## SRI GURU NANAK PUBLIC SCHOOL, ADARSH NAGAR, DELHI-110033 SUMMAR VACATIONS HOLIDAY HOMEWORK (2024-25) <br> CLASS-IX

## ENGLISH

## TASK 1

Your family trip to Lakshadweep Island -the pint-sized paradise on earth was a very enriching experience. This trip gave you a kaleidoscopic view of nature's wonder. The mesmerizing sight of clear blue sky and the beautiful beaches evoked in you a sense of reverence for this rich nature's trove in our country.


Pen down your experience of this trip in the form of a Diary entry in about 120 words.

Your account should vividly describe the place, its climate, flora \& fauna \& your takeaway. Do this task on an A3 size sheet. Paste beautiful pictures also

## TASK-2

Write a self-composed poetry on any one of the given topics with at least 2-3 stanzas on an A4 size sheet.
A) Brotherhood
B) I am blessed
C) Music

## TASK-3

Given below is a list of literary devices. Make a video or PPT and select any one poem from the syllabus as well. Describe all the literary devices used in it while explaining the literary devices in the video/ PPT.

Simile
Metaphor
Personification Irony
Repetition
Hyperbole Allusion
Apostrophe
Paradox
Onomatopoeia

## TASK-4

Create a beautiful notebook of handmade sheets. Write 20 idioms and their meanings along with 30 difficult words shortlist from your text. Also write their antonyms and synonyms in a notebook.

## GRAMMAR WORKSHEETS

Solve the following worksheets in the A4 size ruled sheets and paste it in your cw register:

## WORKSHEET-1

The following passage has not been edited. There is an error in each line. Write the incorrect word and the correction in the blank spaces. The first one has been done as an example.

The next day during an break
when all the teacher and students
was eating their snacks, the mother
left the school building hurrily.
The boy saw him walking
quickly from of the school gate
when he was drank water after
his meal and wonder where
his mother is going.

Incorrect - Correct
(a)
(b) $\qquad$
(c) $\qquad$
(d) $\qquad$
(e) $\qquad$
(f) $\qquad$
(g) $\qquad$
(h) $\qquad$

## WORKSHEET-2

## NARRATION

Q1. Read the conversation between a teacher and student and complete the passage that follows.
A. Neha: I'm really looking forward to the class picnic tomorrow.

Namita: Yes, after a long time we will be meeting our friends and teachers.
Neha told Namita (1) $\qquad$
forward to the class picnic Namita agreed that after a long time (2) $\qquad$
friends and teachers.
b. Biology Teacher: I instructed you to draw
the diagram of bacteria. Why did you submit a blank sheet?
Sameer: Sir, I had drawn the diagram of bacteria, but you can't see it because it is not visible to the naked eye

The biology teacher had instructed Sameer to draw the diagram of a bacterial cell and asked him (a) $\qquad$ a blank sheet. Sameer respectfully answered that he had drawn the diagram but (b). $\qquad$ to the naked

## WORKSHEET-3

This passage contains the agreement errors. Correct the subjects or verbs that don't agree with each other. Remember to use present tense in your corrections.

Within the state of Arizona, Rob, along with his family, move frequently, from city to city. After his arrival, one of his first tasks are to find an apartment close to work as he does not have a car. Usually, there is many different places to choose from, and he consider cost, location, and luxury. If one apartment has a washing machine and dryer and cost four hundred dollars a month, he prefers to rent it over another apartment which have significantly less rent located two blocks from a Laundromat. Rob's family never wants to live in an apartment on the thirteenth floor since all of them fears heights. He also tries to choose an apartment with landlords recommended by former tenants.

Everybody know that it is important to find a responsible landlord. Rob and his wife love to cook together when both is free, so he need a spacious, well equipped kitchen. Rob often also look for a place with an air conditioner because there is so many scorching days and nights in Arizona. Whenever Rob find a new apartment, all of his concerns disappears. He feels relieved and call his mother. Someone understands!

