St. Mary's School, Dwarka
Holiday Homework
Std. X
Week 2
Worksheet 2

Subject: English

General Instructions:

1) **The work should be done neatly and in a systematic way.**
2) **The given questions are to be done in the English notebook.**
3) **Attempt all questions.**

SECTION A- READING (5 marks)

Q1. Read the following passage. **(1x5=5)**

1. The history of human civilization, right from the golden age, evolved parallel to the history of the ways we learnt to handle water and its resources across the globe. As urban areas expanded slowly and steadily, water resources were taken rapidly from remote sources, amounting to luxury engineering impacts like aqueducts, dams, and so on. During the Roman Empire's era, nine major systems had a drastic change with the help of a sophisticated idea of sewers, pipelines, etc. Such engineering advancements by the Roman occupants provided as much water per individual person as it has been in many industrial areas today.

2. It was evident that the water resources demand rose exponentially due to the industrial revolution and population growth in the 19th and 20th centuries. Moreover, enormous monuments and other tens and thousands of engineering projects were built, incorporating flood control systems, clean water supply, irrigation and hydropower projects that brought happiness to millions of human lives. There was also a food supply growing to compensate for the soaring population due to the spread of artificial irrigation systems that ensure a potential growth of 40% of the world's food. Almost one-fifth of the current electricity produced across the world is generated using big turbines spun by the power of a tsunami.

3. However, there is a negative face to this picture. Besides our reach, nearly 50 percent of the world's human population still faces hurdles, with water resources lesser than those had by the ancient Greeks and Romans. According to the United Nations (UN) report on access to water reemphasized in the month of November 2001, above one billion people are deprived of clean drinking water, and almost two and a half billion people do not have access to necessary sanitation facilities. Avoidable diseases pertaining to water kill an estimated 11,000 to 22,000 children every day, and recent proof reveals that we need to speed up the process of solving problems before it is too late.

Based on your understanding of the passage, attempt the questions given below.

   i.   What was the impact of the engineering advancements by the Russians?

   ii. The engineering projects helped in _____.

   iii. Why was water resources taken rapidly from remote sources?

   iv. Which of the following statements is **NOT TRUE**?

       a) Demand for water resources rose due to the industrial revolution and poverty.

       b) Big turbines spun by tsunami are used to generate one-fifth of the current electricity.

       c) 50 percent of the world's human population still faces challenges with water resources.

       d) Almost two and a half billion people do not have access to necessary sanitation facilities.

   v.   Suggest a suitable title for the above passage.

Answer questions 2 to 4 in 20-40 words.

Q2. Describe how the rain brought destruction in Lencho's fields?   **(2)**

Q3. What did the world witness on 10th May, 1994 in South Africa?   **(2)**

Q4. "He should be lurking in the shadow,

   Sliding through grass".

   Why do you think the poet does not prefer tiger in the zoo?   **(2)**

Answer question 5 in 60-80 words.

Q5. "All the while, Mrs Pumphrey hovered anxiously in the background ringing a dozen times for the latest bulletins".

 Do you think Mrs Pumphrey's concern for Tricki is justified? Why or why not?   **(3)**

Q6. Read any story based on the theme 'Hope' and create a story board in your own words.   **(5)**

Q7. Read the following conversation between a doctor and patient. Complete the sentences by reporting the patient's reply in reported speech.   **(2)**

Doctor: What happened to you?

Patient: I am experiencing severe stomach ache.

Doctor: Since when have you been unwell?

Patient: I have been experiencing stomach ache since last night.

The doctor asked the patient what a)_____. The patient replied that b)_____stomach ache. The doctor further asked c)_____unwell. The patient replied that d)_____ .

Q8. i. Identify the error in the given sentence.   **(1)**

Karacabey floodplain is a habitat to hundreds off species of birds each year.

Error	Correction

ii. Fill in the blanks by using the correct form of the word in the brackets. **(1)**

We a)_____ (plan) a vacation since last year. Hopefully, we _____ (visit) the Caribbean Island next month.

