N.K.Bagrodia Public School,Sec-4, Dwarka

Summer Break Holidays Homework

Class – X

Session- 2020-21

English

Integrated Grammar Exercises

DIRECT AND INDIRECT SPEECH

1.Read the conversation given below and complete the paragraph that follows.

Ganga: How did you spend your holidays?

Gautham: I went for cricket coaching. What did you do?

Ganga: I went for the NTSC coaching classes.

Gautham: At least during the holidays you could have enjoyed yourself.

Ganga: I enjoyed going for the coaching classes.

Ganga asked Gautham (a) ………………… holidays. Gautham said that (b) ……………….. Cricket coaching and wanted to know (c) ……………….. during the holidays. When Ganga told him that she had gone for NTSC coaching classes, Gautham told her that she could have enjoyed herself during the holidays. Ganga replied that (d) ………………. the coaching classes.

2.Read the following conversation carefully and complete the following passage.

Ruby: Raj, how is your knee today? Is it still giving trouble?

Raj: No. It feels a lot better today. I went to a doctor and he told me it was only a pulled ligament. I should be fine for Saturday's

game.

Ruby: Great. But why don't you take it easy today? Maybe just practice throwing. Don't do any running.

Raj: OK.

Ruby asked Raj (a) ……………… and if it was still giving him trouble. Raj replied that (b) …………… He told him that he had gone to the doctor, who (c) ……………. that it was only a pulled ligament. He (d) ……………. for Saturday's game. Ruby then suggested that he should take in easy that day and just practice throwing and not do any running.

GAP FILLING EXERCISE

3.Complete the following passage with the most appropriate words from the options given.

An ATM, or Automated Teller is (a) …………………….. (a, an, the, no word) simple machine which (b) …………… (acting, acted, acts, is acted) as an extension of a bank even (c) ……………. (as, which, when, where) the bank is closed. The machine (d) …………… (was, is, has been, should be) usually placed (e) ……………. (at, of, in, on) a small room with a security guard stationed outside. You can (f) ………… (withdraw, withdrawal, withdrawn, withdrew) money from your account, deposit cheques, order (g) ……………. (a, an, the, no word) cheque book, get (h) ………………… (my, our, somebody's, your) account statements etc. The ATMs work round the year 24 hours a day.

LITERATURE ASSIGNMENT

Chapter- 1,2 ,3

REFERENCE TO CONTEXT

I. The following Sunday, Lencho came a bit earlier than usual to ask if there was a letter for him. It was the postman himself who handed the letter to him while the postmaster, experiencing the contentment of a man who has performed a good deed, looked on from his office.
Lencho showed not the slightest surprise on seeing the money; such was his confidence, but he became angry when he counted the money. God could not have made a mistake, nor could he have denied Lencho what he had requested.
(a) Why did Lencho come earlier to the post office?
(b) Why wasLencho angry when he counted money?
(c) Find the word which means the opposite of permitted from the passage.
(d) Which word in the passage gives the meaning 'that one will be successful one day'.

II. "We have at last, achieved our political emancipation". We pledge ourselves to liberate all our people from the- continuing bondage of poverty, deprivation, suffering, gender and other discrimination.
(a) Who is the speaker ?
(b) What pledge does he take ?
(c) Which word is the noun form of 'emancipate' ?
(d) What has the speaker achieved ?

III. With a loud scream he fell outwards and downward into space. Then a monstrous terror seized him and his heart stood still. He could hear nothing. But it only lasted a minute. The next moment he felt his wings spread outwards. The wind rushed against his breast feathers, then under his stomach and against his wings.
(a) How did the young seagull learn to fly ?
(b) How long did the young seagull's fear last ?
(c) Find the word from the passage which means the same as 'terrible'.
(d) Who fell outwards and downward into space ?

IV. "Some say the world will end in fire
    Some say in ice.
    From what I've tasted of desire
    I hold with those who favour fire."

