

SGJ DAV SEN. SEC. PUBLIC SCHOOL, HARIPURA

Class – 10th (Assignment)

Date – 01.09.2025

Instructions:

Dear Students,

We are sending you Homework. You have to solve this work in your notebook in a neat and clean way. You have to submit this work after the opening of school to your Subject Teacher.

Subject-English

Q1 Write a factual description in not more than hundred words of a digital camera that you plan to use for photography. (5 Marks)

Q2. How does pending time in nature improve health? Write an article in 150 words on "Nature Medicines : A Path to Wellness." You may use the following cues along with your own ideas:

°Physical benefits like reduce to blood pressure

°Mental health improvements

°Immune system enhancement. (5 Marks)

Q3. You are Priya/ Prakash, a resident of New Delhi. Write a letter in 150 words to the Transport Commissioner suggesting measures to reduce vehicle pollution in the city. Use ideas from the passage along with your own. (5 Marks)

Subject -Hindi

1.दीपावली के शुभ अवसर पर एक संदेश लिखें।

दीपावली के शुभ अवसर पर शुभकामना सन्देश

“दीपावली की रात आई है, खुशियों की सौगात लाई है,

आज लग रहा है कुछ ऐसा, जैसे सितारों की बारात आई है“

दिनांक - 14 नवम्बर 2020

समय - 6:00 am

आप सभी क्षेत्र वासियों को दीपावली की हार्दिक शुभकामनाएँ। इस दीपावली में माँ लक्ष्मी आप सभी के घरों में सुख समृद्धि, धन-दौलत, वैभव व् शांति लेकर आए।

मुख्यमंत्री

2.शोक संदेश का उदाहरण

शोक सन्देश

दिनांक - 16 सितम्बर 2020

समय - 9:00 am

अत्यंत दुःख के साथ आप सभी को सूचित किया जा रहा है कि मेरी पूज्य दादी माँ श्री मती देवकी देवी पत्नी स्वर्गीय श्री राजा राम चौहान का दिनांक 15 सितम्बर 2020 को शाम 7:00 बजे स्वर्गवास हो गया है। उनका पीपल पानी दिनांक 24 सितम्बर 2020 को हमारे आवास “चौहान निवास - समरहिल” में किया जाएगा। कृपया इसी सुचना को व्यक्तिगत बुलावे की मान्यता प्रदान करें।

शोकाकुल परिवार

Subject -Punjabi

वुल्ल अंक:- 8

ਪੱਕੀ ਕਾਪੀ ਉੱਤੇ ਸੁੰਦਰ ਲਿਖਾਈ ਵਿੱਚ ਲਿਖੇ ਅਤੇ ਯਾਦ ਕਰੋ।

ਲੇਖ ਰਚਨਾ- ਮਨ ਤੂੰ ਜੋਤਿ ਸਰੂਪ ਹੈ (200 ਸ਼ਬਦਾਂ ਵਿੱਚ) ਲਿਖੋ।

ਜਾਣ ਪਛਾਣਭਾਵ..... ਮਨ ਕੀ ਹੈ..... ਮਨ ਬਹੁਤ ਚੰਚਲ..... ਇਸ ਨੂੰ ਕਾਬੂ ਵਿੱਚ ਕਰਨ ਦੀ ਜ਼ਰੂਰਤਮਨ ਤੇ ਜਿੱਤ ਪਾਉਣ ਦੇ ਢੰਗਇਛਾਵਾਂ ਦਾ ਤਿਆਗ..... ਮਨ ਨੂੰ ਕਾਬੂ ਕਰਨ ਦੇ ਲਾਭ..... ਸਿੱਟਾ

Subject: Mathematics

3 marks questions

Q1 The speed of a bus is 30 km/h less than the speed of a car. The bus takes 2 hours more than the car to cover a distance of 540 km. Find the speed of the bus and the car.

Hint: Let the speed of the car be x km/h, then the bus speed will be $(x-30)$ km/h. Use distance = speed \times time to form equations.

