



St. Mary's School, Dwarka

Holiday Homework 2026

Class: IX

Worksheet 4

Subject: English

General Instructions:

- 1) The work should be done neatly and systematically.
- 2) The questions given are to be done in your English notebook.
- 3) Attempt all questions.

No. of Questions: 9

M.M.: 25

Q1. Read the given passage and answer the questions that follow:

(5)

Artificial Intelligence, commonly known as AI, has become one of the most influential technologies of the modern era. From virtual assistants and recommendation systems to self-driving vehicles and medical research, AI is transforming the way people live and work. While many celebrate its ability to improve efficiency and solve complex problems, others express concern about its long-term impact on employment, privacy, and human decision-making. Experts believe that AI itself is neither entirely beneficial nor harmful; rather, its consequences depend upon how responsibly society chooses to use it. One major advantage of AI is its ability to analyse enormous amounts of data within seconds. In healthcare, intelligent systems help doctors detect diseases earlier and more accurately. In education, personalised learning platforms assist students according to their individual strengths and weaknesses. Businesses also rely on AI to predict trends, improve customer service, and reduce repetitive work. Such developments have increased productivity in many sectors and opened opportunities for innovation. However, critics argue that excessive dependence on AI may create serious social and ethical challenges. Automated systems are replacing certain jobs previously performed by humans, causing anxiety among workers. Furthermore, concerns about data collection and surveillance continue to grow because digital platforms often gather personal information without complete transparency. Some scientists also warn that people may become overly reliant on machines, weakening critical thinking and interpersonal communication skills.

Despite these concerns, many researchers believe that AI can contribute positively to society if proper regulations and ethical guidelines are established. Governments, educators, and technology companies must work together to ensure that innovation remains beneficial and fair. Ultimately, the future of AI depends not only upon technological advancement but also upon human wisdom and responsibility.

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i. What can be inferred about the author's attitude towards Artificial Intelligence?

The author _____

- a. believes AI should completely replace human intelligence
- b. considers AI dangerous and harmful in every situation
- c. believes AI can be useful if used responsibly
- d. thinks technological progress should stop immediately

ii. Which statement best reflects the central idea of the passage?

- a. AI only benefits large businesses and industries.
- b. Artificial Intelligence offers advantages and challenges, depending on how humans use it.
- c. Technology has already made human workers unnecessary.
- d. AI development should be banned worldwide.

iii. Which word from the passage is closest in meaning to 'dependence'?

- a. transparency
- b. innovation
- c. reliance
- d. advancement

iv. Why are some people worried about the increasing use of AI?

v. How can society ensure that AI remains beneficial for humanity?

Q2. As a responsible citizen, write a letter to the Editor of a local daily in about 100-120 words about the importance of road safety awareness among teenagers. Discuss the reasons behind the increasing number of road accidents involving young people and suggest measures that schools, parents, and authorities can take to promote responsible behaviour on roads. (3)

Q3. Complete the given sentences using suitable words: (2)

- i. Either the manager or the employees _____ responsible for the delay in the project.
(was/were/is/has been)
- ii. Each of the dancers in the competition _____ performed exceptionally well.
(have/has/were/are)
- iii. Not only the students but also the coach _____ confident before the final match.
(were/are/was/have)
- iv. More than one player in the team _____ injured during practice.
(were/have/has/was)

Q4. Read the passage given below. There are four errors in it. Identify the errors and write the corrections along with the error words. (2)

One has been done for you as an example.

Technology have changed the way people communicate today. Many students prefers online learning because it provide flexibility and convenience. However, some people believes that excessive screen time affect concentration and social interaction. A balanced approach are necessary for healthy learning habits.

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Error	Correction
Have	has
_____	_____
_____	_____
_____	_____
_____	_____

Q5. Why does the poet use sounds like ‘humming,’ singing,’ and ‘rhythm’ throughout the poem ‘Gifts of Grace: Honouring Our Vocations’? (2)

Q6. Why was the act of touching the granddaughter’s feet emotionally significant? (2)

Q7. How does the poem ‘Bharat Our Land’ present patriotism as admiration rather than superiority? (2)

Q8. How does the poem celebrate the dignity of labour and the importance of every profession in society? (3)

Q9. Create a tri-fold pamphlet showing the important message, emotions, and life lessons from the poem ‘Gifts of Grace- Honouring Our Vocations’ as if you are spreading awareness or inspiration to readers. (4)

Include the following:

Front Cover-Title of the poem, name of the poet, a catchy slogan related to the poem

Inside Panel 1 –Write briefly:

- central idea/theme
- setting or mood
- main message (40–50 words)

Inside Panel 2 – Important Literary Devices

Inside Panel 3 –Write 3 lessons the poem teaches and your personal response in 60–70 words.

