St. Mary's School, Dwarka
Holiday Homework
Std. IX
Week 4
Worksheet 4

Subject: English

Q1. Read the passage given below.

The modern classroom has taken several steps forward in its evolution of the learning environment in the past 25 years. Many of the benefits that we have seen in this setting are due to the introduction of new technology options for students. Instead of having a single computer for a class to use or a laboratory environment for the entire school placed in one room, we can now help students learn at their table or desk with items issued to them directly. Thus, there are quite a lot of advantages of having technology in classrooms.

Technology helps children to stay motivated during the learning process. Most students don't like to go to school if they feel like they are wasting their time. When there is technology allowed in the classroom, then teachers have an opportunity to let children work at a pace which suits them the best without disturbing others. They can look up additional information about a subject they are learning about that day, play educational games that reinforce the lesson, or work on advanced material using a program.

Since, the technology options available today allow students to see how well they are doing compared to the average users, it gives them a chance to push harder to achieve their academic goals. Many of the programs that encourage learning also issue rewards or award certificates, which helps to make the lessons fun as well.

Technology encourages more communication between teachers and parents. When there is technology in the classroom, then there are more opportunities for parents and teachers to connect with each other. Using a blog for the classroom can help parents get to see what their children are learning each day. Apps and software options allow teachers to instantly report on a child's behaviour to let parents know in real- time what is happening throughout the day. There are options for chat boxes, instant messaging, and other forms of communication as well.

Let's not forget about email here either. Since the 1990s when this technology option came into the classroom, it created more reliability in messaging between teachers and parents should there be a need to talk.

Technology also creates new ways to learn for today's student. There are three critical forms of intelligence that we see in children today: emotional, creative, and instructional. The traditional classroom environment, which typically encourages lecture-based lessons, focuses more on the latter option. Standardized tests and similar ranking tools do the same. When children have access to technology today, then those who excel outside of the standard learning setup can still achieve their full potential.

Technology allows children to embrace their curiosity in multiple ways. They can try new things without embarrassment because their tech access gives them a level of anonymity. This process allows children to work, through trial-and error if they wish, to see if a different strategy helps them to learn more effectively. It even encourages students to stay engaged with their learning environment. Children get bored very easily when they feel like they already know what is being taught in their classroom. Some children will transform into mentors or leaders in this situation to help their fellow students, but there are many more who disengage because they lack stimulation. By introducing technology to the classroom, there are fewer places where repetitive learning must take place. Teachers can introduce new subjects, try new techniques, or use different projects to encourage ongoing learning, which creates more overall engagement.

Based on your understanding of the passage, attempt the questions given below.   (1x5=5)

i. According to the passage, most children don't like to go to school if they _____.
(a) don't understand what is being taught in class.
(b) feel like they are wasting their time.
(c) find class too boring.
(d) can get away with it.

ii. What is the advantage of having a technology that allows students to see how well they are doing compared to the average of other students?

iii. Complete the following analogy correctly with a word/ phrase from the above passage :

   teachers: classroom : : _____ : computer

(iv) Which of the following is NOT a way through which technology helps children to stay

   motivated during the learning process?

   (a)   play educational games that reinforce a lesson
   (b)   work on advanced material using a program
   (c) look up additional information about a subject they are learning about
   (d) allows them to work on a lesson beyond their curriculum

   (v) Choose a word from the passage which means the same as 'encouragement of something to

   make it develop or become more active'.

Answer questions 2 to 4 in 20-40 words.   (2x3=6)

Q2. "I had learnt to open my mind and body to sounds and vibrations," says Evelyn. How did she do this?   **(2)**

Q3. How did the County Inspector disappoint Margie?   **(2)**

Q4. What should people do to avoid the destruction caused by the strong winds?   **(2)**

Answer question 5 in 60-80 words.

Q5. Toto was a mischievous monkey'. How did he trouble everyone?   **(3)**

Q6. Make puppets of the mechanical teacher and Margie. Create dialogues between them after Margie learnt about the old school.   **(5)**

Q7. Read the conversation given below and complete the sentences that follow. **(1x2=2)**

Anu: How much did you score in your test?