## WORKSHEET-4

Fill in the blanks with appropriate Tenses.
a) I met him while $\qquad$ (go) to his office.
b) They $\qquad$ (live) in this place since 1970.
c) The train $\qquad$ (leave) before I reached the station.
d) I wish I $\qquad$ (be) a bird!
e) Your letter $\qquad$ (reach) me yesterday.
f) He $\qquad$ (make) a doll now.
g) He $\qquad$ (work) here since 2011.
h) I $\qquad$ (write) the letter last night.
i) He $\qquad$ (sit) in the library when I saw him.
J) If I were you, I $\qquad$ (not, do) it.

## WORKSHEET-5

Fill in the blanks with appropriate Determiners:

1. There isn't $\qquad$ boot-polish in this tin.
2. Please give $\qquad$ more pudding. I'm sorry but there isn't
3. You have $\qquad$ fine flowers in your garden.
4. I regret to say that there is $\qquad$ I can do in this matter.
5. Art movies are appreciated only by $\qquad$
6. My friend is $\qquad$ teacher.
7. He is: $\qquad$ European.
8. She is $\qquad$ M.L.A.
9.She is a nice lady. We like $\qquad$ behaviour. (your, her)
9. $\qquad$ bicycle is mine. (this, these)

## HINDI

1. रैदास के पदों का सार अपने शब्दों में लिखिए।
2. 'आत्म-विश्वास व सफलता' पर एक 80-100 शब्दों में अनुच्छेद लिखिए।
3. अपठित गद्यांश से संबंधित कार्यपत्रिका करें|
4. पाठ्यपुस्तक में विद्यमान किसी भी एक कवि/लेखक पर सचित्र परियोजना तैयार कीजिए। (कवि/लेखक का परिचय, रचनाओं के नाम व रचनाओं का संक्षिप्त परिचय, पुरस्कार, आपका कवि/लेखक के बारे में विचार, उनकी रचना पर टिप्पणी व अन्य जो उचित लगे)
5. कक्षा में करवाया गया कार्य पूरा करें तथा P.T-1 का पाठ्यक्रम याद करें।
6. विद्यालय पत्रिका हेतु अपनी हिंदी भाषा में रचनाएँ (कविता/लेख) अवश्य लेकर आएँ| ये रचनाएँ स्वरचित होनी चाहिए। टाइप की हुई या हाथ से लिखी हुई हो सकती है।

## कार्यपत्रक-1

## निम्नलिखित गद्यांश को पढ़कर नीचे दिए गए प्रश्नों के उत्तर दीजिए।

विज्ञान ने मनुष्य को मशीन बना दिया है, यह कहना उचित नहीं है। मशीनों का आविष्कार मनुष्य ने अपनी सुख-सुविधा के लिए किया है। यदि मशीनें नहीं होतीं, तो मनुष्य इतनी तेजी से प्रगति नहीं कर पाता एवं उसका जीवन तमाम तरह के झंझावातों के

बीच ही गुम होकर रह जाता। मशीनों से मनुष्य को लाभ हुआ है, यदि उसे भौतिक सुखसुविधाएँ प्राप्त हो रही हैं, तो उसमें मशीनों का योगदान प्रमुख है। मशीनों को कार्यान्वित करने के लिए मनुष्य को उन्हें परिचालित करना पड़ता है जिससे कार्य करने में उसे अधिक परिश्रम नहीं करना पड़ता। यदि कोई व्यक्ति मशीन के बिना कार्य करे, तो उसे अधिक परिश्रम करने की आवश्यकता पड़ेगी। इस हृष्टि से देखा जाए, तो मशीनों के कारण मनुष्य का जीवन यंत्रवत् नहीं हुआ है, बल्कि उसके लिए हर प्रकार का कार्य करना सरल हो गया है। यह विज्ञान का ही वरदान है कि अब डेबिट-क्रेडिट कार्ड के रूप में लोगों के पर्स में प्लास्टिक मनी आ गई है और वे जब भी चाहें, रुपये निकाल सकते हैं। रुपये निकालने के लिए अब बैंकों में घंटों लाइन में लगने की जरूरत ही नहीं। पहले लंबी दूरी की यात्रा करना मनुष्य के लिए अत्यंत कष्टदायी होता था। अब विज्ञान ने मनुष्य की हर प्रकार की यात्रा को सुखमय बना दिया है। सड़कों पर दौड़ती मोटरगाड़ियाँ एवं एयरपोर्ट पर लोगों की भीड़ इसका उदाहरण हैं। पहले मनुष्य के पास मनोरंजन के लिए विशेष साधन उपलब्ध नहीं थे। अब उसके पास मनोरंजन के हर प्रकार के साधन उपलब्ध हैं। रेडियो, टेपरिकॉर्डर से आगे बढ़कर अब एलझडी, डीवीडी एवं डीटीएच, कंप्यूटर, इंटरनेट, मोबाइल का जमाना आ गया है। यही नहीं मनुष्य विज्ञान की सहायता से शारीरिक कमजोरियों एवं स्वास्थ्य संबंधी समस्याओं से छुटकारा (निजात) पाने में अब पहले से कहीं अधिक सक्षम हो गया है और यह सब संभव हुआ चिकित्सा क्षेत्र में आई वैज्ञानिक प्रगति से।