Q9. You are Karan/Kanika of St. John School, Delhi. Your school is interested to visit the National Science Museum, Pragati Maidan next week. Write a letter to the Director inquiring about the venue, tickets, activities, timings etc. Invent other necessary details. **(3)**

Q10. You are Aman/Amita residing at 23-B, Kalyan Lane, Bhopal. In the last few weeks, there have been incidents of chain snatching in your locality. Write a letter to the Editor of a newspaper highlighting the aforementioned issue in 120-150 words. **(4)**

Subject: Hindi

निर्देश — 1 दिए गए सभी प्रश्नों के उत्तर हिन्दी की उत्तर पुस्तिका में कीजिए।

        2 सभी प्रश्नों के उत्तर पूर्ण वाक्य में लिखकर स्थानों को रेखांकित कीजिए।

        3 कार्य स्वच्छ, शुद्ध एवं स्पष्ट लेख में कीजिए।

प्रश्न 1 निम्नलिखित गद्यांश पर आधारित प्रश्नों के उत्तर उचित विकल्प चुनकर दीजिएः

                                                                  (1×5 = 5)

मानव प्रजाति के लिए संगीत भगवान द्वारा दिया गया उपहार है। यह हमारे लिए एक आत्मीय कुंजी के समान है जो हमें मानसिक तथा शारीरिक स्वस्थ रूप से स्वस्थ बनाये रखने में हमारी सहायता करता है। संगीत वो लय है, जो बीते समय, पसंदीदा स्थानों, व्यक्तियों या उत्सवों आदि की सभी अच्छी यादों और सकारात्मक विचारों को लाता है। संगीत बहुत ही मधुर और वैश्विक भाषा है, जो सब कुछ शान्ति से बताता है और हमारी सभी समस्याओं को हमसे बिना पूछे खत्म करता है।मैं संगीत के प्रति बहुत प्रतिबद्ध हूँ और इसे अधिकतर सुनता हूँ। यह बहुत बड़े स्तर पर राहत प्रदान करते हुए मुझे खुश रखता है। संगीत सुनना मेरा शौक है और यह मेरे स्वस्थ और सुखी जीवन का रहस्य है। यह मेरे लिए भगवान का तोहफा है, जिसे मैं अपने भले के लिए प्रयोग करता हूँ और इसके साथ ही दूसरों को भी संगीत सुन कर इससे लाभ लेने की सलाह देता हूँ।मैं बचपन से ही अपने पिता के कारण संगीत सुनने का शौकीन होने के साथ ही अपने मित्रों के साथ संगीत प्रतियोगिता, चर्च, जन्मदिन समारोह, आदि अन्य स्थानों पर गायन में भाग भी लेता हूँ। संगीत मेरे जीवन का बहुत महत्त्वपूर्ण भाग है; मैं संगीत के बिना अपने जीवन की कल्पना भी नहीं कर सकता। मेरे माता-पिता, विशेष रूप से मेरे पिता ने मुझे संगीत सीखने में बहुत प्रोत्साहित किया और मेरी इस आदत को एक अद्भुत पहचान दी।संगीत बहुत ही आसान है; जिसे कोई भी किसी भी समय सीख सकता है हालांकि, इसे सीखने के लिए शौक, नियमित अभ्यास और अनुशासन की आवश्यकता है। मैं बंसी बजाना बहुत अच्छे से जानता हूँ, जिसके कारण मेरे मित्रों और साथियों के बीच में मेरी काफी प्रशंसा होती है। यह मेरे मस्तिष्क को शान्त करने का कार्य करता है। इसके साथ ही यह मुझे सकारात्मक विचारों से भी भरता है जो मेरे व्यक्तिगत जीवन में मेरी काफी सहायता करता है। इस तरह कहा जा सकता है कि, संगीत आध्यात्मिक, मानसिक और शारीरिक शक्ति प्रदान करने के साथ ही मनुष्य में आत्मविश्वास को भी विकसित करता है।

    (i)   मनुष्य के लिए संगीत किसके समान है ?   1

        (क) आत्मिक कुंजी के समान

        (ख) मानवीय कुंजी के समान

        (ग) आध्यात्मिक कुंजी के समान

        (घ) सात्विक कुंजी के समान

    (ii) संगीत मनुष्य के मस्तिष्क को कैसे विचारों से भर देता है?   1

        (क) राजनीतिक विचारों से।

        (ख) प्रदूषित विचारों से।

        (ग) नकारात्मक विचारों से।

(घ) सकारात्मक विचारों से।

(iii) संगीत सीखने के लिए किसकी आवश्यकता होती है?   1

(क) शौक, अनियमित अभ्यास और अनुशासन

(ख) शौक, नियमित अभ्यास और अनुशासन

(ग) शोक, नियमित अभ्यास और कुशासन

(घ) शौक, नियमित अभ्यास और स्वशासन

(iv) संगीत मानव के व्यक्तित्व में किस गुण का विकास करता है?   1

(क) आत्मसंयम

(ख) आत्मरूचि

(ग) आत्मचिंतन

(घ) आत्मविश्वास

(v) 'माता – पिता' का सही समास विग्रह क्या होगा?   1

(क) माता के साथ पिता

(ख) माता सहित पिता

(ग) माता और पिता

(घ) माता में पिता

निम्नलिखित प्रश्नों के उत्तर उचित विकल्प चुनकर दीजिएः :   (1×5 = 5)