Subject: Hindi

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

2 कार्य स्वच्छ शुद्ध एवं स्पष्ट लेख में कीजिए।

No. of Questions: 10

M.M.: 25

प्रश्न 1 निम्नलिखित गद्यांश पर आधारित प्रश्नों के उत्तर निर्देश के अनुसार दीजिए: (1×5=5)

आज के गतिशील युग में 'समसामयिक विषयों' या करंट अफेयर्स का ज्ञान होना अत्यंत आवश्यक है। इसका अर्थ है हमारे आसपास, देश और दुनिया में वर्तमान समय में घटित होने वाली महत्वपूर्ण घटनाएँ। एक विद्यार्थी के लिए केवल किताबी ज्ञान पर्याप्त नहीं है, बल्कि उसे विश्व की राजनीतिक, आर्थिक और सामाजिक हलचलों से भी अवगत रहना चाहिए। करंट अफेयर्स हमें जागरूक नागरिक बनाते हैं और हमारी सोचने-समझने की शक्ति को विस्तार देते हैं। आज के समय में जलवायु परिवर्तन, कृत्रिम बुद्धिमत्ता और वैश्विक शांति जैसे विषय चर्चा के केंद्र में हैं। भारत जैसे बढ़ते हुए देश के लिए अंतरिक्ष विज्ञान और तकनीकी प्रगति की जानकारी होना गर्व की बात है। समाचार पत्र पढ़ना, समाचार सुनना और इंटरनेट का सही उपयोग करना करंट अफेयर्स जानने के सर्वोत्तम साधन हैं। जो छात्र नियमित रूप से इन विषयों पर ध्यान देते हैं, उनकी सामान्य ज्ञान की क्षमता दूसरों से अधिक होती है। प्रतियोगी परीक्षाओं में भी समसामयिक विषयों पर आधारित प्रश्न बड़ी संख्या में पूछे जाते हैं। यह हमें देश की समस्याओं को समझने और उनके समाधान के बारे में सोचने के लिए प्रेरित करता है। इसके माध्यम से हम विभिन्न देशों की संस्कृतियों और उनकी नीतियों के बारे में भी जान पाते हैं। यह न केवल हमारी शब्दावली को बढ़ाता है, बल्कि वाद-विवाद और निबंध लेखन जैसी प्रतियोगिताओं में भी सहायक होता है। सजग रहने से हम अफवाहों और गलत सूचनाओं से बच सकते हैं। आज की भागदौड़ भरी जिंदगी में दुनिया से कदम मिलाकर चलने के लिए करंट अफेयर्स एक सेतु का कार्य करता है। यह हमें सिखाता है कि किस प्रकार अंतरराष्ट्रीय घटनाएँ हमारे दैनिक जीवन को प्रभावित करती हैं। एक शिक्षित युवा वही है जो अपने परिवेश की घटनाओं पर तार्किक दृष्टिकोण रखता हो। संक्षेप में, समसामयिक विषयों का ज्ञान हमारे व्यक्तित्व के सर्वांगीण विकास के लिए अनिवार्य है। आधुनिक तकनीक ने इन जानकारियों को हमारी उंगलियों पर उपलब्ध करा दिया है। हमें प्रतिदिन कम से कम 15-20 मिनट दुनिया की खबरों को जरूर देने चाहिए। यह ज्ञान हमें भविष्य की चुनौतियों के लिए तैयार करता है और आत्मविश्वास प्रदान करता है। अंततः, करंट अफेयर्स से जुड़ना केवल परीक्षा पास करना नहीं, बल्कि विश्व नागरिक बनने की ओर एक कदम है।

(i) अनुच्छेद के अनुसार, 'करंट अफेयर्स' को एक 'सेतु' क्यों कहा गया है?

(क) यह विश्व के साथ कदम से कदम मिलाकर चलने में योगदान नहीं करता है।

(ख) यह दुनिया के साथ कदम से कदम मिलाकर चलने में मदद करता है।

(ग) यह केवल प्रतियोगी परीक्षाओं में अंक दिलाने का कार्य करता है।

(घ) यह इंटरनेट और समाचार पत्रों के बीच का माध्यम है।

(ii) एक 'शिक्षित युवा' की सबसे बड़ी पहचान क्या बताई गई है?

