O.P. JINDAL SCHOOL, SAVITRI NAGAR

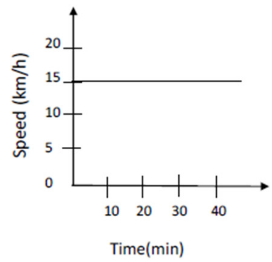
SUMMER VACATION HOLIDAY HOMEWORK
(SESSION -2025-2026)
CLASS IX

Sl no.	Subject	Topics
1.	**English**	Dear Students, Be creative, thoughtful, and sincere. Use this break to reflect, explore, and express! Please ensure that the holiday homework is done on A4 size sheets/project papers, organized neatly, and submitted without a plastic folder. It will be entirely handwritten, with no printed components. **Reading Skills** 1. Read Unit 1 and 2 of MCB and complete all the exercises. 2. Read the Newspaper daily (Online/Offline) and write only one headline each under the given headings like National, International, Sports, Business and express your views on it in not more than 30 words. **Writing Skills** 3. Artificial Intelligence is a storehouse of knowledge and wisdom and they are hazardous too. Write an article on the topic ‘The benefits and harms of AI’. Word limit is 180-200 words. 4. You encountered two strange people. They were different from normal human beings but they were quite interesting and exciting. As Manish\ Manisha, using your ideas, write a story in about 150-200 words narrating your experience with them. **Thinking Skills** 5. Write a self composed poetry on the given topics with minimum 4 stanzas A) Music B) I am blessed C) My school My pride **Dictionary Task** 6. Refer the dictionary and write the full forms of all the abbreviations used in the dictionary. Eg. Fem-feminine, prep-prepositions 7. From the base form of the verb form adjectives, adverb, nouns wherever possible by selecting minimum 30 words from the dictionary.
2.	**Hindi**	1 कवि रसखान और कबीर दास जी की कविताओं का वाचन करके वीडियो बनाकर मेल कीजिए। 2 ग्रीष्मावकाश में की गई यात्रा का विवरण देते हुए उन स्थलों का वीडियो मेल कीजिए। अथवा तिब्बत समाज की सांस्कृतिक झाँकी (वेशभूषा, खानपान, नृत्य,

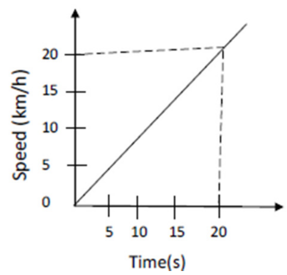
		दर्शनीय स्थल आदि का) वीडियो के रूप में मेल कीजिए। 3 दिए गए फारमेट में अपना पोर्टफोलियो बनाकर मेल कीजिए। 1 अनुक्रमणिका 2 छात्र/छात्रा का परिचय 3 रुचि/अरुचि 4 आत्म जीवन परिचय 5 पारिवारिक सदस्य 6 मेरा सबसे अच्छा मित्र 7 मेरे आदर्श व्यक्ति 8 मेरे जीवन का लक्ष्य Email. Kshitijclass9@gmail.com
3.	**Sanskrit**	ग्रीष्मावकाशः गृहकार्यम्(संस्कृतम्) कक्षा - नवमी 2025 -26 1) सं. व्या. पाठ - 6, (शब्दरूप - प्रकरणम्) बालकः, कविः, साधुः, पितृ, अस्मद् और (किम् शब्दरूप, तीनों लिंगों मे) 2) सं. व्या. पाठ - 7, (धातुरूप - प्रकरणम्) पठ् , गम् , वद् , भू , क्रीड् , नी , दृश् , अस् , और सेव् धातु (सभी धातुओं को पाँचों लकारों मे) 3) सं. व्या. पाठ - 10 , (संख्याः ज्ञानम्) (1 - 100) कंठस्थ करना है। # उपरोक्त सभी कार्य संस्कृत कॉपी में लिखकर कंठस्थ करना है। 4) मणिका पाठ्यपुस्तक से पाठ - 2 (पा�येयम्) के श्लोकों को कंठस्थ करना है। 5) अभ्यासा�- अपठित गद्यांशः , पत्रलेखनम् और चित्रवर्णनम् के लिए कार्य-पत्रक दिया जाएगा।
4.	**Mathematics**	Solve daily 5 questions of Maths in a separate notebook from the chapters given below from the book of class VIII. (i) Algebraic identity (ii) Factorization (iii) Exponent and power.
5.	**I.T**	Cyber Security ➢ What is Cyber Security? ➢ What is the role of Cyber Security? ➢ Write some software names for Cyber Security? Search more about Cyber Security with the help of internet, newspaper and computer magazines. Make a PowerPoint presentation on the topic – Advantages of Cyber Security. Set a beautiful background. Apply nice formatting and animation effects on it.