(a) What is the poetic device in the last line?
(b) What is the poet's opinion about the world?
(c) What is the contradictory opinion of public?
(d) How are ice and fire similar to each other though they have contradictory traits?
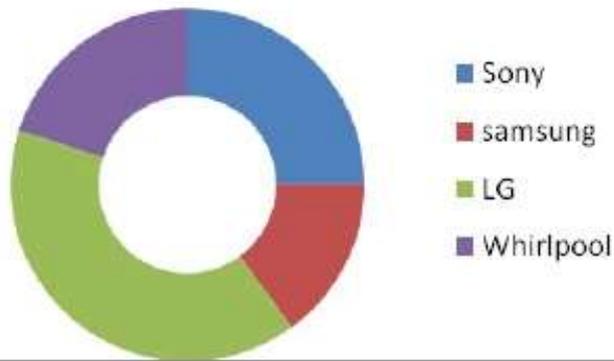
ASSIGNMENT -3

LITERATURE & SUPPLEMENTARY READER

ANSWER THE FOLLOWING QUESTIONS:

1. 'Freedom is such an essential virtue that is valued not only by human beings but also by animals alike '. Justify this statement with reference to the poem, 'A Tiger in the Zoo'.

2. What is the irony in the story ' A Letter to God'?

3. Do you think Tricki was enjoying his stay at the hospital? Why?

4. Draw a pen-portrait of Anil on the basis of your reading of 'The Thief's Story'

5. How did Ausable fulfil his promise to give an 'authentic thrill' of the day?

WRITING SKILLS

1-Give below is a pie-Chart, which shows different types of electric gadgets, used by middle-class people in their houses on an average in Ahmedabad. On the basis of this, write a paragraph in about 80 words the reason of selecting the electric gadgets for their houses.

Sales

- Sony
- samsung
- LG
- Whirlpool

Maths

Dear students ,you need to solve the below mentioned assignment in fair notebook and revise Ch-1,2,3 & 4.

Also, you need to do the given activity on loose pages and make a file for the same.

Assignment - 4
Ch-4- Quadratic Equations

Q1   Every quadratic polynomial can have at most
    (a) three zeros
    (b) one zero
    (c) two zeros
    (d) none of these

Q2   The roots of the equation $9x^2 - bx + 81 = 0$ will be equal, if the value of b is
    (a) ± 9
    (b) ± 18
    (c) ± 27
    (d) ± 54

Q3   Which of the following is not a quadratic equation?
    (a) $3x^2 - 5x + 9$
    (b) $x + \dfrac{1}{x} = 1$
    (c) $x^2 - 9x = 0$
    (d) $x^3 - 2x - \sqrt{5} = 0$

Q4   Value of D when root of $ax^2 + bx + c = 0$ are real and unequal will be
    (a) D ≥ 0
    (b) D > 0
    (c) D < 0
    (d) D = 0

Q5   If equation $9x^2 + 6px + 4 = 0$ has equal roots, then both roots are equal to

(a) $\pm\dfrac{2}{3}$ (b) ± 3

(c) $\pm\dfrac{3}{2}$ (d) 0

Q6. Find the value of p so that the equation $3x^2 - 5x + 2p = 0$ has equal roots. Also find the roots.

Q7. Find the quadratic equation whose roots are $2 + \sqrt{3}$ and $2 - \sqrt{3}$

Q8. If the equation $(1 + m^2)x^2 + 2mcx + c^2 - a^2 = 0 \text{ has equal roots,}$ show that $c^2 = a^2(1 + m^2)$.

Q9.A train travels at a certain average speed for a distance of 63 km and then travels a distance of 72 km at an average speed of 6 km/h more than its original speed. If it takes 3 hours to complete the total journey, what is its original average

Q10. A rectangle has a length that is 2 less than 3 times the width. If the area of this rectangle is 16, find the dimensions and the perimeter.

Q11. To fill a swimming pool two pipes are used if the pipe of larger diameter used for 4 hour and the pipe of a smaller diameter for 9 hours only half of the pool can be filled .find how much long it would take for each pipe to fill the pool separately if the pool of a smaller diameter takes 10 hour more than the pool of larger diameter to fill the pool?

Q12. The sum of the squares of the two consecutive multiples of 7 is 637, find the multiples?

Q13.Five times of a positive integer is less than twice its square by 3. Find the integer.

Activity 1

System of linear equations

Objective
To obtain the conditions for consistency of a system of linear equations in two variables by graphical method.

