

DAV PUBLIC SCHOOL, IFFCO, PARADEEP
SUMMER BREAK HOLIDAY HOMEWORK, 2026-27
STD – X

SL No	SUBJECT	H.W DETAILS
1	English	<ol style="list-style-type: none"> 1. Read any one English novel of your choice and write a book review in about 150 words including summary, main characters, message etc. 2. Watch any English news channel like BBC News or NDTV and note 5 new words daily along with their meanings. 3. Create a colorful mind map of the lesson 'Two Gentlemen in Verona' by adding characters, plot, theme, moral etc. 4. Frame 3 short questions and 2 long questions from the lesson 'Two Gentlemen in Verona' and write them in HW copy along with answers. 5. Prepare a Debate Web Chart by drawing a web diagram, keeping the Topic in centre and adding "For" and "Against" arguments branching out. For example - "Social Media: Good or Bad." 6. Learn 10 idioms and write them in HW copy along with their meanings and usage in sentences.
2	Hindi	<ol style="list-style-type: none"> 1. पदबंध के पाँच भेदों (संज्ञा, सर्वनाम, क्रिया, विशेषण, क्रिया विशेषण) की परिभाषा लिखकर उनसे सम्बंधित एक-एक उदाहरण भी लिखिए। 2. रचना के आधार पर वाक्य के तीनों भेदों (सरल, संयुक्त, मिश्र) की परिभाषा लिखकर और उससे संबंधित एक-एक उदाहरण भी लिखकर स्पष्ट कीजिए। 3. नीचे दिए वाक्यों का वाक्य रूपान्तरण कीजिए- क-मीना पढाई करके सो गई। (संयुक्त वाक्य में बदलिए) ख- नेता जी मंच पर आए और भाषण देने लगे। (मिश्र वाक्य में बदलिए) ग- बड़े भाई साहब मेहनत करते थे फिर भी फेल होते थे। (सरल वाक्य में बदलिए) 4. कबीर की 8 साखियों की व्याख्या लिखिए। (कक्षा दसवीं के पाठ्यक्रम के आधार पर) 5. 'पर्यावरण प्रदूषण एवं उसकी रोकथाम के लिए बढ़ाए गए कदम' विषय पर 120 शब्दों में अनुच्छेद लिखिए।
3	Odia	<ol style="list-style-type: none"> 01. ରଚନା- କୃତ୍ରିମ ବୃଦ୍ଧିମତା ଓ ଭବିଷ୍ୟତ , ସ୍ୱାସ୍ଥ୍ୟ ସଚେତନତାର ଆବଶ୍ୟକତା 02. ଏକ ଶବ୍ଦ ଯୁକ୍ତ ପ୍ରଶ୍ନ /ଉତ୍ତର – per ch/20 questions 03. ରୁଦ୍ଧି ରୁ ବାକ୍ୟ ଗଠନ – 50 ଟି 04. ଭ୍ରମ ସଂଶୋଧନ – 50 ଟି 05. project-କାଠି ଗଠନକୁ ଏକାଙ୍କିକା ରୂପେ ଚିତ୍ର ସହ ଲେଖ ।
4	Sanskrit	<ol style="list-style-type: none"> 1. प्रत्येकं पञ्च उदाहरणानि लिखत। प्रत्ययः - टाप्, डीप् 2. प्रत्येकं पञ्च उदाहरणानि लिखत। सन्धिः - मोऽनस्वार, वर्गस्य तृतीय वणदिशः, वर्गस्य पञ्चम वणदिशः 3. वाङ् मयं तपः इति पाठस्य कण्ठस्थीकरणम् प्रश्नोत्तराणि च।

MATHEMATICS

- **Update CW and HW copies.**
- **Practice Mathematics Exemplar problem ch-1, ch-2 and ch-3**
- **Solve the following problems in Mathematics HW copy. (Q1 to 20)**

1. Prove that $\sqrt{5}$ is an irrational number.
2. Prove that $7 + \frac{4}{5}\sqrt{2}$ is an irrational number, where $\sqrt{2}$ is irrational.
3. Prove that $\sqrt{3} + \sqrt{5}$ is irrational, given that $\sqrt{15}$ is an irrational number.
4. Find the largest positive integer that will divide 430 and 398 leaving remainder 5 and 8 respectively.
5. Find the smallest number that, when divided by 40, 64 and 104 leaves remainder of 8 in each case.
6. Two tankers contain 144 litres and 90 litres of petrol respectively. Find the maximum capacity of a container which can measure the petrol of either tanker in exact number of times.
7. The traffic lights at three different road crossings change after every 48 sec, 72 sec and 108 sec respectively. If they all change simultaneously at 8:20:00 hours, at what time will they again change simultaneously?
8. Find the zeros of the quadratic polynomial $2x^2 - 7x - 9$ and verify the relationship between the zeros and the coefficients.
9. Find a quadratic polynomial whose zeroes are given by $(\sqrt{2}+1)$ and $(\sqrt{2}-1)$.
10. If α and β are the zeros of the polynomial $3x^2 - 7x + 5$, find the value of :
 - (i) $\alpha^2 \beta + \beta^2 \alpha$
 - (ii) $\alpha^3 + \beta^3$
 - (iii) $\frac{\alpha}{\beta} + \frac{\beta}{\alpha}$
11. If one zero of the polynomial $3x^2 - 8x + k$ is reciprocal of other, then find the value of k .
12. If α, β are the zeros of the polynomial $x^2 - 1$, then find a polynomial whose zeros are $\frac{2\alpha}{\beta}$ and $\frac{2\beta}{\alpha}$.
13. Find the value of c for which the pair of equations $cx - y = 2$ and $6x - 2y = 3$ will have no solutions.
14. For what value of k the lines given by : $3x + 2ky = 2$ and $2x + 5y + 1 = 0$ are parallel.
15. Draw the graph of the pair of equations $2x + y = 4$ and $2x - y = 4$. Write the vertices of the triangle formed by these lines and the y -axis. Also find the area of this triangle.
16. **Case Study-1**