प्रश्न 2 वह **बात-बात पर** रोने लगता है।वाक्य में रेखांकित पदबंध कौन- सा है?   1

(क) संज्ञा पदबंध

(ख) क्रियाविशेषण पदबंध

(ग) क्रिया पदबंध

(घ) विशेषण पदबंध

प्रश्न 3 परेशानियों से न हारने वाले आप निराश कैसे हो गए? वाक्य में सर्वनाम पदबंध कौन-सा है?   1

(क) परेशानियों से न हारने वाले आप

(ख) परेशानियों से न हारने वाले

(ग) परेशानियों से

(घ) परेशानियों से न हारने

प्रश्न 4 'साहसी विद्यार्थी उन्नति करते हैं।'इस वाक्य का उपयुक्त मिश्र वाक्य कौन-सा है?   1

(क) साहसी विद्यार्थी है और उन्नति करते हैं।

(ख) साहसी विद्यार्थी है,उन्नति करते हैं।

(ग) जो विद्यार्थी साहसी होते हैं वे उन्नति करते हैं।

(घ) साहसी विद्यार्थी है इसलिए उन्नति करते हैं।

प्रश्न 5 मोहन ने रवि से कहा कि तुम माता पिता की **मेहनत की कमाई** क्यों बरबाद कर रहे हो ? रेखांकित शब्दों के स्थान पर किस मुहावरे का प्रयोग किया जाएगा? 1

        (क) गीली कमाई।

        (ख) गाँव की कमाई।

        (ग) गहरी कमाई।

        (घ) गाढ़ी कमाई।

प्रश्न 6 'दोराहा' का उचित समास विग्रह क्या होगा? 1

        (क) दो राहों का समाहार

        (ख) दो राही का समाहार

        (ग) दो रातों का समाहार

        (घ) दो रागों का समाहार

निम्नलिखित प्रश्नों के उत्तर दीजिए — (3×2 = 6)

प्रश्न 7 मीरा श्रीकृष्ण की भक्ति से प्राप्त होने वाले किन लाभों के विषय में बताती हैं ? वे गिरिधर से अलग क्यों नहीं होना चाहती ?

प्रश्न 8 पुलिस कमिश्नर का नोटिस कौंसिल के नोटिस से किस प्रकार भिन्न था ? साधारण आदमी किस प्रकार पुलिस कमिश्नर की सहायता ले सकता है ?

निम्नलिखित प्रश्नों के उत्तर दीजिए — (2×2= 4)

प्रश्न 9 (क) हरिहर काका की किस स्थिति ने लेखक को चिंतित कर दिया ?

      (ख) कथावाचक और हरिहर काका के बीच क्या संबंध है और इसके क्या कारण हैं?

प्रश्न 10 आप संस्कार पब्लिक सीनियर सेकेंड्री स्कूल, शालीमार बाग, दिल्ली के छात्र पल्लव हो। आपने अपने विद्यालय के छात्र को एक साहसिक कार्य करते देखा। उस सहपाठी को पुरस्कृत एवं सम्मानित करने के लिए अपने विद्यालय के प्रधानाचार्य को लगभग 120 शब्दों में प्रार्थना पत्र लिखिए। (1×5=5)

Subject: Mathematics

General Instructions:

1) **The work should be done neatly and in a systematic way.**
2) **The given questions are to be done in the Math practice notebook.**
3) **Attempt all questions.**

Q-1 Express each number as a product of its prime factors: (2)

(i)3825 (ii)5005

Q-2 Given that HCF (306, 657) = 9, find LCM (306, 657). (2)

Q-3 The following real numbers have decimal expansions as given below. In each case, decide whether they are rational or not. If they are rational, and of the form, p/q what can you say about the prime factors of q? (2)

(i) 43.123456789

(ii) 0.120120012000120000

Q-4 Check whether 6^n can end with the digit 0 for any natural number n. (2)

Q-5.Find HCF and LCM of 13 and 17 by prime factorisation method. (2)

Q-6.Prove that $2 + 3\sqrt{5}$ is an irrational number. (3)

Q-7 Show that the square of any positive odd integer is of the form 8m + 1, for some integer m. (3)

Q-8. Find the remainder when $x^3 + x^2 + x + 1$ is divided by x – 12 using remainder theorem. (3)

Q-9 Prove that $2\sqrt{3} - 1$ is an irrational number. (3)