Pre-requisite knowledge
Plotting of points on a graph paper

Procedure
1. Take the first pair of linear equations in two variables of the form
$$a_1 x + b_1 y + c_1 = 0$$
$$a_2 x + b_2 y + c_2 = 0$$
   e.g. $2x - 3y = 3$
   $3x - 4y = 5$

2. Obtain a table of ordered pairs (x, y), which satisfy the given equation. Find at least three such pairs for each equation.
   e.g. For $2x - 3y = 3$

x	0	3	6
y	-1	1	3

   For $3x - 4y = 5$

x	- 1	- 5	7
y	- 2	- 5	4

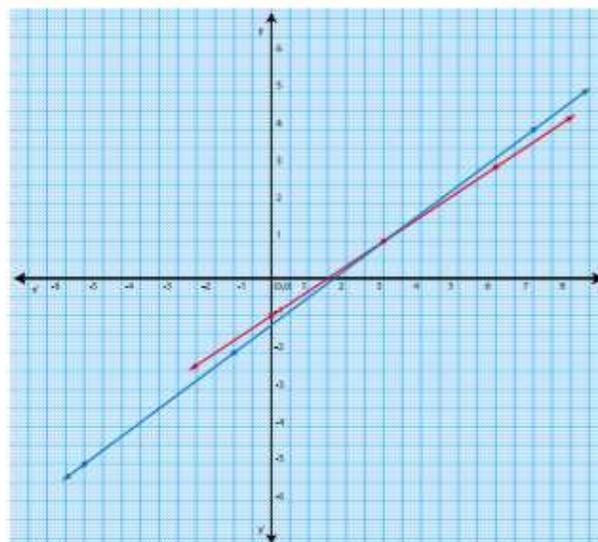3. Plot the graphs for the two equations on the graph paper as shown in Fig 1(a).

Fig 1(a)

4. Observe if the lines are intersecting, parallel or coincident and note the following:

$$\frac{a_1}{a_2} = \qquad\qquad \frac{b_1}{b_2} = \qquad\qquad \frac{c_1}{c_2} =$$

5. Take the second pair of linear equations in two variables,
   e.g. $6x + 10y = 4$, $3x + 5y = -11$
6. Repeat the steps from 2 to 4.
7. Take the third pair of linear equations in two variables
   e.g. $x - 2y = 5$, $2x - 4y = 10$
8. Repeat the steps from 2 to 4.
9. Fill in the following observation table

Type of lines	$\frac{a_1}{a_2}$	$\frac{b_1}{b_2}$	$\frac{c_1}{c_2}$
Intersecting			
Parallel			
Coincident			

10. Obtain the condition for two lines to be intersecting, parallel or coincident from the

observation table by comparing the values of $\frac{a_1}{a_2}$, $\frac{b_1}{b_2}$ and $\frac{c_1}{c_2}$.

Observations

The student will observe that for intersecting lines $\frac{a_1}{a_2} \neq \frac{b_1}{b_2}$,

for parallel lines $\frac{a_1}{a_2} = \frac{b_1}{b_2} \neq \frac{c_1}{c_2}$ and for coincident lines $\frac{a_1}{a_2} = \frac{b_1}{b_2} = \frac{c_1}{c_2}$.

Learning outcomes

The student will learn that some pairs of linear equations in two variables have a unique solution (intersecting lines); some have infinitely many solutions (coincident lines) and some have no solution (parallel lines).

Remarks

1. The teacher will explain that when a system of linear equations has solution (whether unique or not), the system is said to be consistent; when the system of linear equations has no solution, it is said to be inconsistent.

2. The teacher may consider additional examples in which some of the co-efficients are zero.

Science

- **Revise all the topics covered till now thoroughly. Also practice numerical based on electricity, writing chemical equations involved and diagrams based on chapter life processes.**
- **Enclosed below are the assignments of various chapters covered. Paste the assignments in fair register and complete them.**

Assignment No. 1
Chemistry
Chapter 1: Chemical Reactions and Equations

Q1. Write the balanced chemical equations for the following reactions and identify the type of reaction in each case.

    a) Sodium hydroxide solution is treated with acetic acid to form sodium acetate and water.

    b) Ethene is burnt in the presence of oxygen to form carbon dioxide, water and releases heat and light.

Q2. Write the balanced chemical equations for the following reactions and identify the type of reaction in each case.

    a) Thermit reaction, iron (III) oxide reacts with aluminium and gives molten iron and aluminium oxide.

    b) Magnesium ribbon is burnt in an atmosphere of nitrogen gas to form solid magnesium nitride.

    c) Chlorine gas is passed in an aqueous potassium iodide solution to form potassium chloride solution and solid iodine.

    d) Ethanol is burnt in air to form carbon dioxide, water and releases heat.

