

Dear Children (IX-XII)

Nothing pleases us more than your joyous looks as the final bell of the last period rings, signaling beginning of your much awaited vacations! Happy anticipation of the times ahead, fun-filled moments, cheerful laughter, abounding joy... there is so much to look forward to in vacations! At the same time you need to think well and wisely as to how you would spend this invaluable wealth of time given to you this summer. You have exactly the same number of hours per day as given to Newton to come up with the laws of gravity, Mother Teresa, to the change the spiritual perception of the world, Mahatma Gandhi, to become the father of the nation! All you need is proper utilization of your time along with passion, zeal, conviction and commitment to put your best foot forward in whatever you do. Let games, adventure, knowledge exploration and bonding with family, cousins and society be a part of your schedule this vacation. You must complete your holiday homework and also ensure that it is a work well-done and is completed timely. Also do revise for your Periodic Tests beginning soon after vacations.

Wish you all the best and hope to see you back refreshed, enriched, physically fit and well prepared for rest of the academic session.

DELHI PUBLIC SCHOOL, JAMMU HOLIDAYS HOMEWORK Session 2017-18

CLASS : IX

Subject: English

Q1 Prepare one personality card and paste it in your English Note-book. This card should be about any poet/writer from your Literature Reader. You can use the following points

- a. Name
- b. PLACE OF BIRTH
- c. Name of some books written
- d. Types of stories/poems written
- e. Any award won

Q2 Cut 20 Passive Headlines written in Passive Voice from the news paper .Paste them in your English Note book and elaborate each heading in 2 lines.

Q3 Read the NOVEL Three Men In A Boat and do the following

a Thorough reading of Chapter 1 – 4 and write the chapter wise summary in your English Note-Book. Write Character sketch of – Jerome K Jerome , Harris , George in 80 words each in your English Note-Book.

Q4 Do the following

- a. Write 5 notices
- b. 5 stories
- c. 5 formal letters
- d. 5 Diary entries

Q5 Main course book -two units -Adventure and Children to be read and exercise to be done in the book itself Q6.Work Book -do units1,2,3 in the book itself.

Note : Revise complete syllabus for periodic Test- I.

Subject : Hindi

1 महादेवी द्वारा रचित कोई दो कहानियाँ पशुओं से सम्बंधित अपने शब्दों में लिखिए ।

2 गोदान प्रेमचन्द द्वारा रचित एक मर्मस्पर्शी उपन्यास हैं, उसे पढकर उसकी समीक्षा कीजिए ।

3 नोटबन्दी के बाद के हालात का वर्णन करते हुए एक वार्तालाप , संवाद के रुप में लिखिए , दों मित्रों के बीच ।

4 देश की राजनीति में महिलाओं की भागीदारी पर एक अनुच्छेद लेखन 120–130 शब्दों में लिखिए । 5 प्रधानमंत्री द्वारा चलाई गई योजनाओं के संबंध में किन्ही तीन योजनाओं को सक्षिप्त रुप में लिखिए ।

आवधिक परीक्षा के पाठ्यकम को दोहराये ।

आवश्यक निर्देश :

- गृहकार्य के लिए ए-4 आकार के पत्र (शीट)का प्रयोग आवश्यक है।
- कार्य रचनात्मक व आकर्षक शैली में किया जाए।
- कार्य करने में पूर्ण रूप से हिंदी भाषा का प्रयोग किया जाए।
- स्वच्छता व प्रस्तुतीकरण का विशेष ध्यान रखा जाए।
- आवधिक परीक्षा के पाठ्यक्रम को दोहराए।

Sub: Maths

Q1: Evaluate

- a) 97²
- b) 185 x 185 115 x115
- Q2: If a + b = 10 and ab = 16. Find $a^2 ab + b^2$
- Q3: Plots the points in the graph A(-6,2) B(-5,4) C(3,-2) D(5,6).
- Q4: What must be added to $x^3 3x^2 12x + 19$ so that the result is exactly divisible by $x^2 + x 6$.
- Q5: Represent $\sqrt{17}$ on the number line and verification.
- Q6: Find a and b if x=0 and x= -1 are the zeroes of $P(x) = 2x^3-3x^2 + ax+b$
- Q7: If p=2-a, Prove that $a^3+6ap + p^3 8 = 0$
- Q8: IF the complement of an angle is one-third of its supplement. Find the angles.
- Q9: If $x^2 + 1/x^2 = 79$, find the value of $x^3 + 1/x^3$.
- Q10: Find an angle if its reflex angle is double of the angle.
- Q11: If $a^2 + b^2 + c^2 = 250$ and ab + bc + ca=3, find a+b+c
- Q12. Represent $\sqrt{9.5}$ on the number line and verification.
- Q13: If x + y + z = 8 and xy + yz + zx = 20, find $x^3 + y^3 + z^3 3xyz$
- Q14:If the polynomial ax^3+3x^2-13 and $2x^3-5x+a$ when divided by x-2 leaves remainder R1 and R2 such that R1 = R2. Find the value of a.
- Q15: Mark the points (2,2),(2,-2),(-2,-2) and (-2,2) on a graph paper and join these points . Name the figure obtained and also find the area of the figure so obtained.
- Q16; Express $4.0\overline{35}$ in the form of p/q.
- Q 17 If $\frac{3-\sqrt{5}}{3+\sqrt{5}}$, $b = \frac{3+\sqrt{5}}{3-\sqrt{5}}$. Find $a^2 b^2$.
- Q 18 Prove that sum of angles of hexagon is 720° .
- Q1 9 Prove that sum of angles of triangle is 180° .
- Q 20. Prove that sum of exterior angles of triangle is 360° .