- (क) वह जिसे विश्व की सभी राजनीतिक घटनाओं का रट्टा हो।
- (ख) वह जो नियमित रूप से 15-20 मिनट समाचार सुनता हो।
- (ग) वह जो अपने परिवेश की घटनाओं पर तार्किक दृष्टिकोण रखता हो।
- (घ) वह जो केवल पुस्तकीय ज्ञान पर तार्किक दृष्टिकोण रखता हो।

(iii) निम्नलिखित कथन (A) तथा कारण (R) को ध्यानपूर्वक पढ़िए तथा दिए गए विकल्पों में से कोई एक सही विकल्प चुनकर लिखिए।

कथन (A) एक विद्यार्थी के लिए केवल किताबी ज्ञान पर्याप्त नहीं है।

कारण (R): करंट अफेयर्स हमें जागरूक नागरिक बनाते हैं और सोचने-समझने की शक्ति का विस्तार करते हैं।

- 1 कथन (A) तथा कारण (R) दोनों गलत हैं।
- 2 कथन (A) गलत है परन्तु कारण (R) सही है।
- 3 कथन (A) सही है परन्तु कारण (R) गलत व्याख्या करता है।
- 4 कथन (A) और कारण (R) दोनों सही हैं और कथन कारण की सही व्याख्या करता है।

(iv) "अफवाहों और गलत सूचनाओं से बचना" आज के समय में क्यों चुनौतीपूर्ण है और इसमें करंट अफेयर्स कैसे मदद करते हैं?

(v) 'विश्व नागरिक' बनने से लेखक का क्या तात्पर्य है?

निम्नलिखित प्रश्नों के उत्तर निर्देश के अनुसार दीजिए: (1×6 = 6)

प्रश्न 2 (क) "सच्ची मित्रता विपत्ति के समय ही पहचानी जाती है।" वाक्य में रेखांकित शब्द 'मित्रता' संज्ञा के किस भेद से बना है?

(ख) "समुद्रगुप्त भारत का नेपोलियन था।" इस वाक्य में रेखांकित शब्द 'नेपोलियन' किस संज्ञा का उदाहरण है?

प्रश्न 3 निम्नलिखित वाक्यों को शुद्ध करके पुनः लिखिए

- (क) मेरे से मत पूछो।
- (ख) वह लोग कल दिल्ली जाएँगे।

प्रश्न 4 निम्नलिखित समानार्थी शब्दों में से भिन्नार्थक शब्द कौन-सा है? उस शब्द को लिखिए।

(क) चाँद, शशि, मयंक, नरेश

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(ख) पावस , जलद, वारिद, नीरद

प्रश्न 5 निम्नलिखित शब्दों में से मूल शब्द व उपसर्ग को अलग करके लिखिए:

(क) निर्भय (ख) अधिनायक

प्रश्न 6 निम्नलिखित शब्दों में से मूल शब्द व प्रत्यय को अलग करके लिखिए :

(क) घबराहट (ख) सुगमता

प्रश्न 7 निम्नलिखित प्रश्नों के उत्तर दीजिए —

(क) परीक्षा में अनुत्तीर्ण होने के बाद रामू की और उसे समय की कीमत समझ में आ गई।" रिक्त स्थान की पूर्ति उचित मुहावरे से कीजिए।

(ख) ईमान बेचना अर्थ के लिए कौन-सा मुहावरा प्रयोग होगा ?

प्रश्न 8 निम्नलिखित प्रश्नों के उत्तर दीजिए —

(2×2= 4)

(क) हीरा और मोती ने सांड जैसे शक्तिशाली दुश्मन को कैसे हराया? इस घटना से हमें 'एकता' के अलावा और क्या सीख मिलती है?

(ख)"जैसे चितवत चंद्र चकोरा" पंक्ति के माध्यम से रैदास मन की किस अवस्था का वर्णन कर रहे हैं?

प्रश्न 9 दिए गए चित्र का वर्णन 100 शब्दों में लिखिए।

(5×1=5)



प्रश्न 10 अपने प्रिय पशु की आकृति बनाते हुए चाबी का छल्ला बनाइए। (5×1=5)

Subject: Mathematics

General Instructions:

- 1) The work should be done neatly and systematically.
- 2) The given questions are to be done in the Math notebook.
- 3) Attempt all questions.