6.	Science	**PHYSICS:**
		Q1. Suppose a boy is enjoying a ride on a merry-go-round which is moving with a constant speed of 10 m/s. what does it implies with respect to boy? (a) at rest (b) moving with no acceleration (c) in accelerated motion (d) moving with uniform velocity Q2. If the displacement of an object is proportional to square of time, then the object moves with (a) Uniform velocity (b) Uniform acceleration (c) Increasing acceleration (d) Decreasing acceleration Q4.In which of the following cases of motions, the distance moved and the magnitude of displacement are equal? (a) If the car is moving on straight road (b) If the car is moving in circular path (c) The pendulum is moving to and fro (d) The earth is revolving around the Sun Q5. If a car is travelling north on a straight and its brakes are applied it will (a) have no acceleration (b) accelerate to south (c) accelerate to north (d) accelerate either east or west Q6. The maximum speed of a train is 80 km/h. It takes 10 h to cover a distance of 400 km. Find the ratio of its maximum speed to its average speed. Q7. Starting from a stationary position, Rahul paddles his bicycle to attain a velocity of 6 m s^{-1} in 30 s. Then he applies brakes such that the velocity of the bicycle comes down to 4 m s^{-1} in the next 5 s. Calculate the acceleration of the bicycle in both the cases. Q8. What are inertial and non-inertial frames of reference? Q9. Give an example of a body which may appear to be moving for one person and stationary for the other. Q10. What can you say about the motion of an object if its speed-time graph is a straight line parallel to the time axis? Q11. Differentiate between distance and displacement? Q12. What is the nature of the distance-time graphs for uniform and

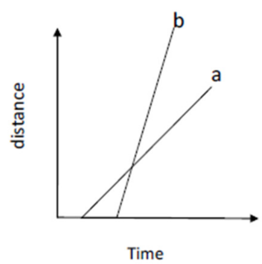
		non-uniform motion of an object? Q13. How can we describe the location of the object? Q14. An object is moving up an inclined plan. Its velocity changes from 15m/s to 10m/s in two seconds. What is its acceleration? Q15. A body covered a distance of x metre along a semi-circular path. Calculate the magnitude of displacement of the body, and the ratio of distance to displacement? Q16. A car covers 30 km at a uniform speed of 30km/hr. what should be its speed for the next 90km if the average speed for the entire journey is 60 km/h? Q17. A person goes to market, makes purchases and comes back at a constant slower speed. Draw displacement -time and velocity time graphs of the person? Q18. A boy runs for 10 min. at a uniform speed of 9km/h. At what speed should he run for the next 20 min. so that the average speed comes 12km/hr.? Q19. A particle was at rest from 9 a.m. It moved at a uniform speed 10km/hr from 9.30 a.m. to10 a.m. Find the average speed between (a) 9.00 a.m. and 10.00 a.m., (b) 9.15 a.m. and 10.00 a.m. Q20. An insect moves along a circular path of radius 10 cm with constant speed. If it takes 1 min. to move from a point on the path to the diametrically opposite point, find (a) the distance covered, (b) The speed, (c) the displacement, (d) average velocity. Q21. A train accelerated from 20km/hr to 80km/hr in 4 minutes. Find acceleration in this period? Assume that the tracks are straight? Q22. A cyclist moving on a circular track of radius 50m completes one revolution in 4 minutes. What is his (a) average speed (b) average velocity in one full revolution? Q23. Figure represents the speed time graph for a particle. Find the distance covered by the particle between t=10min. and t=30min.



Q24. Find the distance covered by a particle during the time interval t=0 and t=10s for which the speed time graph is shown in figure:



Q25. Figure shows distance-time graph of two objects a and b. which object is moving with a greater speed when both are moving?



