



APS CLEMENT TOWN, DEHRADUN
WINTER VACATION HOLIDAY HOMEWORK (2024-25)
CLASS- IX

1	ENGLISH	<p>Grammar- Do Integrated Grammar Exercise on pages 340 (Q 1 to 10) Pg 346 (Q1, Q2, Q3) Pg 361 (Q1,2, 3,4 and5) Pg 384 (Q3) of the grammar book.</p> <p>Writing Skill-</p> <ul style="list-style-type: none">● Imagine you are the protagonist from the chapter "A House is Not a Home". You have recently shifted in your newly built house. Write a paragraph in about 100-120 words sharing advice you would give to teenagers going through a difficult time.● You've just finished reading the chapter "Reach for the Top". Based on the chapter prepare a dialogue between Maria Sharapova and Santosh Yadav, mentioning what motivated them to achieve success.● Revise and learn lessons, poems and Grammar topics taught in the class so far. <p style="text-align: center;">Note - <u>Do Holiday Homework in the English Notebook</u></p>
2	HINDI	<p>लिखित</p> <p>प्रश्न-1) आपकी कक्षा में एक नए अध्यापक पढ़ाने आए हैं जो कि बहुत अच्छा पढ़ाते हैं। उनके विषय में परिचयात्मक सूचना देते हुए अपने मित्र को लगभग 80-100 शब्दों में एक पत्र लिखिए।</p> <p>प्रश्न-2) 'मनोरंजन का बदलता स्वरूप' विषय पर एक अनुच्छेद लिखिए।</p> <p>प्रश्न-3) अपने-अपने जीवन लक्ष्य के बारे में दो मित्रों की बातचीत को संवाद के रूप में लिखिए।</p> <p>प्रश्न-4) व्याकरण परिचय - पुनरावृत्ति कार्य पत्र- 9 (प्रश्न 2,3,4) कार्य पत्र - 14(प्रश्न - 1,2,) हिन्दी की कॉपी में लिखिए।</p> <p>प्रश्न 5) आपको अपनी हिंदी की पाठ्य पुस्तक का कौन-सा पाठ सबसे अच्छा लगा और क्यों? विस्तार से लिखिए।</p> <ul style="list-style-type: none">● नोट- सभी प्रश्न अपनी हिंदी की कॉपी में कीजिए।

3	MATHEMATICS	<p>Q1. Factorise: a) $(2x + 3y)^3 - (2x-3y)^3$ b) $x^4 - 3x^2 + 2$</p> <p>Q2. Two sides of a triangular field are 85m and 154m in length and its perimeter is 324m. Find the area of the field and the length of the perpendicular from the opposite vertex on the side measuring 154m</p> <p>Q3 Draw the graph of the equation $3x+2y=12$. At what point does the graph cut the x-axis and the y-axis?</p> <p>Q4 In a triangle ABC, the sides AB and AC are produced to P and Q. The bisectors of $\angle PBC$ and $\angle QCB$ intersect at point O. Prove that $\angle BOC = 90^\circ - \frac{1}{2} \angle A$.</p> <p>Q5. The radius and height of a right circular cone are in the ratio of 5:12 and its volume is 2512 cm^3. Find the curved surface area and the total surface area of the cone.</p> <p>Q6. Find the value of a and b for which for which $(x-1)$ and $(x+3)$ are two factors of polynomial $x^3 - ax^2 - 13x + b$</p> <p>Q7. A circular park 20 m is situated in a colony. Three boys Ankur, Syed and David are sitting at equal distance on its boundary each having a toy telephone in his hands to talk to each other, find the length of the string of each phone.</p> <p>Q8. (i) State the Mid point Theorem (ii) Show that the line segment joining the mid points of the opposite sides of a quadrilateral bisect each other.</p> <p>Q9. A solid cylinder has total surface area of 462 sq cm. Its curved surface area is one third of its total surface area. Find the volume of the cylinder.</p> <p>Q10. Factorize: $x(x-y)^3 + 3x^2y(x-y)$</p> <p>Q11. Naresh observed that a juice seller is having a cylindrical vessel of base diameter 25 cm and height 40 cm and it is</p>
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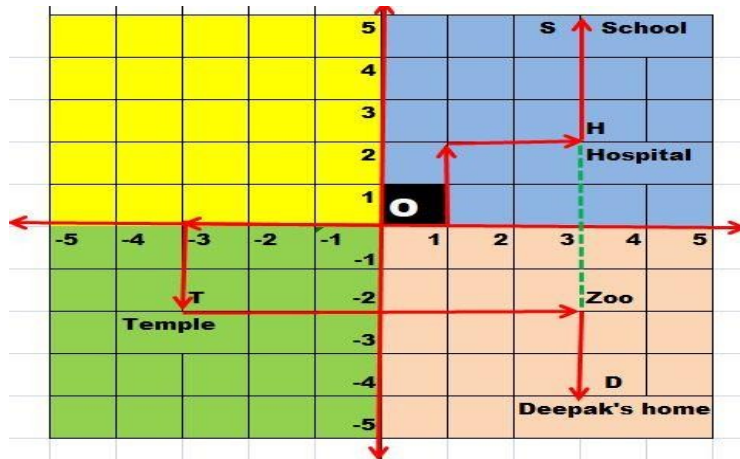
full of juice. He is selling the juice in small cylindrical glasses of diameter 10 cm and height 10cm