Tanu: I scored eighty out of hundred.

Anu: Why are you still sad? You've scored good mark.

Tanu: My cousin has scored eighty-five marks in the test.

Anu asked Tanu (a) _____. Tanu replied that she scored eighty out of hundred. Anu further inquired Tanu (b) _____, even though she had scored good marks. Tanu answered that her cousin had scored eighty-five marks in the test.

Q8. Fill in the blank with the suitable form of the word given in the bracket. **(2)**

 i I hope that you _____ me. (pardon)

 ii. Complete the given sentence, by filling in the blank with the correct option:

   We want the best candidate to be appointed _____ the post.

 a) from   (b) for   (c) to   (d) by

Q9. You are Rishabh/ Rashi, a member of Shramdan club. Recently you along with the other students of

   the club visited an orphanage, and donated clothes, bags and stationery items. Write a diary entry expressing your feelings and emotions after doing this kind act. **(3)**

Q10. Read the information given below and write a bio-sketch in about 100 -150 words on Dr. Radhakrishnan, former President of India and a great Indian Scholar and Philosopher. **(4)**

Birth: Bom in Tirutani near Madras, 1888
Family: Belonged to a poor Brahmin family
Education: Graduated from Madras Christian college
Teaching: Taught philosophy at Madras, Career Mysore and Calcutta Universities;
            Professor of Eastern Religions at Oxford in 1936.
Later life: Indian Ambassador to the U.S.S.R in 1949; Vice-President of India in
            1952. President of India from 1962 to 1967.
Works: Written many books: The Hindu View of Life, The Indian Philosophy,
            Eastern Religions and Western Thought, Religion and Society are
            among his famous books.

 Awards and
 Honours: Awarded Bharat Ratna, the highest Civilian award in 1931
 Died in the year: 1975

Subject: Hindi

प्रश्न 1 गद्यांश को ध्यानपूर्वक पढ़कर दिए गए प्रश्नों के उत्तर दीजिए— (1x5=5)

स्वामी विवेकानंद जी का जन्म 12 जनवरी 1863 को कोलकता में हुआ था।अपने गुरू रामकृष्ण परमहंस के नेतृत्व में स्वामी जी ने अध्यात्म पर कार्य किया।राजयोग ,कर्मयोग, भक्तियोग और जनयोग पर कार्य किया तथा इन विषयों पर उनके लेख व कविताएँ भी प्रकाशित हुई। 4 जुलाई 1902 को स्वामी जी का देहान्त हो गया।स्वामी जी अध्यात्मिक गुरू तो रहे ही हैं , साथ ही साथ एक ऐसे मानव भी जिन्होंने समाज को कुछ न कुछ दिया ही है।लेखक कहना चाहते हैं कि शिष्य को हमेशा इस बात का ध्यान रखना चाहिए कि कुछ भी करने से पहले या किसी को कुछ भी सिखाने से पहले उन्हें आज्ञाकारी होना चाहिए तथा सिखाने से पहले सीखने की क्षमता रखनी चाहिए।मन में एक पवित्र भाव रखना व जिज्ञासा का भाव तथा सत्य तक पहुँचने की प्रबल इच्छा होना परमावश्यक है।एक अच्छे शिष्य में एकाग्रता , एकनिष्ठा , स्वच्छ व पवित्र सकारात्मक विचार व जिज्ञासु जैसे गुण होना अनिवार्य है। इसके अलावा यह भी आवश्यक है कि सच्चे शिष्य के मन में पवित्रता ,सच्ची ज्ञान-पिपासा और गुरू के प्रति आस्था और पूर्ण विश्वास हो।तभी वह सही ढंग से शिक्षा प्राप्त कर सकता है।

