

O.P Jindal School, Savitri Nagar, Tamnar
Summer
Holiday Homework:2023-24
Class - IX

S.No	Subject	Do the given Homework in A4 size paper and submit.
1.	ENGLISH	<p>(1) Read the Newspaper (English) daily and write only one news article in 20-30 words under the given headings - National/ International - Science, Literature, Sports, Glamour, Business.</p> <p>(2) Read the Editorial column in a Newspaper in English (daily).</p> <p>(3) Find and write a minimum of 40 Verbs & 40 Adjectives, and their meaning in your Homework Assignment File.</p> <p>(4) Prepare a write-up in 100 to 150 words on how did you spend your Summer Vacation.</p> <p>(5) Refer to a dictionary and write the full forms of a minimum of 20 abbreviations used in the dictionary. Eg. Fem-feminine, prep-prepositions.</p>
2.	Hindi	<p>1 हिंदी के अखबार का पठन और पाँच मुख्य समाचार को ए-4 साईज पेपर में लिखेंगे।</p> <p>2 फणीश्वर नाथ 'रेणु' जी की लाल पान की बेगम, संवदिया और पंचलैट को खोजकर पढ़िए।</p> <p>3 बिहारी, केशवदास, भूषण और रत्नाकर, इन कवियों की कुछ काव्य पंक्तियों का संकलन कर उनमें निहित अलंकारों की पहचान कीजिए।</p> <p>4 सोने से पूर्व अपने दिनभर के अनुभवों को डायरी शैली में लिखिए।</p>
3.	Sanskrit	<p>1) सं. व्या. *पाठ - 6*, (शब्दरूप - प्रकरणम्) बालकः, कविः, साधुः, पितृ, अस्मद् और (किम् शब्दरूप, तीनों लिंगों में)</p> <p>2) सं. व्या. *पाठ - 7*, (धातुरूप - प्रकरणम्) पठ्, गम्, वद्, भू, क्रीड्, नी, दृश्, अस्, और सेव् धातु (सभी धातुओं को पाँचों लकारों में)</p> <p>3) सं. व्या. *पाठ - 10*, (संख्या: ज्ञानम्) (1 - 100) कंठस्थ करना है। # *उपरोक्त सभी कार्य संस्कृत कॉपी में लिखकर कंठस्थ करना है*।</p> <p>4) *शेमुषी* पाठ्यपुस्तक से पाठ - 5 (सूक्तिमौक्तिकम्) के श्लोकों को कंठस्थ करना है।</p> <p>5) *अभ्यासार्थ*- अपठित गद्यांशः, पत्रलेखनम्, चित्रवर्णनम् और अनुवाद के लिए कार्यपत्रक दिया जाएगा।</p>
4.	Maths	<p>P*Learn the tables up to 30.</p> <p>*Practice 5 questions daily by NCERT and R. S Aggrawal.</p> <p>*Solve the worksheet on A4 sheet paper.</p> <p>Choose the correct answer.</p> <p>Q1. When $21\sqrt{15}$ is divided by $3\sqrt{3}$, find the quotient.</p> <p>a) $3\sqrt{5}$ b) $7\sqrt{3}$ c) $7\sqrt{5}$ d) $5\sqrt{3}$</p> <p>Q2. Can we write 0 in the form of p/q?</p> <p>a) Yes b) No c) Cannot be explained d) None of the above</p> <p>Q3. In between any two numbers, there are:</p>

a) Only one rational number b) Two rational numbers

c) Infinite rational numbers d) No rational number

Q4. $3\sqrt{6} + 4\sqrt{6}$ is equal to:

a) $6\sqrt{6}$ b) $7\sqrt{6}$ c) $4\sqrt{12}$ d) $7\sqrt{12}$

Q5. The number obtained on rationalising the denominator of $1/(\sqrt{7}-2)$ is

a) $(\sqrt{7}+2)/3$ b) $(\sqrt{7}-2)/3$ c) $(\sqrt{7}+2)/5$ d) $(\sqrt{7}+2)/45$

Q6. Which of the following is rational?

a) $4/0$ b) $0/4$ c) $\sqrt{3}$ d) π

Q7. The number $(3-\sqrt{3})(3+\sqrt{3})$ is

a) an irrational number b) a rational number
c) not a natural number d) none of these

Q8. $(16)^{3/4}$ is equal to

a) 2 b) 4 c) 8 d) 16

Q9. On simplifying $(\sqrt{5} + \sqrt{7})^2$, we get

a) 12 b) $\sqrt{35}$ c) $\sqrt{5} + \sqrt{7}$ d) $12 + 2\sqrt{35}$

Q10. The square root of which number is rational

a) 7 b) 1.96 c) 0.04 d) 13

Answer the following questions:

Q11. Represent $\sqrt{2}$ and $\sqrt{3}$ on number line.