a) What is the volume of bigger vessel?

b) Find the surface area of small glass.

c) Find the number of small glasses that can be filled with the juice of the bigger vessel

Q12.



In the above picture, one small square is of size $1 \text{ km} \times 1 \text{ km}$. From the starting point $O(0,0)$, Deepak started to drive towards his home. He first drives 3km in left then he turned to his left and drove 2 km, there he found a temple. He worshipped there and drove 6km in the left direction, there is a zoo and from the zoo, he drives 2km on the right side, then he reached his home.

From O Sanjay drove for his school, he drove 1km to his right then took a left turn and drives 2km then again took a right turn and drives 2 km. He found a hospital in the way. From Hospital he drove 3 km and finally reached his school.

a) What are the coordinates of the Hospital

b) What is the common ordinate of temple and Zoo?

c) Deepak Drove in which quadrants?

Q13. A group of students decided to make a project on Statistics. They are collecting the heights (in cm) of their 51 girls of Class IX-A, B and C of their school. After collecting the data, they arranged the data in the

following frequency distribution table form:



Height(incm)	130-135	135-140	140-145	145-150
No.of girls	10	13	9	12

Based on the information, answer the following questions:

(a) Find the class mark of 140-145

(b) What is the width of the class?

(c) How many girls are of height 140 cm and above?

Q14. Make a mind map of Ch-10 Circles

Q15. Make a formulae chart of Ch-11 Surface Areas And Volumes by using nets.

4 SCIENCE

1. What are isotopes? Find its various applications in our daily life.
2. What is apiculture? How is it important in our lives?
3. Frame 15 questions from chapters Structure of atom and Improvement in natural resources and write their answers also. (including MCQs, one Case Study Question)
4. Solve TEN Numericals from chapter - GRAVITATION in physics notebook.
5. Draw MIND MAPS for Chapters(Gravitation and Work and Energy, The Structure Of an Atom, Atoms and molecules)

NOTE- Learn and write work done in notebook.

5 SOCIAL SCIENCE

1. Make flow charts on the following topics:
 - a) Events of French revolution beginning from meeting of Estate General to Rise of Napoleon.
 - b) Causes of French Revolution.
 - c) Ways in which Hitler dismantled democratic structure.
 - d) Longitudinal and regional division of Himalaya.
 - e) Targeted poverty Alleviation programs launched by government of India.
 - f) Factors influencing the climate of India.
2. source-based questions.