प्रश्न-1. विज्ञान ने मनुष्यों को क्या दिया है?
(क) परिश्रम
(ख) सुख-सुविधाएँ
(ग) मशीनें
(घ) असुविधाएँ

प्रश्न-2. मशीनें नहीं होती तो क्या होता?
(क) मनुष्य खुश रहता
(ग) मनुष्य झंझावातों से निकल जाता
(ख) मनुष्य तेजी से प्रगति नहीं कर पाता
(घ) मनुष्य तेजी से प्रगति कर पाता प्रश्न-3. मशीनों से मनुष्य के जीवन पर क्या प्रभाव पड़ा है?
(क) उसका प्रत्येक कार्य सरल हो गया है
(ख) उसका जीवन यंत्रवत् हो गया है
(ग) उसका प्रत्येक कार्य कठिन हो गया है
(घ) उसे अधिक परिश्रम करना पड़ता है प्रश्न-4. प्लास्टिक मनी क्या है?

## PUNJABI



- तभग्ड हिँच वीडे वंभ टी ट्रवठम्पी वठे।
 size sheet)
MATHEMATICS
GENERAL INSTRUCTIONS: -

1. Project Work to be done in $A 4$ size coloured 1 side Ruled sheets.
2. Assignment to be done neatly on A4size Ruled sheets. Do write the questions also.
3. Both tasks to be clubbed $\&$ submit in same file or folder.

Task 1:

## *Project Work*

Task 2 :
*Assignment*

## TASK 1:-PROJECT WORK

a) Make a crossword with mathematical terms on any topic of your choice.
b) Project of Coordinate geometry:-

1. Draw the map of Delhi as shown below on A3 size sheet or hard board.
2. Make coordinate axis taking Rajouri Garden as origin and mark Assembly constituency in the four quadrants so formed.
3. Write the information (Quadrant wise) about the constituencies marked, along with the name of the candidate standing from there for Lok Sabha elections.

NOTE: - Please refer the map of Delhi given below.