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Sub: Physics

Topics Covered: 1. *Motion and 2. Force and Laws of Motion.*

Section (A)

Project: Prepare a project based on **uniform circular motion**.

Section (B)

Subjective questions:

Q1:- Define the following and also give their SI units. Identify scalar and vector quantities.

(a) Displacement (b) Retardation (c) Average velocity (d) Force (e) Momentum (f) Impulse.

- Q2:- Why velocity and acceleration are vector quantities? Give reason.
- Q3:- What is the significance of slope in position-time graph and in velocity-time graph?
- Q4:- Why a cricketer player lowers his hand while catching a ball?
- Q5:- Derive relation between momentum and kinetic energy.
- Q6:- Define uniform circular motion and explain how it is differentiated from uniform linear motion.
- Q7:- Derive all equations of motion by graphical method.
- Q8: -Define inertia and state all types of inertia with suitable example.

Q9:- State Newton's laws of motion.

Q10:- Explain why Newton's second law is called the real law?

Q11:- State and prove law of conservation of linear momentum.

Q12:- Define average velocity when velocity changes at uniform rate and give formula for it.

Q13:- Define momentum and also give its SI unit.

Q14:- Name the physical quantities which remains constant and which changes in uniform circular motion.

Q15:- Define impulse and give formula for it.

Numericals:

Q16:- A body covers 40m in 20s and next 80m in 20s. Find the average velocity?

Q17:- An athlete complete one round of a circular track of diameter 49m in 20s. Calculate the distance and displacement at the end of 30s.

Q18:- A motor bike running at $5ms^{-1}$, picks up a velocity of $30ms^{-1}$ in 5s. Calculate (a) acceleration (b) distance covered during acceleration.

Q19:- A truck of mass M is moved under a force F. If the truck is then loaded with an object equal to the mass of the truck and the driving force is halved, then how does the acceleration change?

Q20:- A bullet of mass 10g is fired with a velocity of $400ms^{-1}$ from a gun of mass 4kg. What is the recoil velocity of the gun?

Sub: CHEMISTRY

• **PROJECT**: Everything is basically a pile of atoms. Whether we call that pile a solid, a liquid or a gas depends on how close together these atoms are and how fast they are moving. On a chart paper with the help of colorful diagrams pen down the factors on which state of matter depends.

ASSIGNMENT

Q1. What would happen to the interparticle spaces if a liquid is cooled ?

- Q2. Out of sodium chloride and ammonium chloride which can be purified by sublimation and how is it purified ?
- Q3. Describe an activity to determine the boiling point of water .

Q4. Water as ice has more cooling effect whereas water as steam cause more severe burns . Explain these observations.

Q5. Why do we feel comfortable under a fan when we are perspiring?

Q6. How does evaporation differ from boiling ? Explain the various factors on which evaporation depends.

- Q7. Why does water become cold if we add some ice cubes to it ?
- Q8. How will you demonstrate that particles of matter are continuously moving?
- Q9. Why is oxygen called a gas? Give two reasons.
- Q10. What is dry ice ? How is it prepared?
- Q11. Discuss briefly the effect of decreasing temperature and increasing pressure on a gas.
- Q12. Illustrate the factors on which diffusion depends.
- Q13. What do you mean by plasma and BEC? How are they formed?

Q14. Both sand and water take the shape of the container in which they are placed , yet sand is called a solid while water is called liquid. Explain.

- Q15. List the points of difference between homogeneous and heterogeneous mixture .
- Q16. Give reasons for the following.
 - a) A mixture has no definite formula .
 - b) Gold is called a pure substance
- Q17. What are metalloids? Give examples.
- Q18. Give applications of the following.
 - a) Compressibility of gas
 - b) Hardness of metals
 - c) Diffusion of gases in water

d) Latent heat of fusion

Q19. What are pure substances ?Compare the physical properties of metals and non-metals . Q20. Discuss the effect of pressure on boiling point of water .

Sub: BIOLOGY

<u>Project:</u> Prepare a report on various types of tissues. (with diagrams)

- Q1 Write the main function of leucoplast.
- Q2 What is the function of SER in liver cells of vertebrates?
- Q3 Why the RER appears rough?
- Q4 Why viruses are not supposed to be living?
- Q5 What is a nucleoid?
- Q6 Why dry raisins placed in water swell up?
- Q7 In which part of a plant chromoplasts are found?
- Q8 Where are genes located?
- Q9 What will happen if we keep a plant cell or animal cell in a i) Hypotonic solution ii) Hypertonic solution

iii) Isotonic solution.