Q3. Which among the following changes are exothermic or endothermic in nature?

    a) Decomposition of ferrous sulphate

    b) Dilution of sulphuric acid

    c) Dissolution of sodium hydroxide in water

    d) Dissolution of ammonium chloride in water

Q4. A solution of potassium chloride when mixed with silver nitrate solution, an insoluble white substance is formed. Write the chemical reaction involved and also mention the type of the chemical reaction?

Q5. Why do fire flies glow at night?

Q6. Grapes hanging on the plant do not ferment but after being plucked from the plant can be fermented. Under what conditions do these grapes ferment? Is it a chemical or a physical change?

Assignment No. 2
Chemistry
Chapter 2: Acid, Bases and Salts

Q   Complete the following table with the acids and base used to form a particular salt. Also give the idea whether the acid/base is strong or weak and nature of the salt.
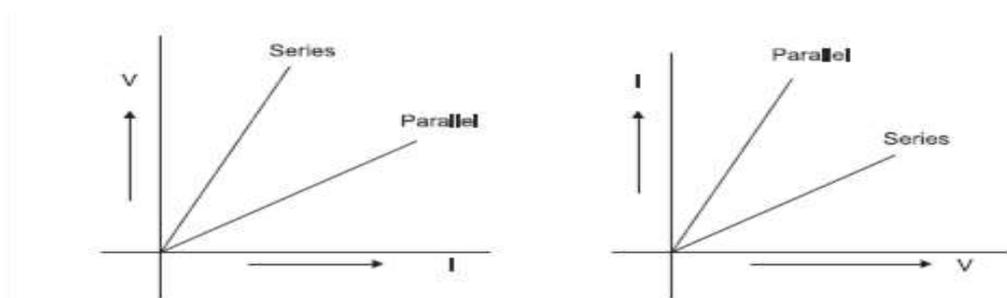
S. No.	Salt	Acid Used	Strong /weak (S/W)	Base used	Strong/ weak (S/W)	Predicted nature of the salt acidic, basic or neutral
1	Sodium chloride					
2	Potassium Nitrate					
3	Zinc Sulphate					
4	Sodium Acetate					
5	Potassium carbonate					
6	Copper chloride					
7	Aluminium chloride					
8	Sodium hydrogen carbonate					
9	Ammonium chloride					
10	Potassium sulphate					

Assignment No. 3
Physics
Chapter 12: Electricity

1. Show the variation of:

   i. resistance with radius of wire.

   ii. resistance with area of wire.

   iii. resistivity with temperature of wire.

   iv. resistivity with radius of wire.

2. Two wires one of manganin and other of copper has equal length and equal resistance. Which one of these will be thicker?

3. What should be the resistance of ammeter and voltmeter and why?

4. A TV set shoots out a beam of electrons. The beam current is 10 micro ampere. How many electrons strike the TV screen in each second? How much charge strikes the screen in a minute?

5. A metallic wire of resistance R is cut into 10 equal parts. Two pieces each are joined in series and then five such combinations are joined in parallel. What will be the effective resistance of the combination?

6. Why the I-V graph for conductors deviates from straight line at higher temperature?

7. An aluminium wire gas radius 0.25 mm and length of 75 m. If the resistance of the wire is 10ohm, calculate the resistivity of aluminium.

8. Two resistors, with resistance 5 ohm and 10 ohm respectively are to be connected too a battery of emf 6V so as to obtain:
   a) minimum current flowing and maximum current flowing

b) How will you connect the resistances in each case?

c) Calculate ethe strength of the total current in the circuit in the two cases.

9. If the length of the wire is tripled and its area of cross section reduces to five times, if the initial resistance of the wire is 50 ohm. Find the change in resistance of the wire.

10. Why are alloys used for making standard resistance coils?

11. Two students perform the experiments on series and parallel combinations of two given resistors R1 and R2 and plot the following V-I graphs.

Which of the two graphs above is (are) correctly labelled in terms of the words 'series' and 'parallel'.Justify your answer.

12. A wire of resistance 5 ohm is bent in the form of a closed circle. What is the effective resistance across the diameter of the circle?

13. An electric kettle of 2KW works for 2Hrs daily. Calculate the a)energy consumed in SI and commercial unit b) cost of running it in the mont of June at the rate of Rs.3 per unit.

Assignment No. 4
Physics
Chapter 14: Sources of Energy

1. 'Biogas is considered as an ideal fuel for domestic use.' List any four reasons to justify the statement.