Case Study 1: The Monsoon, unlike the trades, does not have steady winds but is pulsating in nature, affected by different atmospheric conditions encountered by it, on its way over the warm tropical seas. The duration of the monsoon is between 100-120 days from early June to mid-September. Around the time of its arrival, the normal rainfall increases suddenly and continues constantly for several days. This is known as the 'burst' of the monsoon and can be distinguished from

the pre-monsoon showers. The monsoon arrives at the southern tip of the Indian peninsula generally by the first week of June. Subsequently, it proceeds into two-the Arabian Sea branches and the Bay of Bengal branch. The Arabian Sea branch reaches Mumbai about ten days later on approximately the 10th of June. This is a fairly rapid advance. The Bay of Bengal branch also advances rapidly and arrives in Assam in the first week of June. The lofty mountains cause the monsoon winds to deflect towards the west over the Ganga plains. By mid-June, the Arabian Sea branch of the monsoon arrives over Saurashtra-Kuchchh and the central part of the country. The Arabian Sea and the Bay of Bengal branches of the monsoon merge over the northwestern part of the Ganga plains. Delhi generally receives the monsoon showers from the Bay of Bengal branch by the end of June (the tentative date is the 29th of June). By the first week of July, western Uttar Pradesh, Punjab, Haryana, and eastern Rajasthan experience the monsoon. By mid-July, the monsoon reaches Himachal Pradesh and the rest of the country.

1. Mention three important features of monsoon.
2. What so you understand by Burst of monsoon?
3. Name the two branches of monsoon.
4. From which branch of monsoon Delhi generally receive the monsoon showers?
5. Two statements are given in the question below as Assertion (A) and Reason (R). Read the statements and choose the appropriate option.
Assertion (A) Monsoon generally reaches the Southern tip of the Indian Peninsula during the first week of June.
6. Reason (R) Delhi receives rainfall from Bay of Bengal branch.
 - (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

Case Study 2: Poverty is a significant challenge faced by many countries, including India. It refers to the lack of basic necessities and resources required for a decent standard of living. In India, poverty is measured using a poverty line, which is the minimum level of income required to meet the essential needs of an individual. Poverty can be classified into two categories: rural poverty and urban poverty. Rural poverty is primarily caused by factors such as low agricultural productivity, lack of access to credit, unemployment, and landlessness. Urban poverty, on the other hand, is attributed to factors like unemployment, low wages, lack of skill development, and migration from rural areas. Poverty not only affects the material well-being of individuals and families but also leads to social exclusion and limited access to education, healthcare, and other essential services. Addressing poverty requires comprehensive measures such as poverty alleviation programs, inclusive economic growth, skill development, and social welfare initiatives.

1. How is poverty measured in India?
2. What are the two categories of poverty in India?
3. What are some factors contributing to rural poverty in India?

4. What are the factors attributed to urban poverty in India?
5. Besides material well-being, what are some consequences of poverty?

Case Study 3: In the late 19th century, Europe witnessed growing discontent among the working class due to their poor working conditions and low wages. Industrialization led to the rise of factories and a massive increase in the number of industrial workers. However, these workers faced long working hours, low wages, and hazardous working conditions. As a result, various socialist ideas began to emerge, advocating for a more equitable society where the means of production would be owned and controlled by the workers themselves. These ideas gained traction among the working class, leading to the formation of socialist political parties and trade unions across Europe.

1. What was the main cause of discontent among the working class in late 19th-century Europe?
2. Which factor contributed to the rise of socialist ideas in Europe during this period?
3. What did socialist ideas propose regarding the means of production?
4. What was the impact of socialist ideas on the working class?
 - a) They led to increased job opportunities.
 - b) They resulted in higher wages for workers.
 - c) They gave rise to socialist political parties and trade unions.
 - d) They caused a decline in the number of industrial workers.

NOTE: TO BE DONE IN FAIR NOTE BOOK

6 SKILLSUBJECT
INTRODUCTION
TO FINANCIAL
MARKETS

Q1. Explain Direct tax and Indirect tax.
Q2. Difference between financial planning and planning?
Q3. Activity
Imagine you are doing professional animation course for two months staying in a hostel, your father gives you Rs. 10000/- a month for all your expenses, you also get a pocket money of Rs.500 per month.