## TASK 2: - ASSIGNMENT

1. Express each of the following as a rational number in the simplest form:
(a) 0.12
(b) $0.1 \underline{7}$
(c) 0.63
2. Find one rational and one irrational number between $\frac{1}{3}$ and $\frac{1}{2}$.
3. Find the decimal representation of:
(a) $\frac{7}{8}$
(b) $\frac{8}{3}$
4. Simplify:
(a) $\sqrt{7} \times \sqrt{35}$
(b) $\sqrt{162} \div \sqrt{2}$
(c) $\sqrt{32}-\sqrt{128}+$ $\sqrt{200}$
5. Examine whether the following numbers are rational or irrational:
(a) $(\sqrt{2}+2)^{2}$
(b) $\frac{6}{2 \sqrt{3}}$
(c) $(5+\sqrt{5})(5-$
$\sqrt{5)}$
6. Rationalise the denominator:
(a) $\frac{\sqrt{11}-\sqrt{5}}{\sqrt{11}+\sqrt{5}}$
(b) $\frac{1}{3-\sqrt{8}}$
(c) $\frac{6}{3 \sqrt{2}-2 \sqrt{3}}$
7. If $x=2+\sqrt{3}$, find the value of $x^{2}+\frac{1}{x^{2}}$
8. Simplify:
(a) $\left(\frac{-1}{27}\right)^{\frac{-2}{3}}$
(b) $\sqrt{(81)^{-2}}$
(c)
$\left(\frac{81}{16}\right)^{\frac{-3}{4}} X\left(\frac{25}{9}\right)^{\frac{-3}{2}}$
9. Find two rational numbers a and bif: $\frac{\sqrt{5}+\sqrt{3}}{\sqrt{5}-\sqrt{3}}=a+\sqrt{15} b$
10.Simplify: $\frac{3}{\sqrt{3}+1}+\frac{5}{\sqrt{3}-1}$
10. Which of the following points belong to $x$-axis: $A(3,1), B(4,0), C(-2$, $0), \mathrm{D}(0,3), \mathrm{E}(-4,0), \mathrm{F}(1,0)$ ?
11. Which of the following points belong to $y$-axis: $\mathbf{P}(\mathbf{2}, \mathbf{0}), \mathbf{Q}(0,2), \mathbf{R}(0,-$ $3), S(-3,0), T(2,-3), U(0,-5)$ ?
13.In which quadrants will the following points lie:
$\mathrm{A}(3,1), \mathrm{B}(2,-3), \mathbf{C}(-2,-1), \mathrm{D}(-5,2), \mathrm{E}(6,-3)$ ?
14.If $P(2,7)$ and $Q(-3,6)$ are coordinates of two points, find:-
i) Abscissa of $\mathbf{P}+\boldsymbol{o o r d i n a t e}$ of $\mathbf{Q}$
ii) Oordinate of $\mathbf{Q}$ - Abscissa of $\mathbf{Q}$
12. Without plotting the points indicate the quadranat in which they will lie, if
(i) the ordinate is 5 and abscissa is - $\mathbf{3}$
(ii) the abscissa is $\mathbf{- 5}$ and ordinate is $-\mathbf{3}$
(iii) the abscissa is - 5 and ordinate is $\mathbf{3}$
(iv) the ordinate is $\mathbf{5}$ and abscissa is 3
13. Write the coordinates of points $P, Q, R, S, T$ and $O$ from the given graph

17.Write the answer to each of the following questions:
(i) What is the name of the horizontal and the vertical lines drawn to determine the position of any point in the Cartesian plane?
(ii) What is the name of each part of the plane formed by these two lines?
(iii) Write the name of the point where these two lines intersect.
14. What will be the perpendicular distance of $(2,-6)$ from $x$-axis?
15. What will be the perpendicular distance of $(-5,4)$ from $y$-axis?
16. What will be the value of $y$ coordinate on $x$-axis?
21.A triangular park has sides $\mathbf{1 2 0} \mathbf{m , ~} \mathbf{8 0} \mathrm{m}$ and $\mathbf{5 0} \mathrm{m}$. A gardener has to put a fence all around it and also plant grass inside. How much area does he need to plant?
22.The perimeter of a right triangle is $\mathbf{3 0 0} \mathrm{m}$. If its sides are in the ratio $3: 5: 7$. Find the area of the triangle.
23.Find the area of a triangle with base is 20 cm and height is 10 cm .
24.Perimeter of the rhombus is 100 m and its diagonal is 40 m . Find the area of rhombus.
17. Find the semi-perimeter of a triangle whose sides are $12 \mathrm{~cm}, 6 \mathrm{~cm}$ and 15 cm .
26.The area of an equilateral triangle is $100 \sqrt{3} \mathrm{~cm}^{2}$. Find the perimeter of the triangle.
27.The perimeter of a triangular field is $\mathbf{4 2 0} \mathbf{~ m}$ and its sides are in the ratio $6: 7: 8$. Find the area of the triangular field.
28.The sides of a triangle are $11 \mathrm{~cm}, 60 \mathrm{~cm}$ and 61 cm . Find the length of altitude to the shortest side.
29.The sides of a triangular sheet are $5 \mathrm{~cm}, 12 \mathrm{~cm}$ and 13 cm . Find the cost of painting the sheet on both sides at the rate of Rs 30 per $\mathbf{c m}^{2}$.
30.An isosceles triangle has perimeter 30 cm and each of the equal sides is $\mathbf{1 2} \mathbf{~ c m}$. Find the area of the triangle.
18. Case based question:-Triangles are used to make bridges as shown in the figure below:-