2. What is the source of energy for Sun and stars? What are the conditions needed?

3. What is hydro power plant? How electricity is produced in hydro power plant?

4. How many numbers of neutrons are released in fission of U-235?

5. Which part of solar cooker is responsible for greenhouse effect and why?

6. What are the factors that should be taken into consideration for selecting a source of energy? List any four.

7. Why wind energy farms can be established only at specific locations? Give reason to support your answer.

8. Name the nuclear reaction which is responsible for the energy production by atom bomb and in sun.

9. Why is there a need to harness non-conventional sources of energy? Give two reasons.

10. What is the main difference between nuclear fission and nuclear fusion reaction?

11. What is the way to stop a nuclear chain reaction?

Assignment No. 5
Biology
Chapter 14: Life processes

1. Give reason:
   a. Secretion of mucus from gastric glands in stomach
   b. Carnivores have shorter small intestine as compared to herbivores
   c. Rings of cartilage are present in the throat
   d. Lungs always contain a residual volume of air
   e. Rate of breathing in aquatic organisms is much faster that seen in terrestrial organisms
   f. Separation of the right side and the left side of the heart is useful
   g. Warm blooded animals have double circulation system
   h. Presence of blood platelets in blood
   i. Presence of values in veins
   j. Ventricles have thicker muscular walls than atria
   k. Bile has no enzymes but is essential for digestion
   l. insectivorous plants are not categorized under consumers

2. Name the following:
   a. tissues in which chloroplasts are present in leaves
   b. Site for light & site for dark reaction in chloroplast
   c. Blood vessel that brings nitrogenous wastes to the kidneys for removal.
   d. procedure used in the working of artificial kidney
   e. part of the nephron is connected to the ureters
   f. Most common nitrogenous wastes generated inhuman being. Which among them is the most toxic?
   g. hormone which regulates the selective absorption in the nephrons

3. Mention the functions of the following
   a. Lymph
   b. Transpiration
   c. Diaphragm in breathing
   d. Epiglottis
4. Difference between role of transpiration and root pressure in transportation of water and minerals.
5. What are the factors on which the amount of water reabsorption depends in nephron?
6. Explain why in a healthy adult, the initial filtrate in the kidneys is about 180 L daily but volume actually excreted is only a litre or two a day?
7. Draw schematic representation of transport and exchange of oxygen and carbon dioxide.
8. What is the role of bicuspid and tricuspid valves in the heart?
9. Differentiate between Pepsin and Trypsin
10. (a) Draw a diagram to show open stomatal pore and label guard cells and chloroplast
    (b) State two functions of stomata
    (c) How do guard cells regulate the opening and closing of stomatal pore?
11. How do xerophytic plants manage to performphotosynthesis?
12. What is the significance of emulsification of fats?
13. Why and how does water enter continuously into the root xylem?
14. Why does absorption of digested food occur mainly in the small intestine?

SST

Social Science Project – Consumer Rights (Economics)

Keeping the above mentioned Chapter of Economics in mind; prepare a project on **Consumer Rights** as per the following guidelines:

1. **Highlight the following:**

- Definition of 'Consumer'.

- What is 'Consumer Right'?

- What are the various consumer rights? (Diagrammatic Presentation)

- Need of Consumer Movement

- Consumer Movement in India

- Consumer Act in India

- Rights to Consumer (Detailed Explanation)

- Three Tier Quasi Judicial Machinery

- Standardisation and its Importance

- Consumers' Day and Critical comment on Consumer Redressal Process

Prepare the Project File of around 25-30 pages

Important Instruction:

- Use data, pictures, pie charts, bar diagrams, advertisement, newspaper cuttings, tables, etc. to make the file presentable.

- All the pages having relevant content must be only hand written.

- Project must start with the following pages: Cover Page, Index Page, Acknowledgement, Objectives of the project.

2. Revise the syllabus done before summer break.

3. Complete the Assignment of the chapters covered till summer break.

Hindi

कार्यपत्रिका -1

स्पर्श (गद्य खंड)

प्रश्न 1. निम्नलिखित प्रश्नों के उत्तर दीजिए :-

(क) बड़े भाई साहब की डांट-फटकार अगर न मिलती तो क्या छोटा भाई कक्षा में अव्वल आता? तर्कसहित उत्तर दीजिए |

(ख) छोटे भाई ने बड़े भाई के नरम व्यवहार का क्या फायदा उठाया ?