Q2 Prove Basic Proportionality Theorem (BPT):

Hint: Use the concept of similar triangles and their corresponding proportional sides.

Q3 The 12th term of an AP is 10 and the last term is 60. If the sum of all terms of the AP is 490, find the number of terms and the first term.

Hint: Use formulas $a_n = a + (n-1)d$, $S_n = n/2[a + a_n]$

5 marks questions

Q4 Verify the relationship between zeros and coefficients of the polynomial $x^2 - 8x + 15$

Hint: Sum of zeros = $-\alpha + \beta = -b/a$, Product of zeros = $\alpha\beta = c/a$

Q4-B Find the HCF and LCM of 72 and 120 using the prime factorization method.

Hint: Write each number as a product of prime factors.

Q5 The sum of the ages of a mother and her daughter is 48 years. 12 years ago, the mother's age was four times the daughter's age. Find their present ages using the elimination method.

Hint: Let mother's age = x and daughter's age = y , then form two equations using the given conditions.

Q-5B Find the sum of the first 25 terms of an AP whose 6th term is 15 and 12th term is 33.

Hint: First find the common difference (d) using $a_n = a + (n-1)d$, then use $S_n = n/2[2a + (n-1)d]$

Subject -Science

1. A current of 10 A flows through a conductor for two minutes.

(i) Calculate the amount of charge passed through any area of cross section of the conductor.

(ii) If the charge of an electron is 1.6×10^{-19} C, then calculate the total number of electrons flowing.

(2 Marks)

Ans-Given that: $I = 10$ A, $t = 2$ min = 2×60 s = 120 s

(i) Amount of charge Q passed through any area of cross-section is given by $I = Q/t$

or $Q = I \times t \therefore Q = (10 \times 120)$ A s = 1200 C

(ii) Since, $Q = ne$

where n is the total number of electrons flowing and e is the charge on one electron

$\therefore 1200 = n \times 1.6 \times 10^{-19}$

or $n = 1200 / 1.6 \times 10^{-19} = 7.5 \times 10^{21}$

Question 2.

What is described by formula $I = q/t$. Give the units of current.

(2 Marks)

Answer:

Electric current is the amount of charge flowing through a particular area in unit time.

Question 3.

Define one ampere. And find value of I , if 10 C charge is flowing in 2 seconds.

(2 Marks)

Answer:

One ampere is constituted by the flow of one coulomb of charge per second.

$1 \text{ A} = 1 \text{ C s}^{-1}$, By using formula $I = q/t$

Question 4.

Name a device that you can use to maintain a potential difference between the ends of a conductor. Explain the process by which this device does so.

(3 Marks)

Answer:

A cell or a battery can be used to maintain a potential difference between the ends of a conductor. The chemical reaction within a cell generates the potential difference across the terminals of the cell, even when no current is drawn from it. When it is connected to a conductor, it produces electric current and, maintain the potential difference across the ends of the conductor.

Question 5. State Ohm's law. Draw a labelled circuit diagram to verify this law in the laboratory. If you draw a graph between the potential difference and current flowing through a metallic conductor, what kind of curve will you get? Explain how would you use this graph to determine the resistance of the conductor.

(3 Marks)

Answer:= It states that the potential difference V , across the ends of a given metallic wire in an electric circuit is directly proportional to the current flowing through it, provided its temperature remains the same. Mathematically,

$$V \propto I$$

$$V = RI$$

where R is resistance of the conductor.

Subject -Social Science

1. "The exact balance of power between the central and the state government varies from one federation to another." Substantiate the statement with suitable examples.
2. Analyze the measures adopted to prevent soil erosion. Enumerate the natural resources which lead to soil erosion.
3. "There are many ways to solve the problems of land degradation." Substantiate the statement with illustrations.
4. 'The multiparty system often appears very messy and leads to political instability. At the same time, this system allows a variety of interests and opinions to enjoy political representation.' Justify the statements with relevant points referring to India.