a) What will be the area of triangle if isosceles triangles are used to construct the bridge in which the base (unequal side) is $\mathbf{4} \mathbf{~ c m}$ and it's perimeter is 20 cm .
b) What will be the area of triangle if sides of the triangle are in the ratio 3:5:7 and it's perimeter is $\mathbf{3 0 0} \mathbf{~ m}$.
19. Read the Source/Text given below and answer any four questions:


There is a square park ABCD in the middle of Saket colony in Delhi. Four children Deepak, Ashok, Arjun and Deepa went to play with their balls. The colour of the ball of Ashok, Deepak, Arjun and Deepa are red, blue, yellow and green respectively.

All four children roll their ball from centre point $O$ in the direction of XOY, $X^{\prime} O Y, X^{\prime} O Y '$ and XOY'. Their balls stopped as shown in the above image.

Answer the following questions:-

1. What are the coordinates of the ball of Ashok?
2. What are the coordinates of the ball of Deepa?
3. What the line XOX' is called?
4. What the point $O(0,0)$ is called?

## SCIENCE

Q1. Revise chapter: -1 Matter in our surroundings for pre - mid Term Exams thoroughly.

Q2. Write the experiments in a practical file as instructed by the subject teacher

Q3. Complete the given worksheet on HW side of your chemistry registers.

## WORKSHEET

Q1. Fill in the blanks:

1. Matter is made up of small $\qquad$ .
2. The forces of attraction between the particles are $\qquad$ in solids, $\qquad$ in liquids and $\qquad$ in gases.
3. $\qquad$ is the change of gaseous state directly to solid state without going through liquid state, and vice-versa.
4. Evaporation causes $\qquad$ .
5. Latent heat of fusion is the amount of heat energy required to change $\mathbf{1 k g}$ of solid into liquid at its $\qquad$ .
6. Solid, liquid and gas are called the three $\qquad$ of matter.
7. The smell of perfume gradually spreads across a room due to $\qquad$ .
8. Rapid evaporation depends on the $\qquad$ area exposed to the atmosphere.
9. As the temperature of a system increases, the pressure of the gases $\qquad$ .
10. As the volume of a specific amount of gas decreases, it's pressure $\qquad$ .
Q2. State true or false:
11. Boiling is a bulk phenomenon.
12. Evaporation is a surface phenomenon.
13. The rate of evaporation depends only on the surface area exposed to the atmosphere.
14. Latent heat of vaporization is the heat energy required to change 1 kg . of a liquid to gas at atmospheric pressure at its melting point.
15. Water at room temperature is a liquid.
16. Atoms in a liquid are farther apart than the atoms in a gas.
17. The molecules in a gas are in constant motion.
18. Gases present in air have the same pressure throughout the entire atmosphere.
19. All materials move from solid to liquid to gas as the temperature increases.
20. Because electrons have been stripped away from atoms in plasma, plasmas have a negative charge
Q3. Match the following:

| Quantity | Units |
| :--- | :--- |
| Temperature | Pascal |
| Length | Kg |
| Mass | M |
| Volume | K |
| Density | $\mathrm{m}^{3}$ |
| Pressure | $\mathrm{Kg} / \mathrm{m}^{3}$ |

Q4. (i) Convert the following Kelvin temperature to degrees Celsius.
a. 173 K
b. 273 K
c. 400 K
(ii) Convert the following Celsius temperature to Kelvin temperature.
a. $-73^{\circ} \mathrm{C}$
b. $-23^{\circ} \mathrm{C}$
c. $100^{\circ} \mathrm{C}$