Your expenses are as follows:

Your budget for the month

Money coming in:

Money given by father: Rs. 10000

Pocket Money: Rs.500

Total Money (A) : Rs. 10500

Money going out:

Hostel fees	Rs3200
Breakfast, Lunch & Dinner	Rs2500
Transport to College Bus fees	Rs. 750
Total Fixed Expense	Rs6450

	<p>Variable Expenses:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">Laundry</td> <td style="text-align: right;">Rs.800</td> </tr> <tr> <td>Visiting places</td> <td style="text-align: right;">Rs.1500</td> </tr> <tr> <td>Amusement park / Movies</td> <td style="text-align: right;">:Rs.500</td> </tr> <tr> <td>Shopping</td> <td style="text-align: right;">:Rs.1200</td> </tr> <tr> <td>Total Variable Expenses</td> <td style="text-align: right;">:Rs.4000</td> </tr> </table> <p>Total Expense (B) (Fixed+Variable) = (6450+4000)=10450</p> <p>Any money left over (C) = Rs. 50 (A-B)</p> <p>What would you do if you wanted to purchase a gift to your parents worth Rs.500? Explain by Showing complete budget in your notebook.</p>	Laundry	Rs.800	Visiting places	Rs.1500	Amusement park / Movies	:Rs.500	Shopping	:Rs.1200	Total Variable Expenses	:Rs.4000
Laundry	Rs.800										
Visiting places	Rs.1500										
Amusement park / Movies	:Rs.500										
Shopping	:Rs.1200										
Total Variable Expenses	:Rs.4000										
ARTIFICIAL INTELLIGENCE	<ol style="list-style-type: none"> 1. Write a program to print the thought of the day. 2. To accept the name and address of the user and display it. 3. To accept side of the square and display the area of the square. 4. To accept length and breadth of the rectangle from user and display the perimeter of the rectangle 5. To accept two numbers from user and display their sum. 6. To accept two numbers from user and display the remainder. 7. To accept hours from the user and display equivalent minutes. 8. To create a list containing elements [7,8,9,10,11] and add the element 12 to the list. 9. To create a list containing eight numbers. Replace the third and fifth number with the square of the number to their immediate left. 10. Create a python list with first four odd numbers and display these elements in the descending order. 11. Create a list of vegetables (any seven). Use range functions to print the element of the list. 12. Create a list of names and use the functions to add elements in the list. 13. Create a list of brands of clothes and use the functions to remove the element from the list. 14. Write a program using any loop to print table of 4. 15. Write a program to accept a number from user from 1 to 20 and print whether a number is even or odd. 										
INFORMATION TECHNOLOGY											

7. Create a table in Writer which contains the following fields. Enter the records of an and save the table.

- a. Name
- b. Gender
- c. Date of Birth
- d. Postal Address
- e. E-mail Address

- ◆ Create a table of 5 x 5.
- ◆ Enter the records of your five friends.

- ◆ Add the title at the top: Friends Database. Use the font styles to beautify the title.
- ◆ Insert two columns after the column Date of Birth in the table and add the fields respectively.
- ◆ Insert three rows before last row.
- ◆ Split the table from 4th row.
- ◆ Save the table.

8. Click on the cells B20, F9, E1, A24, G13 one after the other and observe the display of cell box.

9. Write the cell addresses of the following:
- a. First row and first column
 - b. First row and 100th column
 - c. First column and 20th row

10. Write the range for the following:
- a. All cells of row 6 from column C to H.
 - b. All cells of column D from rows 3 to 15.
 - c. All cells from column F row 4 to column L row 9.

11. Let us calculate the Total points and Grade secured by every House in various competitio

	A	B	C	D	E	F	
1	HOUSE ACTIVITY RESULT						
2	Houses	Comp. Quiz	Declamation	Recitation Contest	Rangoli	Caption Contest	To
3	Points	100	100	100	100	100	5
4	Vivekanand	80	90	85	72	74	
5	Shankra Charya	92	75	95	85	86	
6	Meerabal	75	85	82	85	79	
7	RaviDas	89	92	79	75	87	

- ◆ Houses getting more than or equal to 450 points, should be awarded **A** grade, while t 450 and greater than equal to 350 should be awarded **B+** grade. The houses getting po 350 should get **C** grade and less than this should get **D** grade.
- ◆ Find the maximum points obtained by a house.
- ◆ Find the minimum points obtained by a house.
- ◆ Find the total points of Shankaracharya House for the activities: Comp. Quiz, Recitatio Contest.
- ◆ Find the average points obtained by Meerabai House.
- ◆ Save the Worksheet.