Q-10 Prove that the product of any three consecutive positive integers is divisible by 6. (3)
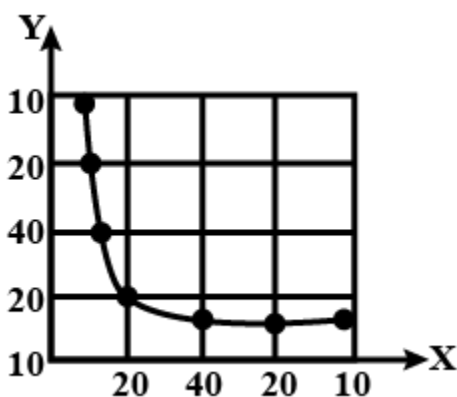
Subject: Science

<u>**Objective:**</u>
- Revision of concepts.
- Skills to carry out research and develop scientific aptitude.
- Encouraging learning through experience.

<u>**Instructions**</u>:

* Neatly write the answers in your respective subject notebooks.

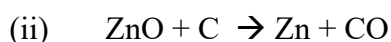* Attempt the questions keeping in mind the weightage of each question.

Q1. Define then term nephron. (1)

Q2. A lens forms a real image of an object. The distance from the object to the lens is x cm and that from the lens to the image is y cm. The graph given below shows that variation of y with x. Determine the type of lens and its focal length. (1)

Q3. Identify the substances getting oxidized and reduced in the following chemical reactions:

(2)

(i) $Fe_2O_3 + 2Al \rightarrow Al_2O_3 + 2Fe$

(ii) $ZnO + C \rightarrow Zn + CO$

Q4. Why do plants coated with Vaseline or wax do not remain healthy for a long time? (2)

Q5. Draw a labelled ray diagram to show how a ray of light passes through a parallel-sided glass block: (3)

(a) if it hits the glass block at 90∘ (that is perpendicular to the glass block)

(b) if it hits the glass block at an angle other than 90∘ (that is, obliquely to the glass block).

Q6. A silver wire is dipped in an aqueous solution of copper sulphate in one beaker while in another beaker, a copper wire is dipped in the aqueous solution of silver nitrate. What type of chemical reaction takes place in both the beakers? Write the chemical equation/equations involved. (3)

Q7. Define blood pressure. How do systolic pressure and diastolic pressure differ from each other?

(3)

Q8. (i) A lens produces a magnification of -0.5. Is this a converging or diverging lens?
If the focal length of the lens is 6 cm, draw a ray diagram showing the image formation
in this case. (3+2)

(ii)A boy was playing with a thin beam of light from a laser torch by directing it from different
directions on a convex lens held vertically. He was surprised to see that in a particular direction the
beam of light continues to move along the same direction after passing through the lens. Draw a ray
diagram to support your answer.

Q9. Explain the term rancidity with the following subheadings- (5)

- Definition
- Examples
- Preventions

Q10. Draw a neat and labelled diagram of human respiratory system. (5)

Subject: Social Science

General Instructions:

1) The work should be done neatly and in a systematic way.

2) The given questions are to be done in your respective subject notebooks.

Q1. Define National resources and Individual resources?   1

Q2. Who founded the secret society, 'Young Italy' during the 1830s?   1

Q3. What was the main aim of the French revolutionaries?   1

Q4. What is soil erosion? How do human activities and natural forces cause soil erosion?   2

Q5. How is a federal form of government different from a unitary government? Explain with

examples.   3

Q6. What does the following cartoon represent?   3

Q7. The destruction of forests and wildlife is not just a biological issue. The biological loss is strongly

correlated with the loss of cultural diversity. Elucidate.   3

Q8. Highlight any three major advantages of public facilities.   3

Q9. Does availability of good health and educational facilities depend only on amount of   3

money spent by the government on these facilities? What other factors could be relevant?

Q10. Explain the contribution of Otto von Bismarck in German unification.   5

Subject: Information Technology

General Instructions:

1) **The work should be done neatly and in a systematic way.**
2) **The given questions are to be done in the Computer Science notebook.**
3) **Attempt all questions.**

I Multiple Choice Questions

i. Computer based record keeping system is known as: 1

(a) Data Manipulation System
(b) Computerised Data System
(c) Computer record Keeping System
(d) DBMS

ii. RDBMS provides relational operators to manipulate the data. Here, RDBMS refers to: 1

(a) Record Database Management System
(b) Relational Database Management System
(c) Reference Database Management System
(d) None of the above

iii. A database that contains tables linked by common fields is called a : 1

(a) Centralised database
(b) Flat file database
(c) Relational database
(d) None of the above

iv …………… refers to the attribute that can uniquely identify tuples within the relation. 1

 (a) Foreign key (b) Consolidate key (c) Alternate key (d) Primary key

v. Key field is a unique identifier for each record. It is defined in the form of 1

(a) rows (b) columns (c) tree (d) query

II Case-based Questions

Q2 Read the following case study and answer the following questions. 1x4=4

Mr. Amar Agarwal is the owner of his parental firm Agarwal & Sons which deals in the wholesale business of spices. He wants to maintain records of spices available in their shop and generate bills when someone purchases any spices from the shop. They want to create a database to keep track of all the spices in the shop and the spices purchased by customers.