Formula for conversion is:
${ }^{\circ}$ Celsius $=$ K - 273
Q5. Write the terms for numbers in the below figure


## Interconversion of the three states of matter

## BIOLOGY WORKSHEET

## CHAPTER- 5 The fundamental unit of life

A. Give reasons, why.

1. Raisins and dry apricots swell up when placed in a bowl containing water for some time.
2. Chromatin, chromatid and chromosomes are related to each other.
3. Lysosomes are known as 'scavengers of the cells.'
4. Plant cells possess large sized vacuole.
5. Roots of plants have mostly leucoplasts in them than chloroplasts.
B. Name the organelles which show the analogy written as under.
6. Transporting channels of the cells.
7. Digestive bag of the cell.
8. Storage sacs of the cells.
9. Control room of the cell.
10. Kitchen of the cell.
11. Powerhouse of the cell.
12. Packing \& dispatching unit of the cell.
C. Multiple choice questions.
13. Select the odd one out
a. Membranes are made of organic molecules like proteins and lipids.
b. Molecules soluble in organic solvents can easily pass-through membranes.
c. Plasma membranes contain chitin sugar in plants.
d. Movement of water across a semipermeable membrane is affected by the amount of substances dissolved in it.
14. Cell organelles without a cell membrane are
a. Nucleus
b. Chloroplasts
c. Ribosomes
d. Golgi apparatus
15. The proteins essential for building the cell membrane are manufactured by
a. Rough endoplasmic reticulum
b. Plasma membrane
c. Mitochondria
d. Golgi apparatus
16. Silver nitrate solution is used to study
a. Endoplasmic reticulum
b. Nucleus
c. Golgi apparatus
d. Mitochondria
17. Plasmolysis in a plant cell is defined as
a. breakdown of plasma membrane in hypotonic medium
b. Shrinkage of cytoplasm in hypertonic medium
c. Shrinking of nucleoplasm
d. None of them
18. Amoeba acquires its food through this process
a. exocytosis
b. endocytosis
c. plasmolysis
d. Both a \& b
19. Cell arises from pre-existing cell was stated by
a. Haeckel
b. Virchow
c. Hooke
d. Schleiden
20. When you keep raisins in hypotonic solution, endosmosis occurs that continues till
a. cells are fully turgid
b. cells burst
c. two hours
d. You keep them in solution
21. The stain used to make temporary mount of human
cheek cells
a. Safranin
b. Methylene blue
c. Xylene
d. Iodine
22. These contain their own DNA and ribosomes
a. Mitochondria
b. Golgi apparatus
c. Plastids
d. $\mathbf{a} \& \mathbf{c}$
D. Higher order Thinking Skills.
23. A person with swollen gums rinses his mouth with lukewarm salt water and swelling of his gums decreases. This is because
a. The gums absorb the salt water solution.
b. The salt water solution lowers the temperature of the water in the gums.
c. The salt in the solution moves against the concentration gradient.
d. The water in the gums moves out due to high concentration of salt in the solution.
24. Ritika observed onion peel cells in the lab and could view the cell wall, cytoplasm and nucleus clearly. Suddenly her friend spilled a few drops of salty water on the slide having onion peel cells. She observes some changes in the cells after sometime
a. What changes would have been observed by Ritika?
b. Name the process that caused the changes in the cells.
c. Would there be similar changes observed, if she had prepared a slide of cheek cells?


Structure of a Nucleus

## 3. Look at the diagram carefully

a. Which part of the above diagram can carry the 'hereditary material'?
b. Who discovered the nucleus for the first time?
c. Why is it called the 'control centre' of the cell?
4. If you are provided with some vegetables to cook, you generally add salt into the vegetables during the cooking process.
a. What happens to the vegetables after adding salt?
b. Which mechanism is responsible for the changes? Explain.
5. Why does the skin of your mother's fingers shrink when she washes clothes for a long time?
a. What is responsible for these changes?
b. Explain the process in brief.