(क) स्वामी विवेकानंद जी का जन्म कब और कहाँ हुआ था ? 1

    1 12 जनवरी 1864 को कोलकता में

    2 12 जनवरी 1863 को कोलकता में

    3 11 जनवरी 1863 को कोलकता में

    4 11 जनवरी 1865 को कोलकता में

(ख) स्वामी जी ने इनमें से किस पर कार्य नहीं किया ? 1

    1 राजयोग

    2 कर्मयोग

    3 भक्तियोग

    4 शिवयोग

(ग) स्वामी जी का देहान्त कब हुआ ? 1

    1 14 जुलाई 1902 को

    2 4 जुलाई 1920 को

    3 4 जुलाई 1902 को

    4 8 जुलाई 1902 को

(घ) सच्चे शिष्य में कौन सा गुण नहीं होना चाहिए? 1

    1 एकाग्रता

    2 एकनिष्ठा

    3 अकर्मण्यता

    4 सच्ची ज्ञान पिपासा

(ड़) 'आवश्यक' का कौन-सा विलोम शब्द सही है ?   1

        1 आनावश्यक

        1 अनवश्यक

        2 अनावशायक

        3 अनावश्यक

प्रश्न 2   आम , <u>मीठा</u> , नहीं ।यहाँ पर रेखांकित 'मीठा' क्या है?   1

      1 शब्द   2 संज्ञा   3 पद   4 अर्थ

प्रश्न 3 वर्णों का समूह क्या कहलाता है?   1

      1 शब्द   2 वर्णमाला   3 पद   4 स्वर

प्रश्न 4 अनुस्वार युक्त उचित शब्द कौन–सा है ?   1

       1 अशं   2 जगंल   3 पंखा   4 वदंन

प्रश्न 5 अनुनासिक युक्त सही विकल्प कौन–सा है ?   1

      1 काँच   2 जाचँ   3 मँच   4 शखं

प्रश्न 6 अनुस्वार युक्त सही विकल्प कौन–सा है ?   1

      1 लंका   2 चदां   3 पकं   4 कगंन

प्रश्न 7 अभियान दल के पैरिच पहुँचने पर उन्हें क्या दुःखद समाचार मिला ?   (3×1= 3)

प्रश्न 8 कवि रैदास के अनुसार उनकी राम नाम की रट क्यों नहीं छूट सकती?   (3×1= 3)

प्रश्न 9 निम्नलिखित प्रश्नों के उत्तर लगभग 20 से 25 शब्दों में लिखिए।

  (क) लेखिका को गिल्लू का इंतजार किस रूप में व क्यों रहता था?   (2×1=2)

  (ख) गिल्लू लेखिका के समीप रहकर कैसा अनुभव करता था और क्यों?   (2×1= 2)

प्रश्न 10 दिए गए चित्र का वर्णन 70 से 80 शब्दों में कीजिए—   (5×1= 5)

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Subject: Mathematics

Q1. What is the value of $(256)^{0.16} \times (256)^{0.09}$? (2)

Q2. State if zero is a rational number. Justify your statement by representing it in p/q where q is not equal to 0 and p and q are both integers. (2)

Q3. Find out 5 different rational numbers between 12/11 and 10/11. (2)

Q4. Simplify: $[\{(8^2 + 9^2)2\}0]2$ (2)

Q5. Let a > 0 be a real number and p and q be rational numbers. Then which of the following statement(s) is/are correct?
(i) $a^p \cdot a^q = a^{p+q}$
(ii) $a^p b^p = (ab)^p$
(iii) $(a^p)^q = a^{pq}$
(iv) All of these (2)

Q6. If $x = 3 + 2\sqrt{2}$, find the value of $x^2 + 1/x^2$ (3)

Q7. Express the following numbers in the form of p /q

(a) -25.6875

(b) 0.621621621..