No. of Questions: 10

M.M.: 25

Q1. Find the distance of the point (-1,7) from x-axis. (2)

Q2. Natural numbers are closed under addition. Are they closed under multiplication and division?

Provide a couple of examples to justify your answer. (2)

Q3. What is the perimeter of a triangle with vertices (0,4), (0,0), (3,0). (2)

Q4. Write the equivalent fraction for each of the following:

i) $\frac{5}{7}$ ii) $\frac{12}{19}$ iii) $\frac{13}{17}$ iv) $\frac{4}{12}$ (2)

Q5. If the distance between the points (3,-5) and (x,-5) is 15 units, then what is the value of x? (2)

Q6. Plot the points (-1,-3), (0,0), (1,3) and (3,9) in the cartesian plane on the graph paper. Do all the points lie on a line. Can you guess the equation of the line? (2)

Q7. If A(1,4), B(2,-3) and C(a,b) lie on the same straight line and B is equidistant from A and C. Find the coordinates of C. (2)

Q8. Draw the graph of the following equations by selecting suitable points on these lines.
 $Y = 2X + 3$, $2Y = 3X + 5$, $Y = 2X$ (3)

Q9. Simplify the following:

i) $\frac{2}{5} + \frac{3}{4} - \frac{1}{10}$ ii) $\frac{2}{3} \left(\frac{11}{8} + \frac{3}{4} \right)$ (3)

Q10. TIMELINE ACTIVITY (5)

Objective: Understand the history of mathematics.

Activity: Students create a timeline including:

- Ishango Bone
- Egyptian mathematics
- Roman numerals
- Zero in India
- Modern calculators

To show how mathematics evolved over time.

Subject: Science

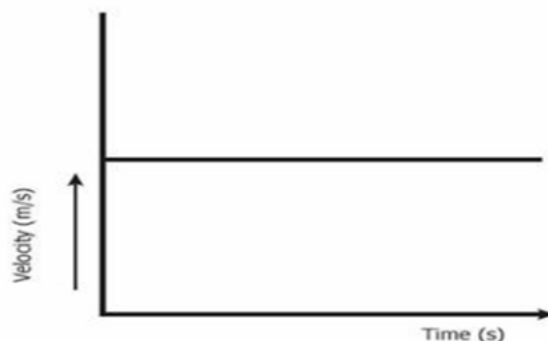
General Instructions:

- * Neatly write the answers in your fair notebook.
- * Attempt the questions keeping in mind the weightage of each question.

No. of questions: 10

M.M. 25

Q1. The velocity-time graph of an object moving in a fixed direction is shown in the figure given below. Which among the following conclusions describes the object? (1)



- a. Object moving with varying speeds.
- b. Object is at rest.
- c. Object moves with uniform retardation.
- d. Object moves with zero acceleration.

Q2. A solution is prepared by dissolving 24 g of salt in 176 g of water. Later, 50 g of water evaporates from the solution, and then 20 g of pure water is added back. What is the final mass by mass percentage of salt in the solution? (1)

- A. 12%
- B. 15%
- C. 16%
- D. 18%

Q3. **Assertion (A):** A saturated solution at 40°C may become unsaturated at 60°C. (1)

Reason (R): Solubility of most solid solutes decreases with temperature.

- A. Both A and R are true, and R is the correct explanation of A
- B. Both A and R are true, but R is not the correct explanation of A
- C. A is true, but R is false
- D. A is false, but R is true

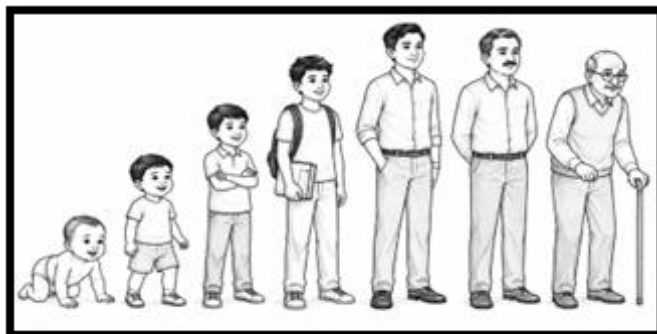
Q4. A gardener kept one plant in sunlight and another in a dark room. After a few days, one plant became pale. (1)

- a. Which cell organelle helps plants prepare food?
- b. Why did the plant kept in darkness become pale?