## PHYSICS

Complete the given assignment in your HOMEWORK registers
c. Is speed a scalar quantity or a vector quantity? Give reasons.
d. What do you mean by average velocity? An object starts moving along a straight line with an initial velocity $u$ and under constant acceleration, its final velocity becomes v . What is the average velocity of the given object?
e. Define the term which measures the rate of motion. Give its SI unit.
f. What term is used to denote the change of velocity with time? Obtain its SI unit.
g. Distinguish between uniform acceleration and non-uniform acceleration.
h. Ramesh goes from his residence to a market 2.5 km away. Finding the market closed, he returns back to his residence. What is the distance covered by Ramesh? What is his displacement?
i. Samir travels on a straight road. He goes from position A to position B where the distance $A B=5 \mathbf{k m}$. Now, he turns back and travels a distance of 2 km to reach the position C. Find
(a) the total distance travelled by Samir during the entire journey, and
(b) the magnitude of his displacement.
j. Kamini hired a taxi and noted the initial reading of its odometer as 24803 km . After the journey, she noted the final reading of odometer as 25118 km . If the journey time was 4 hours 40 minutes, calculate the average speed of the taxi during the entire journey.
k. At a certain instant, an auto driver is driving at a speed of $30 \mathbf{k m ~ h}^{\mathbf{- 1}}$. Then, he uniformly accelerates the auto becomes $60 \mathrm{~km} \mathrm{~h}^{-1}$. What is the average speed of the auto? What is the value of uniform acceleration during the given interval of time?
I. A particle moves 3 m north, then 4 m east and finally $\mathbf{6 m}$ south. Calculate the magnitude of displacement.
m. On a 120 km track, a train travels the first 30 km at a uniform speed of $30 \mathrm{~km} \mathrm{~h}^{-1}$, Calculate the speed with which the train should move rest of the track so as to get the average speed of $60 \mathrm{~km} \mathrm{~h}^{-1}$ for the entire trip.
n . Rajeev went from Delhi to Chandigarh on his motorbike. The odometer of the bike read 4200 km at the start of the trip and 4460 km at the end of his trip. If Rajeev took $\mathbf{4 h} \mathbf{~} \mathbf{2 0} \mathbf{~ m i n}$ to complete his trip, find the average speed in $\mathrm{km} \mathrm{h}^{-1}$ as well as in $\mathrm{m} \mathrm{s}^{-1}$.
o. A girl while riding a bicycle moves with the speed of $10 \mathbf{k m ~ h}^{-1}$ for $\mathbf{2 h}$ and with the speed of $15 \mathrm{~km} \mathrm{~h}^{-1}$ for the next 3 h . Find the total distance moved by her and her average speed.
p. An object starting from rest attains a speed of $25 \mathrm{~m} \mathrm{~s}^{-1}$ after travelling a distance of 50 m . Calculate the acceleration produced and the total time taken to cover that distance.
q. A car travelling at $40 \mathrm{~km} \mathrm{~h}^{-1}$ speeds up to $50 \mathrm{~km} \mathrm{~h}^{-1}$ in $\mathbf{4}$ seconds. Calculate the acceleration of the car.
r. A truck moving with a velocity of $65 \mathbf{k m ~ h}^{\mathbf{- 1}}$ comes to rest after applying brakes in 8 seconds. What is the retardation of the truck?
s. A body starts from rest and speeds up to $35 \mathrm{~km} \mathrm{~h}^{-1}$ in 6 seconds. Calculate the acceleration of the body.
t. 4. A biker starts from rest and increases his velocity at the rate of $3 \mathbf{~ m ~ s}$ ${ }^{2}$ for 4 seconds. What is the velocity of the biker after 4 seconds?
u. A car travels first 50 km with a constant speed of $30 \mathrm{~km} \mathrm{~h}^{-1}$ and next 40 km with a constant speed of $60 \mathrm{~km} \mathrm{~h}^{-1}$. Calculate the average speed.
v. A truck travels some distance with the constant speed of $30 \mathbf{k m ~ h}^{-1}$ and returns back with the constant speed of $40 \mathrm{~km} \mathrm{~h}^{-1}$. Calculate the average speed of the truck.
w. On a track of length 100 km , the train covers first 30 km with a constant speed of $30 \mathrm{~km} \mathrm{~h}^{-1}$. What should be the speed of the train for the next 70 km so that the average speed of the train remains $50 \mathrm{~km} \mathrm{~h}^{-1}$ for the entire trip?
x. A train covers 70 km in first 1 hour, next 40 km in next 0.5 hour and next 50 km in another 0.7 hour. What is the average speed of the train?
y. A biker covers $\mathbf{6 0} \mathbf{~ k m}$ in 70 minutes on a straight road. Calculate its speed and velocity.
z. A car is moving with a constant velocity of $\mathbf{3 0} \mathrm{ms}^{\mathbf{- 1}}$. What is speed of car after 10 s ?
aa. A man goes to his office from his house 30 km away in the morning and returns back to his home in the evening. Calculate the distance and displacement covered by the man.
bb. A ball is thrown vertically upwards up to a height $h$. The ball returns back to the thrower. What is the distance and displacement covered by the ball?
cc. An athlete is running around a circular track of radius $\mathbf{2 0 0} \mathbf{~ m}$. Calculate the distance and displacement covered by athlete in-
(i)half round
(ii) one complete round [Use $\mathbf{p i}=3.14]$
dd. A man running around a circular track of radius 20 m covers one complete round in 40 s. Calculate the distance and displacement covered by him in 3 minutes.
ee. A boy goes 5 m towards east, $\mathbf{4} \mathrm{m}$ towards north and 2 m towards west. Calculate the distance and displacement covered by him.
ff . A boy is moving on a circular path of radius $\mathbf{1 0} \mathrm{m}$. Calculate the distance and displacement covered by the body in one-fourth round.