(i) Which is the correct SQL statement to create the table?

(a) CREATE TABLE spice(scode integer, sname char(25), price decimal, stock integer)

(b) CREATE spice(scode integer, sname char(25), price decimal, stock integer)

(c) CREATE spice(scode , sname , price, stock)

(d) SELECT TABLE spice(scode integer, sname char(25), price decimal, stock integer)

(ii) To add records in the table, which of the following SQL statements is used?

(a) ADD (b) SELECT (c) INSERT (d) INSERT INTO

(iii) To add a new column exp_date in the existing table the statement is

(a) ALTER TABLE spice ADD (exp_date date);

(b) UPDATE TABLE spice ADD (exp_date date);

(c) MODIFY spice ADD (exp_date date);

(d) ALTER TABLE spice MODIFY (exp_date date);

(iv) To view the table structure of the above created table the command is

(a) SELECT spice

(b) DESC spice

(c) DESCRIBE spice

(d) Both (b) and (c)

Q3 Consider the table STUDENT with following details.   1x5=5

Table : STUDENT				
STU_ID	Name	Stream	Marks	Class
1	Armaan	Science	87.5	12A
2	Vicky	Commerce	88.7	12B
3	Meeta	Humanities	76.8	12C
4	Vanisha	Science	79.5	12A
5	Kanika	Science	77.9	12A
6	Anandi	Commerce	86.7	12B

(i) SQL Command to select all Commerce students from the table STUDENT.

(a) SELECT * FROM STUDENT;

(b) SELECT Stream FROM STUDENT WHERE Stream= 'Commerce';

(c) SELECT * FROM STUDENT WHERE Stream = 'Commerce';

(d) SELECT Name FROM STUDENT WHERE Stream = 'Commerce';

(ii) View all records other than '12A' class.

(a) SELECT DISTINCT Class FROM STUDENT;

(b) SELECT Class FROM STUDENT WHERE (Class NOT = 'Science');

(c) SELECT * FROM STUDENT WHERE Class NOT IN ('Science');

(d) SELECT Name FROM STUDENT WHERE Stream = 'Commerce';

(iii) Modify the marks of Kanika as 85.5.

(a) ALTER TABLE STUDENT SET Marks = 85.5 WHERE Name = 'Kanika';

(b) UPDATE STUDENT SET Marks=85.5 WHERE Name = Kanika';

(c) UPDATE TABLE STUDENT SET Marks =85.5 WHERE Name= 'Kanika';

(d) ALTER STUDENT SET Marks=85.5 WHERE Name= 'Kanika';

(iv) Command to delete all records that belongs to 'Science' stream .

(a) DELETE FROM STUDENT WHERE Stream='Science';

(b) DROP FROM STUDENT WHERE Stream='Science';

(c) DROP TABLE STUDENT WHERE Stream='Science';

(d) DROP STUDENT WHERE Stream='Science';

v) Add a record of new student 'Rashmi' of 'Humanities' stream in class '12B' and her marks is '70.9'.

(a) INSERT INTO STUDENT VALUES ('Rashmi','Humanities', '12B', 70.9);

(b) INSERT INTO STUDENT VALUES (7,'Rashmi','Humanities', '12B', 70.9);

(c) INSERT INTO STUDENT VALUES ('Rashmi','Humanities', 70.9, '12B');

(d) INSERT INTO STUDENT VALUES (7,'Rashmi','Humanities', 70.9, '12B');

Practical Work:

S. No   Practical

1   Create a database named "Employee Database Management" to store the records of employees at the tables.

2   Create a table "Employee_Details" with the following fields Emp_No, Employee Name, Department, Designation,dateofjoining and Mobile Number in Design view.

3   Create minimum 5 queries through SQL command using wildcard(*), Where, Order By on Table: Employee_Details

4.   To get all the records of the employees from Finance department from the Employee_Details with the help of a Query wizard.

5.   Create a form using the above table- Employee_Details and take the screenshots of the steps.

6.   Write the steps to create a blog and post and publish on www.blogger.com/ or www.wordpress.com/ on any topic of your choice.