4- A bus driver applied the break and slow down the velocity of the bus from 60 km per hour to 30 km per hour in 5 second. Calculate the acceleration of the bus expresses your answer in SI unit.

5- An athletic is running along a straight path with a constant velocity of 10 m per second draw a velocity time graph for the motion how much distance does he cover in 20 second.

6- Drive equations of motion by graphical method.

BIOLOGY-

1- Draw a neat and labelled colored diagram of following on a Chart Paper.
   (i) Mitochondria   (ii) Chloroplast   (iii) Nucleus
   (iv) Golgi Bodies   (v) Plasma membrane

2- Collect the different seeds (sources of Carbohydrates, Proteins, and Fats) and paste it on the card board. Students can take the help of old bangles for the separation of seeds.

3- When you put a pinch of salt on Salad, few minutes later you see that it releases water. What mechanism is responsible for this? Explain.

4- Visit an agricultural land near to your house. Take a selfie and write your experience in your own words.

5- Enumerate the advantages of mixed Farming.

CHEMISTRY-

1 - Complete two lab manual activities [Experiment 1(a) and 2 (a)] .

2- What is dry ice?

3- Convert the temperature of $50^{\circ}C$ into Kelvin scale.

4- Name two conditions favourable for converting -
   (a) liquid to gas   (b) gas to solid
   (c) What names are given to the above processes?

5- Why does our palm feel cold when we put some acetone or petrol on it.

6- For any substance, why does the temperature remain constant during the change of state?

7- What will be the state of water at-
   (i) $108^{\circ}C$ (ii) 275 K

8- Give reasons :

   (i) Sponge is a solid, yet we are able to compress it.

   (ii) Ice at $0^{\circ}C$ appears colder in the mouth than water at $0^{\circ}C$.

9- What produces more severe burns, boiling water or steam?

10- Arrange the following substances in increasing order of forces of attraction between the particles- water, sugar, oxygen.

Illuminating Global Education Through Indianic Values

NEW STANDARD GROUP OF INSTITUTES

NSGI

HOME ASSIGNMENT 2024

Name..
Class................9 (UP & CBSE)................Sec. ....
Branch..

Note: 1- All the written work is to be done in the fair note book.
2- Prepare taught topics in all subject for test just on reopening of the school.

हिन्दी– (CBSE)

1. जिला अस्पताल में आवश्यक दवाओं और उपकरणों के अभाव में मरीजों को कठिनाइयों का सामना करना पड़ता है। इनकी व्यवस्था के लिए मुख्य चिकित्साधिकारी को प्रार्थना –पत्र लिखिए।

2. छात्रों द्वारा मोबाइल फोन के दुरूपयोग विषय पर दो अभिभावकों के मध्य संवाद लिखिए।

3. व्याकरण की पाठ्य–पुस्तक से अनुप्रास एवं यमक अलंकार की परिभाषा उदाहरण सहित कंठस्थ कीजिए।

हिन्दी– (UP Board)

1. भारतेन्दु युग एवं आदिकाल के अंतर्गत लिखाए गए साहित्य के इतिहास को कंठस्थ कीजिए।

2. लगातार अनुपस्थित रहने के कारण प्रवेश पंजिका से नाम पृथक किये जाने पर पुनः प्रवेश के लिए विद्यालय प्रधानाचार्य को पत्र लिखिए।

3. निम्नलिखित में प्रयुक्त लकार, पुरूष तथा वचन का उल्लेख कीजिए–
गच्छेत्, अपठताम्, भविष्यथः, कुरू।

ENGLISH-

1. Revise the taught syllabus.
2. Develop a story based on the given outlines. Also give an appropriate title to the story.

Once there was a wise king in Israel. He was famous for his wisdom all over the world. People loved and honoured him. One day as he was sitting in his court, two women entered weeping. One of them had a baby in her arms. They were shouting and quarrelling. Both the women were claiming the same baby.

Hints for the development of the story:

The king does not know what to do.........How to solve the problem........Thinks........ Plans to cut the baby into two......Lifts his sword......... one of the women cries......... stop........... don't kill. King gives the baby to her......... the real mother gets the baby.