(ग) 'जीवन की समझ व्यावहारिक अनुभव से आती है - बड़े भाई साहब के इस विचार से आप कहाँ तक सहमत हैं ?' उदाहरण सहित बताइए |

(घ) दूसरी बारफ़ैल होने पर छोटे भाई के मन मे किस कुटिल भावना ने जन्म लिया ?

(च)२६ जनवरी १९३१ के दिन भोर के समय हुई घटनाओं का वर्णन कीजिए

(छ)जानकी देवी और मदालसा ने बालिका विद्यालय जाकर क्या किया ?

(ज)लेखक का 'क़ानून भंग' से क्या अभिप्राय है ?

(झ)वृजलालगोयनका कौन थे ? उनके साथ क्या घटना घटी ?

'डायरी का एक पन्ना' पाठ से आपको क्या शिक्षा मिलती है ?

स्पर्श (काव्य - खंड)

(क) कबीर की साखियों से आप क्या समझते है ?

(ख) कबीर ने निंदक को अपना सबसे बड़ा शुभचिंतक क्यों कहा है ?

(ग) "पौथी पढ़ी - पढ़ी" में कौन सा अलंकार है ?

(घ) कबीर की सखियों से समाज को क्या सीख मिलती है ?

संचयन

प्रश्न : निम्नलिखित प्रश्नों के उत्तर दीजिए -

(क)   अनपढ़ होते हुए भी हरिहर काका दुनिया की बेहतर समझ कैसे रखते थे ? कहानी के आधार पर स्पष्ट कीजिए |

(ख)   यह कहानी अंध-भक्ति और ठाकुरबारी के चरित्र को उजागर करती है | स्पष्ट कीजिए |

(ग)   उम्र का फासला भी आत्मीय संबंधों के बीच बाधा नहीं बनता - कथा वाचक और हरिहर काका के सन्दर्भ में स्पष्ट कीजिए

(घ)   हरिहर काका के परिवार वालों का बदलता व्यवहार आपको क्या सोचने के लिए विवश करता है ? कहानी के आधार पर लिखिए

(ङ)   वर्तमान समाज में हरिहर जैसे वृद्ध व्यक्तियों के लिए युवा- पीढ़ी का क्या कर्तव्य है?

कार्यपत्रिका -2

निम्नलिखित पंक्तियों में प्रयुक्त अलंकारों के नाम बताइए

1. कोटि -कोटि कंठो में कुंजित

2 काली -पुतली से ये जलधर

3 कर का मनका डारि दे ,मन का मनका फेर

4 कोमल कलाप कोकिल कमनीय कूकती थी

5 वह शर इधर गांडीव गुड़ से भिन्न जैसे ही हुआ ,

धड़ से जयद्रथ का इधर सिर छिन्न वैसे ही हुआ

6 पीपर पात सरिस मन डोला

7 चरण कमल बंदो हारे राई

8 काली घटा का घमंड घटा

9 हाय फूल सी कोमल बच्ची

10   मेघमय आसमान से उतर रही .