A seminar was conducted by the club in-charge of different subjects taking the students of different sections of class X of CMS Public School, New Delhi, where the participants were the educators of different subjects. The number of participants in Science, English and Mathematics are 168, 210 and 126 respectively. The in-charge of each club arranged the students in such a way that, in each room there were same number of participants according to their subject. Observe the above situation and answer the following questions.

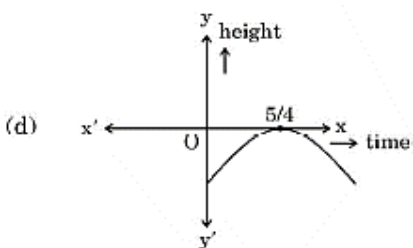
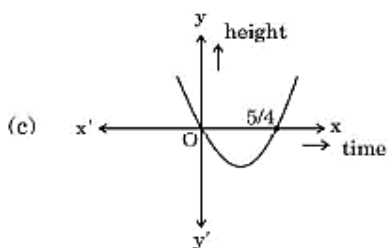
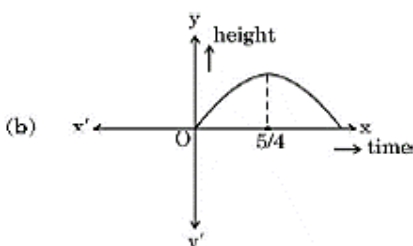
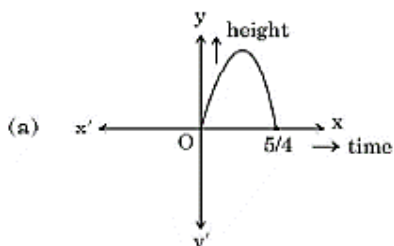
 - i. What is the maximum number of participants that can be accommodated in each room?
 - ii. What is the minimum number of rooms required during the event?
 - iii. (a) Find the LCM of 168, 210 and 126 by prime factorisation method.
(b) Find the product of HCF and LCM of 168, 210 and 126.

17. Case Study-2

In a pool at an aquarium, a dolphin jumps out of the water travelling at 20 cm per second. Its height above water level after t seconds is given by $h = 20t - 16t^2$.

Based on the above, answer the following questions :

- (i) Find zeroes of polynomial $p(t) = 20t - 16t^2$
(ii) Which of the following types of graph represents $p(t)$?



- (iii) (a) What would be the value of h at $t = \frac{3}{2}$? Interpret the result.
(iii) (b) How much distance has the dolphin covered before hitting the water level again ?

18. Case Study-3

Teachers and students of class X of a school had gone to Nandankanan for study tour. After visiting different places of Nandankanan, lastly they visited bird's sanctuary and deer park. Mohan is a clever boy and keen observer. He put the question to his friend "How many birds are there and how many deers are there (at particular time) in Nandankanan?" "Rahul's friend, Nitish gave him correct answer as follows;

'Nitish answered that total animals have 1000 eyes and 1400 legs'.

- (i) If x and y be the number of birds and deer respectively, what is the equation of total number of eyes?
(ii) What is the equation of total number of legs?
(iii) Find the total number of birds and deer in the zoo?

(OR)

Find the total number of legs of deers?

PHYSICS

1. Solve the **worksheet on numerical problems** in-home work copy. (PHY-1)
2. Complete ray diagrams for image formation by spherical lens.
3. Solve NCERT Text book exercise in home work copy.
4. Write the **Physics Experiments** (Provided in separate PDF) in science activity copy. (PHY-2)

CHEMISTRY

5. Solve the questions in HW copy. (provided in separate PDF) .
6. Complete the exemplar questions of Ch-1 in HW copy.
7. Write the **Chemistry Experiments** (Provided in separate PDF) in chemistry practical record.

		<p><u>BIOLOGY</u> Solve the worksheets (Biology HWs) shared in class group.</p>
7	Social Science	<p>1.Design a colourful tabular presentation on the developmental goals of different people. 2.Prepare a project on CONSUMER RIGHTS. (The project should contain A4 size papers and maximum page limit is 15) Name of the topic Acknowledgment Index Content Conclusion Bibliography 3.HISTORY-List the events year wise using time-line (1789-1914) from the chapter- The Rise of Nationalism in Europe. List of Keywords- write from book with explanation. Learn and write 10 questions(5 mark) categories in HW, taught in the class(follow CW) All the above (except the project) should be done in Homework copy only.</p>

WE WISH YOU TONS OF HAPPINESS, JOY AND FUN WHILE YOU ARE ON VACATION.