(c) 15.712121212.. (3)

Q8. Write one rational & one fractional number between 0.515115111…. and 0.535335333…. (3)

Q9. Write one example each of two irrational numbers whose:

(a) Sum is a rational number

(b) Product is an irrational number

(c) Difference is an irrational number

(d) Quotient is a rational number (3)

Q10. (a) Find the value of x if $2^{x-7} \times 5^{x-4} = 1250$

(b) Find the value of x and y if: $3^{x-1} = 9$ & $4^{y+2} = 64$ (3)

Subject: Science

Q1. Give the SI unit of the following: **(1)**
   1. Velocity
   2. Acceleration

**Q2**. Find the displacement of the object in first 10 seconds in the graph given below.   **(1)**
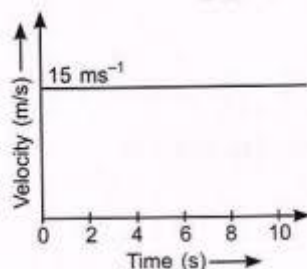
Q3. Explain the effect of decrease in temperature and increase in pressure on carbon dioxide gas. **(2)**

Q4. Identify and explain the process as shown in the given diagram.   **(2)**

Q5. The graph in the figure given below shows the positions of a body at different times. Calculate the speed of the body as it moves from (i) A to B (ii) B to C and (iii) C to D.   **(3)**
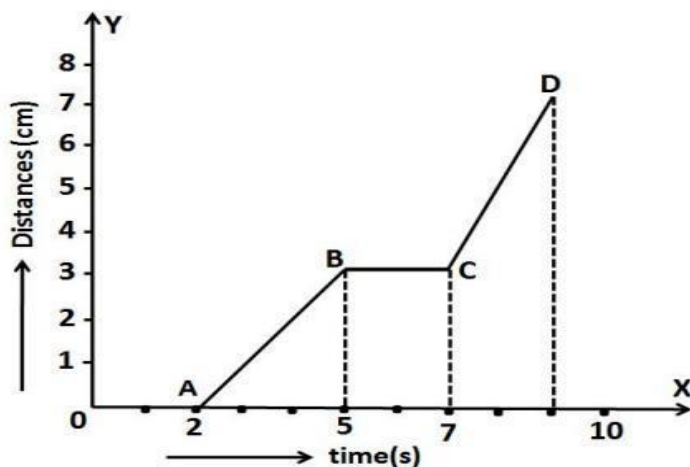
Q6. Dipika visited the Natural Gas Compressing Unit to discover that the gas can be liquefied at specific temperatures and pressures. She shared her experience with her friends but got confused. Help her identify the right set of conditions with explanation.   **(3)**

(a) Low temperature and low pressure
(b) High Temperature and low pressure
(c) Low temperature and high-pressure
(d) High temperature and high-pressure

Q7. Observe the given diagram carefully. Identify the animal cell and plant cell. What is the reason for difference in location of nucleus in both the cells? **(3)**
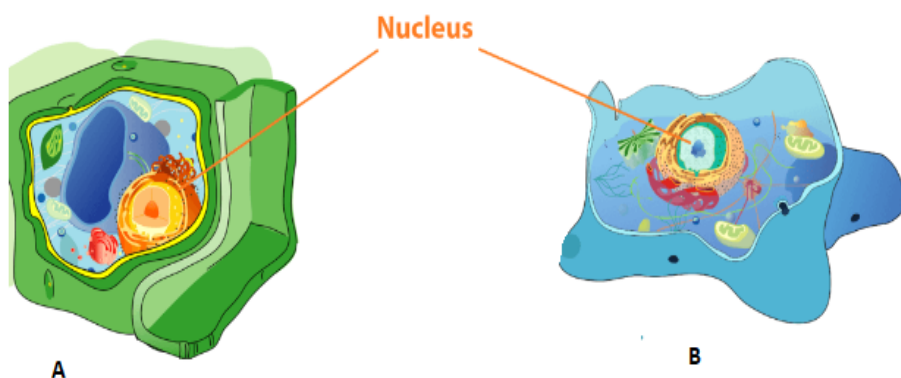
Q8. a) A train is travelling at a speed of 90 kmh^{-1}. Brakes are applied so as to produce a uniform acceleration of – 0.5 ms^{-2}. Find how far the train will go before it is brought to rest**.** **(2+3)**

b) A bus starting from rest moves with a uniform acceleration of 0.1 ms^{-2} for 2 minutes. Find (a) the speed acquired, (b) the distance travelled.