## SOCIAL SCIENCE

*'We cannot stop natural disasters but we can aim ourselves with knowledge so many lives would not have to be lost if there was enough disaster preparedness*

1) Prepare a project work on any one of the following topics

Natural Disaster:
Cyclone, Floods, Earthquakes
Manmade Disasters:
Terronsm, War \& Genocide, Heat Waves and Changing climatic conditions.
2) The total length of the project Work should not be more than 15 handwritten pages of A-4 Size
3)The project report should be hand-written and Credit will be awarded to illustrations, creative use of material, maps and graphical representation
4)The project report should be developed and presented in this order

- Cover page showing project title
- List of Contents
- Index
- Overview
5)At the end of the project each student must mention
a) Bibliography
b) Teacher's evaluation Performa

The projects will be discussed in the class post Vacations
6) Enumerate the following in your project

- Meaning
- Causes
- Do's
- Don'ts
- Preventive measures
- Mitigation measures
- Prepare Your emergency kit

7) Prepare a recent case study of on the topic you choose

## COMPUTER

ASSIGNMENT : 1

## DO THESE QUESTION OF CH IT-ITES IN YOUR REGISTER

1. What do you understand by the term IT and ITeS?
2. What are the pros and cons of using ICT?
3. What are the four main sub-sectors in the IT-BPM industry?
4. Give examples of use of IT in everyday life.
5. How is IT used in libraries?
6. What are the various processes of education where IT is used?
7. For what purpose is IT used in business?
8. Which are the prominent areas where IT is used in science and engineering?
9. List the various uses of IT in a banking system.
10. Which are the different areas of healthcare where IT is used? And how?
11. List any 5 websites of the Indian government which provide IT enabled services to the people.

## ASSIGNMENT : 2

1. Discuss the various types of keys available on a computer keyboard.
2. Differentiate between Home Keys and Guide Keys.
3. What do you understand by Guide Keys? Name the Guide keys of a computer keyboard.
4. Explain the role of typing ergonomics.
5. Why the use of various typing software is common now-a-days?
6. Mention the finger allocation of keys of the Bottom Row of computer keyboard.
7. What is the use of Mouse
8. What is the difference between left mouse button and right mouse button.