     वह संध्या सुन्दरी ,परी सी

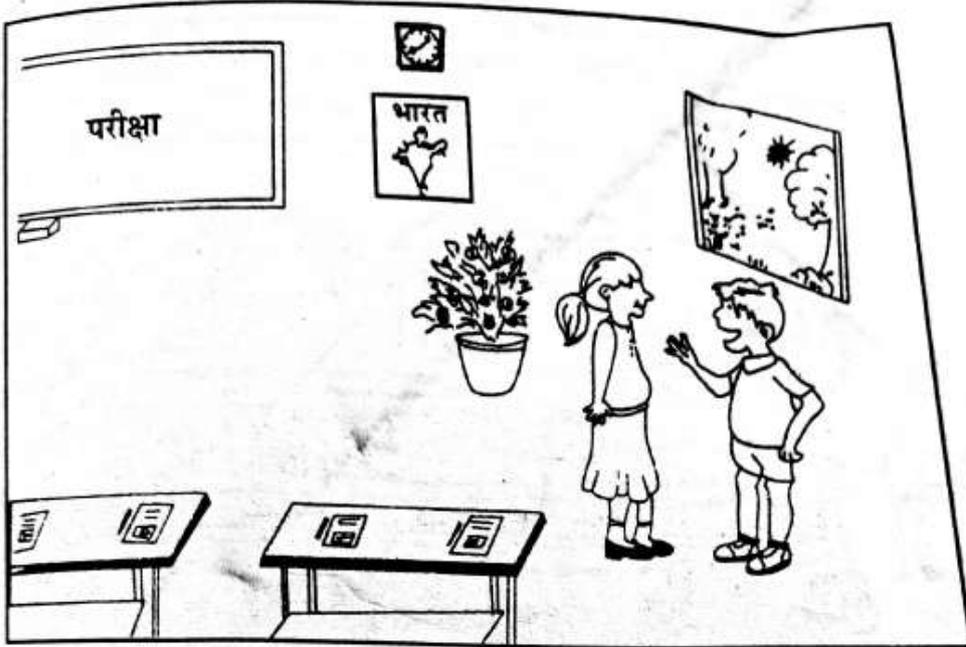प्रश्न -रेखंकित पदबंध का नाम लिखिए

1.<u>सामने की दूकान पर चाय पीने वाला</u> लड़का अपने घर चला गया ।

2 मुझे <u>सुनाई पड रहा है</u> ।

3 <u>मित्र -मंडली के साथ</u> राम घर पर बैठा है ।

4 <u>बाहर से आए मनुष्यों में कुछ</u> शरारती तत्व भी है|

5 <u>दूसरों के साथ मीठा बोलने वाले</u> सुखी रहते है ।

6 दादाजी बाग़ में <u>टहलने जाया करते है</u> ।

7<u>नीली कमीज वाला बालक</u> खेल रहा है ।

8 कुछ लोग <u>धीरे धीरे बाते करते हुए</u> चले जा रहे है ।

9 नदी <u>कलकल करती हुई</u> बह रही है ।

10 <u>सामने के मकान में रहने वाला</u> लड़का आज चला गया ।

11<u>मै ढाई हजार साल पुराने</u> कुशीनगर को खोज रहा हू ।

12 <u>बडी देर से अपने को सम्भालकर</u> बुद्ध बोले ।

गतिविधि

<u>'कोविड -19 और बदलती संस्कृति'</u> विषय पर दो से तीन मिनट की वीडियो तैयार करे ।

Sanskrit

1. दैनिक प्रयोग में आने वाले छोटे-छोटे वाक्यों का प्रयोग करते हुए 4 संवाद लिखें |

2. निम्नलिखित में से किसी एक विषय पर **एक पी.पी.टी** बनायें-
   (क)पाठ ५ (जननी तुल्या वत्सला)
   (ख)पाठ ६ (सुभाषितानि)
   (ग)प्रत्यय
   (घ)वाच्य

3.' व्यायामस्य लाभाः' इस विषय पर ५ वाक्य लिखिये|

4.. Online कक्षा में पढाए गए सभी पठों का लिखकर अभ्यास करें व कण्ठस्थ करें |

5. चित्र देखकर् ५ वाक्य बनायें|

छात्र, परीक्षादिवसः, पुष्पपात्रम्, छात्रा, मञ्चौ, गवाक्षे, श्यामपटे, घटिकायन्त्रम्, तिष्ठतः कुरुतः, भित्तौ, सपाद-अष्टवादनम्, प्रारम्भः, परीक्षायाः, दृश्यते ।

French

1. Decribe the education system of France
2. Describe your future plans in french using future antérieur

Artificial Intelligence

1. Install Anaconda from
   https://www.anaconda.com/distribution/ .
2. For the rest of the installation follow the steps given on
   Python Manual Chapter 3(Pages 50-56).
3. Practice Chapter 2 topics of the same book in Jupyter
   Notebook.
4. Do Assignments of Ch-1,2,3 (AI Book) and Ass 1, 2 of L-3
   ICT Skills (Employability Skills)(if not done)

Information Technology

In Open Office Writer, prepare the following and either whats
app me your work or mail me on
shuchit82malhotra@gmail.com as this will be counted in your
final practical assessment. Also save the files as later on you
have to print the work and make a practical file.

1. Schools to invite parents for annual function using Mail
   Merge (for atleast 10 parents)
2. A Tech Magazine who wants to send flyers to its clients
   (Search some flyer designs on Google)
3. Do Assignments 1,2,3 of Ch-1 Digital Documentation
   Advanced and Ass 1, 2 of L-3 ICT Skills (Employability
   Skills)(if not done)