Q9.(i) Look at the following figures and suggest in which of the glass containers, i.e.,A, B, C or D, will the rate of evaporation be the highest? Justify your answer.
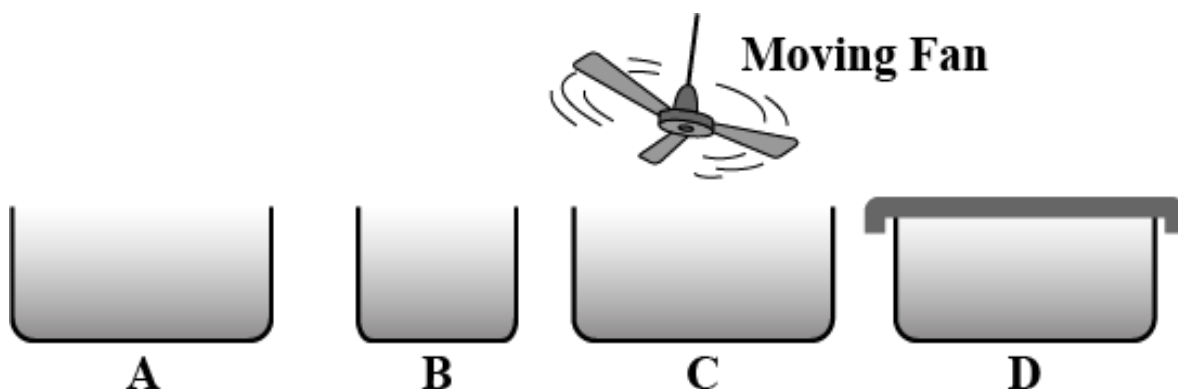
(ii) Sita lived in a village and could, not afford refrigerator in her house. She knew how to keep water cold and preserve all perishable items in her house. She kept wet cloth surrounding the earthen pot to keep water cooler. She also kept vegetables fresh by keeping them in wet gunny bag and timely sprinkled water over it.
(a) Why did Sita keep wet cloth surrounding the earthen pot?
(b) Suggest one more method of keeping the house cool in summer.
(c) What value of Sita is reflected in the above case? **(2+3=5)**

Q10. Name the cell organelle which is called the "waste disposal system of the cell" and why? Explain its structure and site of synthesis. **(5)**

Subject: Social Science

Q1. Name the international body formed to coordinate socialist efforts.   1

Q2. Why did Kerenskii's Government become unpopular in Russia?   1

Q3. Why 82 degree30'E has been selected as Standard Meridian of India?   1

Q4. Assume that you have recently travelled in the Indian desert. Describe the desert to a person not living in India.   2

Q5. Make a comparison between the Shiwaliks and Himachal Himalayas based on the following:

(i) Composition

(ii) Age

(iii) Altitude   3

Q6. What does the following cartoon signify?   3

Q7. 'Citizens play a major role in a democracy.' Discuss.   3

Q8. What are the main factors for production of goods and services?   3

Q9. On what terms did Savita get a loan from Tejpal Singh? Would Savita's condition be different if she could get a loan from the bank at a lower rate of interest?   3

Q10. Explain the main effects of the First World War on the industries in Russia.   5

Subject: Artificial Intelligence

Practical questions:

Instructions:

Upload all the three practicals given below under the Assignment creates on Microsoft Teams.

1. Create a PowerPoint presentation of five slides on any one of the following topics.   5

a) Verbal Communication

b) Non-Verbal Communication

c) 7C's of Effective Communication

2. Create an infographic on use of AI on any one of the Sustainable Development Goals. Share the infographic and publish it. Download the jpg format of the infographic.   5

3. Paste and name the following visual communication symbols in a tabular format using Open Office Writer. Save the file as a visual communication.pdf   5

Visual Communication: Exchanging Information through Images