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Q5. While playing, a child slides a toy block. The block begins moving with a speed of 0.5 m/s, but due to friction, its speed decreases uniformly by 0.05 m/s every second until it stops. Calculate the time taken by the toy block to come to rest. (2)

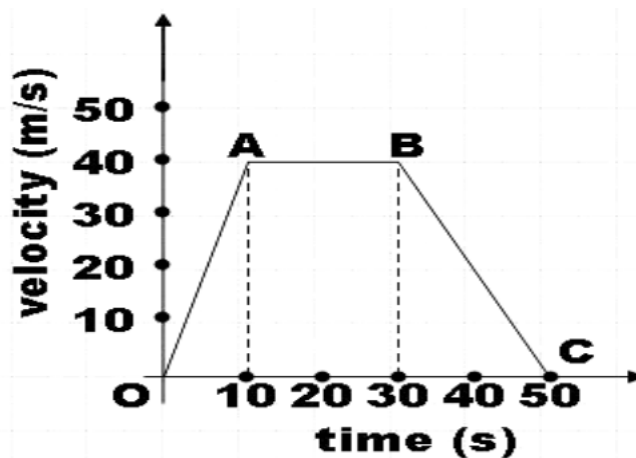
Q6.



- a. Observe the picture carefully. Which process of living organisms is being shown. (1)
b. How does the number of cells change during this process? Explain your answer briefly. (2)

Q7. A student is given a mixture containing kerosene, water, and copper sulphate dissolved in water. He first tries to separate copper sulphate using a separating funnel and then attempts to separate kerosene by crystallization. (3)
Identify the mistakes in the student's method. Suggest the correct order of separation techniques with proper scientific reasoning.

Q8. Study the velocity-time graph of a car given below and calculate (3)



- (a) the acceleration of the car.
(b) the retardation of the car.
(c) the distance travelled by the car between 10 to 30 seconds.

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Q9. Mona is preparing lemonade for a school event. She prepares three different sugar solutions. (4)

Beaker	Sugar Added	Water Added
A	10 g	90 g
B	20 g	80 g
C	30 g	120 g

She observes that the sweetness of each solution is different. Her teacher asks the class to compare the concentrations of the solutions using mass by mass percentage.

1. Calculate the mass-by-mass percentage of sugar in all three beakers.
2. Which beaker contains the most concentrated solution? Give reason.
3. If 20 g of water is added to Beaker B, how will its concentration change? Calculate the new concentration.
4. Mona accidentally adds 10 g extra sugar to Beaker A without adding water. Calculate the new concentration of the solution.

Q10. ACTIVITY –

Objective:

To identify uniform and non-uniform motion by observing the movement of a rolling ball.

Materials Required:

- Small ball/marble
- Measuring tape or metre scale
- Stopwatch/mobile timer
- Smooth floor or cardboard sheet
- Books/wooden block to make a slope

Steps to Follow:

- Place a wooden block or books under one end of a cardboard sheet to make a gentle slope.
- Mark equal distances of 20 cm each on the slope.
- Release the ball from the top of the slope without pushing it.
- Record the time taken by the ball to cross each marked distance.

Repeat on a Flat Surface:

- Now roll the ball gently on a flat surface.
- Repeat the above steps three times to record the time taken to cover equal distances.

Compare the Motion:

- Observe whether the ball covers equal distances in equal intervals of time in both cases.
- Identify the type of motion in each case.

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Observation Table

Surface Used	Distance Covered (cm)	Time Taken (s)	Are Equal Distances Covered in Equal Time?	Type of Motion
Sloping Surface	_____	_____	_____	_____
Flat Surface	_____	_____	_____	_____

Based on the observations recorded during the activity, answer the following questions:

- On which surface did the ball move faster? (1+1+1+2)
- In which case was the motion uniform?
- Compare the speed of the ball on different surfaces.
- Based on the observations recorded during the activity, draw suitable distance–time graphs for the motion of the ball on:
 - the smooth surface
 - the sloping surface

Std. IX Worksheet 4

Subject: Social Science

General Instructions:

The work should be done neatly and systematically.

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

No. of questions: 10

M.M. 25

- Q1. Name the first cereals grown by humans. (1)
- Q2. What role did Sabha and Samiti play in ancient India? (1)
- Q3. Describe the domestication of animals. (2)
- Q4. Explain the meaning of democracy. (2)
- Q5. What are the important features of democracy? (2)
- Q6. Write a note on Mesolithic sites in India. (2)
- Q7. What were the uses of the wheel? (3)
- Q8. What are continental glaciers? Where are continental glaciers generally found? (3)
- Q9. Compare the upper course and middle course of a river on the basis of slope, speed, and landforms formed. (3)

Q10. Project Title (6)

“A Comparative Study of Different Types of Economic Systems” *

Guidelines for Students

The project must be handwritten on A4 sheets or in a project file.