Q26. Cars moving along a straight line at a speed of 54km/hr stop in 5s after the brakes are applied. (a) Find the acceleration, assuming it to be constant. (b) Plot the graph of speed versus time. (c) Using the graph. Find the distance covered by the car after the brakes are applied?

Q27. A car moves 100m due east and then 25m due west. (a) What is the distance covered by the car? (b) What is its displacement?

Q28. An athlete runs from one end to the other end of a semi-circular track whose radius is 70m. What is the distance covered by the athlete and what is his displacement?

Q29. A body starts from rest and moves with a uniform acceleration of $5m/s^2$ for 5s and then it moves with a constant velocity for 4s. Later it slows down and comes to rest in 5s. Draw the velocity graph for the motion of the body and answer the following questions:
(a).What is the maximum velocity attended by the body?
(b). What is the retardation of the body while slowing down?

Q30. An athlete moves 150m in 2minutes and next 50m in 20s on the same straight path. What is his average speed and average velocity?

Q31.A swimmer swims 90m long pool. He covers the distance of 180m by swimming from one end to other end back along the same path. If he covers the first 90m at speed of 2m/s, then how fast he swim so that his average speed is 3m/s?

Q32. A person walks along the sides of a square field each side is 100m long. What is the maximum magnitude of displacement of the person in any time interval?

Q33. A traveller moved from destination A to destination B by taking a uniform motion speed of 50 km/ hr and return back to his starting point with of 25km/ hr Find us average speed.

Q34. A driver of car travelling at 52 km/hr applies the brakes and accelerated uniformly in the opposite direction The cay stops in 5 see. Another driver going at 3km/km. In another car, applied his brakes slowly and stops in 10 sec. on same graph paper, plot the speed Versus time graph for two cars which of travelled farther after braked were applied?

CHEMISTRY:

Q1.Draw Charts on any one of the following topics:
Sublimation , Evaporation , Distillation, Inter conversion of states of matter.

Q2. Read about at least five scientists and their contribution in science and write at least 50 words on each scientist.

Q3. Make 20 MCQS from chapter -1 "Matter in our Surrounding " in your class work notebook.

BIOLOGY:

Q1.What is plasma membrane made up of ?
Q2.What did Robert Hooke observed first in cork cell ?
Q3.What does protoplasm refer to ?
Q4.Name the smallest cell and the longest cell in human body.
Q5.Name three features present in almost every cell.
Q6.What is diffusion ?
Q7.What is osmosis ?
Q8.What is the full form of DNA ?
Q9.State two condition required for osmosis?
Q10.What is plasmolysis ?
Q11.Give the function of nuclear membrane.

		Q12What is the function of nucleus in a cell ? Q13.What are genes ? Q14.Draw various cells of human body. Q15.Give five points of differences between plant cell and animal cell.
7.	**Social science**	**ECONOMICS:** Prepare short notes on the following topics: 1. Gross Domestic product2. Factors of Production 3.Reserve Bank of India 4.Economic and Non-Economic activities 5.Economic Development 6.Human Capital 7. Human capital formation 8. Public Distribution system 9. Primary functions of commercial Bank 10. Primary, Secondary and Tertiary sector **GEOGRAPHY:** Map Skills 1. Mark and label major cities, rivers, and mountains on an outline map of India. 2. Identify and mark Soil types, and natural vegetation regions on a map of India. 3. Create a project on a specific geographical theme, such as:- Natural disasters (e.g., earthquakes, floods, droughts) 4. Research and write about a specific geographical feature or region in India, such as: - The Himalayan Mountains - The Western Ghats - The Eastern Ghats - The eastern coastal plains and Western coastal plains. Practical Exercises 1. Measure and record the temperature and rainfall in your area for a week. Analyze the data and draw conclusions about the local climate. 2. Conduct a survey of your neighborhood to identify geographical features, such as parks, rivers, or hills. **HISTORY:** 1. Create a timeline of important events from the Russian Revolution, focusing on key dates and figures. 2. The French revolution saw a rise of newspapers describing the events of each day and week. Collect pictures and information on any one event and write a newspaper article.

		POLITICAL SCIENCE: 1. Write an essay on the importance of democracy or the impact of specific political events. 2. Create a visual representation of political concepts, such as a political cartoon or a poster illustrating the different branches of government. Guidelines: Students can make use of newspapers, magazine & internet. A separate file has to be prepared for both the projects.