examples.

Q17. A body is moving along a circular path of radius R. What will be distance travelled and displacement of the body when it completes half a revolution.

Q18. A scooter acquires a velocity of 36 km per hour in 10 seconds just after the start. Calculate the acceleration of the scooter.

Q19. A moving train is brought to rest within 20 seconds by applying brakes. Find the initial velocity, if the retardation due to break is 2ms^{-2}.

Q20. A racing car has a uniform acceleration of 4 m/s^2. What distance will it cover in 10 seconds after the start?

CHEMISTRY

Instructions :

i) All the questions are to be done in Chemistry Homework Notebook.
ii) Work should be neat and presentable.

1. What are the conditions for 'something' to be called 'matter'?

2. Name two processes which provide the best evidence for the motion of particles in matter.

3. Which single term is used to describe the mixing of copper sulphate and water kept in a beaker, on its own?

4. When sugar is dissolved in water, there is no increase in the volume. Which characteristic of matter is illustrated by this observation?

5. Even two or three crystals of potassium permanganate can impart colour to a very large volume of water. Which characteristic of particles of matter is illustrated by this observation?

6. When an incense stick (agarbatti) is lighted in one corner of a room, its fragrance spreads in the whole room quickly. Which characteristic of the particles of matter is illustrated by this observation?

7. A piece of chalk can be broken into small particles by hammering but a piece of iron cannot be taken into small particles by hammering. Which characteristic of the particles of matter is illustrated by these observations?

8. What is the scientific name of particles which make up matter?

9. Name the process by which a drop of ink spreads in a beaker of water.

10. What is the general name of :

      (a) rigid form of matter ?

      (b) fluid forms of matter ?

11. Out of solids, liquids and gases, which one has :

      (a) maximum movement of particles ?

      (b) maximum interparticle attractions ?

      (c) minimum spaces between particles ?

12. 'A substance has definite volume but no definite shape'. State whether this substance is a solid, a liquid or a gas.

13. Name the physical state of matter which can be easily compressed.

14. 'A substance has a definite shape as well as a definite volume'. Which physical state is represented by this statement?

15. A substance has neither a fixed shape nor a fixed volume. State whether it is a solid, a liquid or a gas.

16. Name two gases which are supplied in compressed form in homes and hospitals.

17. Write the full forms of the following: (a) LPG   (b) CNG

18. Which of the two diffuses faster : a liquid or a gas?

19. Which of the two diffuses slower : bromine vapour into air or copper sulphate into water?

20. State whether the following statement is true or false :

      Red-brown bromine vapour diffuse into air in a gas jar but the colourless air molecules do not diffuse into bromine vapour.


Biology:

Instructions :

    i) All the questions are to be done in Biology Homework Notebook.

    ii) Work should be neat and presentable.

Q1. Name the factor which decides the movement of water across the Plasma membrane.

Q2. Differentiate between Nucleus and Nucleoid.

Q3. What would happen if shelled raw egg and deshelled boiled egg are placed in water?

Q4. a) Name the smallest and the largest cell.

    b) Name the longest cell in human body.

Q5. Why is endocytosis found in animals only?

Q6. Why dry Apricots placed in salt solution do not swell while they do so when kept in water?

Q7. What would happen if Golgi Apparatus is removed from the cell?

Q8. Name a cell organelle which is non- membranous.

Q9. How are Chromatin, Chromatid and Chromosome related to each other?

Q10. Mitochondria and Chloroplasts are able to make their own protein. Give reason.

Q11. How are vacuoles useful in unicellular organisms like *Amoeba*?

Q12. Write one similarity and one difference between Mitochondria and Chloroplast.

Q13. Hypertonic Solution causes Plasmolysis where the protoplast shrinks and withdraws from the cell wall at most places. What is present between the shrunken protoplast and cell wall?

Q14. Name the organelles which show analogy written as under:

      i)   Transporting Channels of the cell

      ii)   Power house of the cell

      iii)   Packaging and dispatching unit of the cell

      iv)   Digestive bag of the cell

      v)   Storage sac of the cell

Q15. Why do plant cells possess large- sized vacuoles?

Q16. What is membrane biogenesis? How is Endoplasmic Reticulum important for membrane biogenesis?

Q17. What would happen if plasma membrane ruptures?

Q18. a) Name and draw a cell which does not have a well defined nuclear region? Label any four parts.

    b) Mention two ways by which a cell belonging to this group differs from a cell of your body.

Q19. Draw a neat diagram of Plant cell and label any three parts which differentiate it from Animal cell.

Q20.
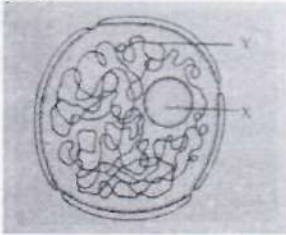
a) Identify the above figure.
b) Label X and Y?
c) What is the function of X?

Social Science : As per CBSE guidelines, students of Class IX have to submit a handwritten project on **any one** of the related topics on
Disaster Management .

GUIDELINES FOR SUBMITTING THE PROJECT

1. Highlight the following:

- Definition of 'Disaster'.
- What is a disaster management cycle?
- What are the types of Disasters?
- What is vulnerability and risk?
- What is a Hazard? How is it classified?
- Differentiate between hazard and disaster.

2 a. Prevention and Mitigation of Common Disasters in India. Select any**one** for your project.

Earthquake OR Flood

2.b. Based on your selection in **Point 2 a** above, enumerate the following in your project: -

- Meaning
- Causes
- Do's and don'ts
- Prevention and mitigation measures
- Your emergency Kit
- Latest means of forecasting Disasters
- Prepare a **case study on any one of the Disasters** that you have chosen to research.

General Instructions:

1. The project should be hand written.
2. It should be well presented, researched, and pictorial.
3. Cover page, table of contents, acknowledgements, bibliography, headings and sub – headings are a must.
4. Each section should be done on **white/colored A4 size sheets**.
5. The project should be presented in a file or get your project spiral bound.
6. The project should **not exceed 15 pages.**
7. **Do not exceed 700 words.**

Computer:

Q1- Solve question paper of Unit-1 test.

Q2- Write the role of IT in any five fields like education, banking, hospitality, etc.

Q3- Make a presentation on effect of Russia and Ukraine war.

Q4- Explain different mode of communication with their limitations.

French : From text book write the conjugation of all the verbs given at the back of the book.Conjugation will include following tenses:

1 Présent   2 Futur proche   3 Futur simple   4 Impératif

Conjugation of each and every verb has to be done in these tenses. Write these conjugation in a thick note book.

Note : Make a separate note book.

HEAD SENIOR SCHOOL   **PRINCIPAL**   **DIRECTOR ACADEMICS**