Q12. Represent $\sqrt{8.5}$ on number line.

5.	Science	<p style="text-align: center;">Physics</p> <ol style="list-style-type: none"> 1. A ball is thrown vertically upwards from the ground from point A upto highest point B at a height 20 m. After reaching highest point it returns to the same point A. Find the net displacement and distance travelled by the ball? 2. (i) When displacement becomes equal to distance? (ii) A person is walking on square track of side 60 m. Calculate the distance and displacement after completing ten and half rotation. 3. A body is moving with a uniform velocity of 10 m/s. What will be the velocity after 20s ? 4. (a) Identify the kind of motion in the following cases: (i) A car moving with constant speed turning around a curve. (ii) An electron orbiting around nucleus. (b) An artificial satellite is moving in a circular orbit of radius 36,000 km. Calculate its speed if it takes 24 hours to revolve around the earth. 5. (a) Define average speed. (b) A bus travels a distance of 120 km with a speed of 40 km/h and returns with a speed of 30 km/h. Calculate the average speed for the entire journey. 6. A car travels from stop A to stop B with a speed of 30 km/h and then returns back to A with a speed of 50 km/h. Find (i) displacement of the car. (ii) distance travelled by the car. (iii) average speed of the car. 7. (a) Define uniform acceleration. What is the acceleration of a body moving with uniform velocity? (b) A particle moves over three quarters of a circle of radius r. What is the magnitude of its displacement? 8. A bus accelerates uniformly from 54 km/h to 72 km/h in 10 seconds Calculate (i) acceleration in m/s² (ii) distance covered by the bus in metres during this interval. <p style="text-align: center;">Chemistry</p> <ol style="list-style-type: none"> 1. Write difference between three states of matter in tabular form. 2. It is a hot summer day, Priyanshi and Ali are wearing cotton and nylon clothes respectively. Who do you think would be more comfortable and why? 3. You want to wear your favourite shirt to a party, but the problem is that it is still wet after a wash. What steps would you take to dry it 4. Comment on the following statements:- (a) Evaporation produces cooling. (b) Rate of evaporation of an aqueous solution decreases with increase in humidity. (c) Sponge though compressible is a solid. 5. Why does the temperature of a substance remain constant during its melting point or boiling point? <p style="text-align: center;">Biology</p> <ol style="list-style-type: none"> 1. Why are lysosomes known as 'suicide-bags' of a cell? 2. Do you agree that "A cell is a building unit of an organism". If yes, explain why? 3. Why is endocytosis found in animals only? 4. Name any cell organelle which is non membranous. 5. What is Cell theory ? 6. Draw well labeled diagram of plant cell and animal cell.
	Social Science	<p>Time calculation (Note Book)</p> <ol style="list-style-type: none"> Q1. What is the local time at a place A 80°E, when it is 10:00 a.m. local time at a place B 40°W? Q2. What will be the local time at Dacca 90°E longitude when it is noon at Greenwich? Q3. Find out the location of place a where local time is 11:00 a.m. while the local time of place be situated at 20° east longitude is 10 a.m. Q4. When it is noon at Cairo 30°E the local time at New York 75°W is 5.00 a.m. Q5. The longitude of New York is 74° West and that Bombay is 20° east .what will be the local time at Bombay ,when it is 4:00 p.m. at New York.

		<p>Map work:- 1. Draw a labelled diagram of different Physical features of India.(Chat paper)</p> <p>Project work:- Q. Visitor a nearest village and take a interview of farmers on following topics:- 1. Production of grain 2. Modern method of farming 3. Impact of weather on crop production. 4. Marketing strategy of selling crops. 5. Types of soil & vegetation. 6. Sources of livelihood in the village.</p> <p>History:- Presence of Hitler in second world war (250 word war)</p>
	<p>Information Technology</p>	<p style="text-align: center;">Cyber Security</p> <ul style="list-style-type: none"> ➤ What is Cyber Security? ➤ What is the role of Cyber Security? ➤ Write some software names for Cyber Security? <p>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.</p> <p>Set a beautiful background. Apply nice formatting and animation effects on it.</p>