Use neat headings, colored charts, and labelled diagrams.

Include relevant pictures, newspaper cuttings, or illustrations.

The project should contain 10-15pages.

Use simple and clear language.

Mention all sources of information in the bibliography.

Creativity and originality will be appreciated.

Suggested Cover Page

“Different Types of Economic Systems”

Submitted by:

Name: _____

Class & Section: _____

Roll Number: _____

Submitted to:

Teacher’s Name: _____

School Name: _____

Session: _____

Std. IX Worksheet 4

Index

1. Acknowledgement
2. Introduction
3. Meaning of Economic System
4. Types of Economic Systems
5. Capitalist Economy
6. Socialist Economy
7. Mixed Economy
8. Role of Government in
Different Economies
9. India's Economic System
10. Case Study / Survey
11. Conclusion

RUBRICS

- * Content Accuracy= 2
- * Presentation & Creativity= 2
- Research & Analysis= 2

Subject: Artificial Intelligence

PYTHON PRACTICAL

- Please note:** a) First, execute all practical questions in Python IDLE and verify the output.
b) Then, prepare the practical file in MS Word by pasting the program code along with screenshots of the corresponding outputs.
c) Save the completed practical file as a PDF and upload it to the assignment posted on Microsoft Teams.

Using IDLE Python 3.7, write the programs for the following.

1. To accept three numbers and print their sum.
2. To find the area of rectangle. [a=l*b]
3. To convert the Celsius temperature to Fahrenheit. [f=(9/5*c)+32]
4. To calculate the volume of cuboid. [v=l*b*h]
5. To calculate the total surface area of cylinder. [sa=2*3.14*r*(r+h)]
6. To calculate the simple interest. [si=(P*R*T)/100]
7. To calculate the area of triangle. [a=0.5*b*h]
8. To calculate the perimeter of square. [p=4*s]
9. To calculate the area of circle. [a=3.14*r*r]
10. To print the circumference of a circle. [c=2*3.14*r]
11. To accept three numbers and find the average of these three numbers. [Avg= sum/3]
12. To convert the Celsius temperature into Kelvin temperature. [K=C+273]
13. To create a calculator to perform the following operations. a) * b)** c) / d) %
14. To swap two numbers.
15. To calculate the compound interest. [C=p *(1+R/100)**t]

Std. IX Worksheet 4

Q9. Make a table enlisting the advantages and disadvantages of Frying, Boiling and Microwave on a A4 size sheet. (5)

Q10. Determine which foods belong to which food groups. Create a chart on an A3 sheet by pasting food item pictures in the suitable food groups. (5)

Cereals	Legumes & pulses	Nuts & Oilseeds	Fats & Oils	Fruits & Vegetables	Milk products	Eggs, poultry, fish, and meat	Spices

Subject: Indian Music

General Instructions:

- The work should be done neatly and systematically.
- The given questions are to be done in your fair notebook.

No. of questions: 7

M.M. 10

1. Define Laya. (1)
2. What is Tala? (1)
3. Define Matra. (1)
4. What is meant by Sam in music? (1)
5. Name the three types of Laya. (2)
6. Differentiate between Tali and Khali. (2)
7. Match the following: (2)

Column A	Column B
Avartan	Division of tala
Vibhag	One complete cycle of tala
Khali	Empty beat
Matra	Smallest unit of tala

Std. IX Worksheet 4

Subject: Painting

Draw a Warli painting (village scene)

Guidelines:

- Use simple geometric shapes such as circles, triangles, and lines to create figures and scenes. The composition may include:
 - Dancing figures
 - Farming scenes
 - Trees, animals, huts, and village life
 - Festivals and celebrations
- Traditional Warli colours should be followed:
- Brown/red background with white artwork

Maintain:

- Neatness and symmetry
- Balanced composition
- Fine line work and detailing
- Avoid excessive colouring or modern cartoon-style figures.

Students may use:

- Poster colours
- Sketch pens
- White paint/white gel pen on coloured sheet
- Add decorative borders and traditional patterns creatively.

Important Features of Warli Art:

- Stick-like human figures
- Circular and triangular body forms
- Repetitive patterns