3. Write a letter to your father requesting him to send you Rs 500/- for depositing the examination fee and for buying some books.
Do exercises of Tenses –
Ex no.15-20 -(UP Board)in Fair Note Book.
Ex no. 6 (CBSE Board) in Book
4. Determiners :
(A) Ex No. - 5,6,8 & 9 in book (CBSE Board)
(B) Ex No. - 5 to 9 in Book (UP Board)

MATHS-

1. **Factorize -**
   (i) $16x^4 - 1$ (ii) $x^3y^3 - 512$ (iii) $x^3 - x^2 - ax + x + a - 1$
   (iv) $x^3 + \frac{1}{x^3} - 2$ (v) $2x^3 - x^2 - 13x - 6$

2. If $x - \frac{1}{x} = \frac{1}{2}$, then find the value of $4x^2 + \frac{4}{x^2}$.

3. Find the remainder when $3x^3 - 6x^2 + 3x - \frac{1}{9}$ is divided by $3x - 4$.

4. Find value of a and b so that the polynomial $x^3 - ax^2 - 14x + b$ has $(x - 1)$ and $(x - 2)$ as factors.

5. Show that $x - 1$ is a factor of $x^{10} - 1$.

6. Find 10 rational numbers between $\frac{-2}{3}$ and $\frac{1}{4}$.

7. Without actual division, find which of the following rational numbers are terminating decimals:
   (a) $\frac{11}{50}$ (b) $\frac{48}{300}$ (c) $\frac{27}{56}$ (d) $\frac{231}{1230}$

8. Find the value of $4\sqrt{5} - 3\sqrt{45} + 2\sqrt{20}$.

9. If $a + b = 13$ and $a - b = 11$, find the value of $a^2 + b^2$.

10. Find zeroes of polynomial $p(x) = x^3 + x^2 + x - 3$.

11. If $x + a$ is a factor of both the polynomials $x^2 + px + q$ and $x^2 + mx + n$, prove that $a = \frac{n - q}{m - p}$.

12. Without actual division, show that $(x^3 - 3x^2 - 13x + 15)$ is exactly divisible by $(x^2 + 2x - 3)$.

13. The polynomial $ax^3 + 3x^2 - 13$ and $2x^3 - 5x + a$ when divided by $(x + 2)$ leaves the same remainder. Find value of a.

14. If $a + b + c = 6$, $a^2 + b^2 + c^2 = 14$ and $a^3 + b^3 + c^3 = 36$, find the value of abc.

15. If $p = 2 - a$, then prove that $a^3 + 6ap + p^3 - 8 = 0$.

PHYSICS-

1. the minute hand of a wall clock is 20 cm long .find (a) the distance covered (b) The displacement of minute hand of the clock from 9:00 a.m. to 9:30 a.m.

2. New Delhi Howrah- Rajdhani express start from New Delhi station at 4:45 p.m. and reaches Howrah at 9:45 a.m. next day. If the distance of Howrah from New Delhi is 1445 km. Find the average speed of train in kilometre per hour .what is its value in metre per second.

3. A tourist cab goes from Delhi to Agra in the morning and covers the journey of 240 km in 4.5 hour. The cab returns from Agra to Delhi during night time covering a journey in 3.5 hour. Calculate the average speed and average velocity of the cap for entire to and fro journey.

SOCIAL SCIENCE-

1- To learn all the taught syllabus (Related to I Periodic Test-2024) of Geography & Economics.

2- To solve very short type questions of chapter- 1 & 2 of Geography in a fair notebook.

3- To practice map work of chapter- 1 & 2 of Geography on the political map of India. (Map related questions already given in book-page no. 114 & 127)

COMPUTER (CBSE) -

1- Complete the AI activity given on Page number 158-159.

2- Complete the AI activity given on Page number 160-161.

3- Complete the AI activity given on Page number 166.

4- Complete the AI activity (Ice breaker Activity) given on Page number 172-173.

Note: All the activity should be complete in book.

COMPUTER (UP BOARD)

1- Explain about peripheral devices with suitable examples.

2- Different between touch screen and GUI interface.

3- Explain about virus. How to protect your computer for virus?

4- Write the steps to create a gmail account.

PHYSICAL EDUCATION (Physical Activity Trainer)

1- Prepare a file of fun activities for early stage children . (any five)

2- List the all types communication skills with figure.

3- List any 10 props and equipment with diagram and usage.

4- Write a paragraph about Ms. Word.

5- Read and learn the chapter-1 in PAT and chapter-1 in employability skills.