2. Let us calculate the HRA, Gross Salary, ESI and Net Salary of employees by using the for learnt till now.

- ◆ Create a table as shown.
- ◆ Calculate the **HRA** of every employee by using the formula =**Basic Salary*10/100**. To c C2 and calculate the **HRA** by applying the formula =**B2*10/100** and press the **Enter** k

- ✦ Similarly, calculate the **HRA** of every employee by copying the same formula in rest. Handle to copy the formula to a series of cells.
- ✦ Apply the formula $=B2+C2$ (Basic Salary + HRA) in the cell D2 and calculate the **Gross Salary**.
- ✦ Similarly, calculate the **Gross Salary** of each one by dragging the Fill Handle.
- ✦ Click on the cell E2 and apply the formula $=B2*2/100$ to find out the **ESI**. Apply the same the **ESI** of every employee by copying it in rest of the cells.
- ✦ Now, click on the cell F2 to calculate the **Net Salary** by using the formula, $=D2-E2$ (i.e.,).
- ✦ Similarly, apply the formula to calculate **Net Salary** of the rest of the employees.
- ✦ Save the worksheet.

	A	B	C	D	E	F
1	Name	Basic Salary	HRA	Gross Salary	ESI	Net Salary
2	Ashish	5000	500	5500	100	5400
3	Swaraj	6000	600	6600	120	6480
4	Dinesh	4500	450	4950	90	4860
5	Rafiq	4800	480	5280	96	5184
6						
7						

13. Design the worksheet as shown and answer the following questions:

- Calculate the **DA** of all the employees as 10% of their salary.
- Calculate the **TA** of all the employees as 15% of their salary.
- Calculate the **HRA** of all the employees as 25% of their salary.
- Calculate the **Total Salary** by using the formula $\text{Salary} + \text{DA} + \text{TA} + \text{HRA}$.
- Find the maximum, minimum, and average salaries being dispensed by this company.

	A	B	C	D	E	F	G
1	Emp ID	Name	Salary	DA	TA	HRA	Total Sa
2	10488149	Ayush	11500				
3	10488167	Simram	9600				
4	10488151	Geetli	10700				
5	10488142	Mitali	12750				
6	10488175	Aarush	11050				

14. Create the following Calc sheet to calculate the actual sales for different quarters for the

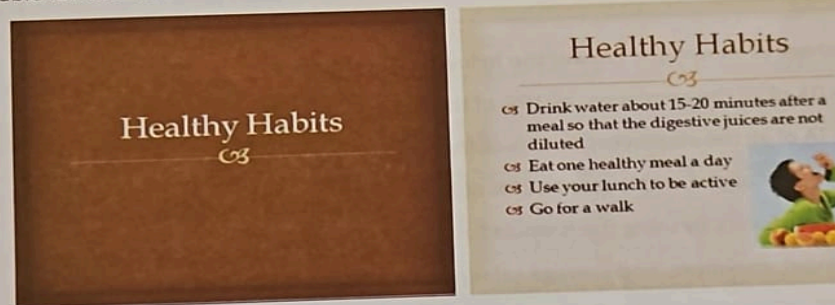
REGION WISE SALES REPORT OF ABC COMPANY						
Region	Quarter 1 (Rs.)	Quarter 2 (Rs.)	Quarter 3 (Rs.)	Quarter 4 (Rs.)	Actual Sales	Proj
North	50000.00	4500.00	31000.00	4500.00	90000.00	90
East	4500.00	5000.00	5343.00	3067.00		40
West	3067.00	1200.00	23870.00	1200.00		34
South	50000.00	5400.00	3067.00	5400.00		70

Do the following on the data:

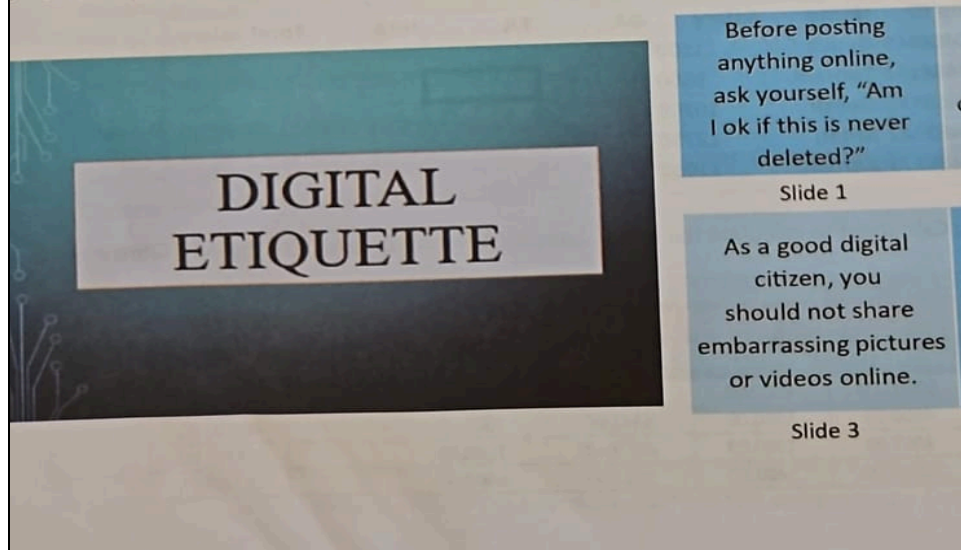
- ✦ Calculate the sum of all quarters in Actual Sales.
- ✦ Validate cells B3 to G6 so that they can contain only numbers.
- ✦ Calculate the total sales of each quarter, total actual sales, and total projected sales in row.
- ✦ Find out which quarter has given the highest and lowest sale.
- ✦ Create a column chart to compare the region-wise sales of four quarters.
- ✦ Create a line chart to compare the region-wise actual and projected sales.

Create a new presentation as shown in the figure:

- ✦ First open a blank presentation.
- ✦ Type the Title Heading- Healthy Habits.
- ✦ Add a new slide.
- ✦ On the second slide, type the heading - Healthy Habits.
- ✦ Type the text as shown in the figure
- ✦ Insert the picture.
- ✦ Choose any theme by clicking on the 'Master Pages' icon and selecting any of the available 'Available for Use' list.



Create a presentation on the topic "Digital Etiquette" by using the etiquette given below



NOTE-

- For better clarification of pictures refer to page number (345-348) of your textbook.
- Individual student will make practical file
- Output will be in printout format.
- Spiral binding of the practical file (hardcopy) should be submitted on 13 January

7	SANSKRIT	<ol style="list-style-type: none">1. संस्कृत भाषा में एक से लेकर 100 तक गिनती लिखिए और याद भी कीजिए।2. पुस्तक शोमुषी से पाठ भारतीयसंतगीति: तथा स्वर्ण काक: के प्रश्न उत्तर याद कीजिए।3. निम्नलिखित वाक्यों का संस्कृत में अनुवाद कीजिए-<ol style="list-style-type: none">1. श्याम कल स्कूल जाएगा ।2. रमा स्वादिष्ट खाना बनाती है ।3. पेड़ पर आम लगे हैं ।4. मोहन प्रतिदिन उद्यान में घूमता है।5. निरंजन सुंदर नृत्य प्रस्तुत करेगा।6. शिक्षिका ने अच्छा आचरण करने की शिक्षा दी थी ।7. हमें अपने पर्यावरण की रक्षा करनी चाहिए ।8. सभी को दूसरों के भले के लिए इच्छा रखनी चाहिए।9. संसार में सभी के प्रति संवेदना का होना आवश्यक है।10. आलस्य हमारा सबसे बड़ा शत्रु है।
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NOTE-

Revision test will be conducted from the holiday homework given, from 15 Jan 2025