- Q10 Explain the importance of osmosis for living beings?
- Q11 Give the historical development of cell theory.
- Q12 Who coined the term "cell " and how?
- Q13 Write the contribution of (a) Robert Hooke, (b) Leeuwenhoek (c) Robert Brown
- Q14 Draw a large diagram of an animal cell as seen through an electron microscope. Label the organelle that carry on the function of Respiration, secretion, protein synthesis, transport of material.
- Q15 Which substance is responsible for transfer of characters from one generation to another?
- Q16 Which cells can contract and relax?
- Q17 Name the substance that makes cork compact.
- Q18 What are root hair?
- Q19 What is transpiration?
- Q20 What is aerenchyma?
- Q21 Name the parenchyma tissue which has chlorophyll.
- Q22 Where is meristemetic tissue found in plants?
- Q23 What is the difference between bone and cartilage?
- Q24 Where are tendons and ligaments found?
- Q25 Describe the functions of xylem. Write the function of each component.
- Q26 What are complex tissues? Write their different kinds.
- Q27 What are cork cells?
- Q28 What are stomata? Write about their structure and function?
- Q29 What are protective tissues?
- Q30 Write the characteristics and functions of collenchyma.

Note: Question Answers should be on homework notebook.

Project report should be on A4 size sheets

Sub: HISTORY

PROJECT

Prepare a project on scrap book on following topics:

- 1. Maharaja Hari Singh (the last ruler of J&K)
- 2. Mr. Narendra Modi (Prime minister of India)

CONTENTS

- 1. Intense study with the background of country.
- 2. Personal traits.
- 3. Social and Political Contribution.
- 4. Leadership qualities.
- 5. Photographs of both the personalities.
- Q1. Why was Bastille prison attacked?
- Q2. What is taille?
- Q3. Who all got the right to vote for National Assembly?
- Q4. What was 'Marseillaise'?
- Q5. What was Nazism?
- Q6. How was the Natioanl Assembly recognized and how did it start exercising its power?
- Q7. Describe the events leading to the economic crisis in Germany?
- Q8. How was slave trade started? When and how was it abolished?
- Q9. Who was Napolean Bonaparte? Why was he called a liberator?
- Q10. What was the impact of World War I on Germany's politics and society?

Sub: CIVICS

- Q1. Which party was ruling in Poland in1980?
- Q2. What do you know about UN?
- Q3. Who came to power in Iraq after a military corp in 1968?
- Q4. What was 'Legal Framework Order'?
- Q5. How was democracy allows us to correct its own mistakes?
- Q6. What happened when a country attacks another country in an unjust manner?
- Q7. Give arguments in favour of democracy.
- Q8. Discuss how democracy expanded throughout the world.
- Q9. How does the International Monetary fund work?
- Q10. How did Musharraf establish his rule in Pakistan.

Sub: Geography

Q.no 1 Palk strait and Gulf of Mannar separate which two countries?

Q.no 2 Which is the largest country of the world?

Q.no 3 Which countries make the Indian subcontinent?

Q no.4 Which type of rainfall is received by the Western Ghats?

Qno 5 What is a water divide?

Qno.6 What is the Terai zone?

Qno.7 Write four points to explain the extent ,length, width and height of the Himalayas?

Qno.8 What are factors which have influenced and modified the relief features of India?

Q no.9 How are coral reefs formed? Name two examples of coral reefs?

Qno 10 Explain any three features of Deccan Plateau?

Qno.11 why do we need a Standard Meridian for India? Explain.

Qno.12 Explain the types of tectonic plate movements responsible for the formation of relief features.

Qno.13 Distinguish between Northern plains and Peninsular plateau.

Qno.14 Analyse is the difference between a gorge and a rift valley.

Qno.15 Describe how the Himalayas were formed.

Qno.16 Why is the Northern plain densely populated? Give any three reasons.

Qno17 Give an account of the Northern Plains of India.

Qno.18 How have the mountains passes been helpful to India since historic times? Explain.

Qno.19 What were the three main contributions of land routes to India in ancient times.

Qno.20 Why is India said to enjoy a strategic positione with reference to the international Trade Route?

Subject: Economics

VERY SHORT ANSWERS

- Q1. Which mechanical devices were used after Green Revolution?
- Q2. What kind of labour is needed for the production of goods and services?
- Q3. What was the status of SC's or dalits in Palampur?
- Q4. How is dairy farming is practiced in Palampur??
- Q5. Who are the farm labourers working for medium and large farmers?

Q6. Name the states which adopted first the modern farming methods in India.

SHORT ANSWERS

- Q7. What are the main factors of production?
- Q8. State the various ways of growing more from the same land by the people of Palampur?
- Q9. Differentiate between physical and human capital?
- Q10. What are the harmful effects of chemical fertilizers?
- Q11. Describe the condition of landless farmer like Dala, of Palampur village.
- Q12. Name the crops grown in rabi and kharif seasons.

LONG ANSWERS

Q13. Define physical capital, fixed capital, working capital, and human capital with examples.

- Q14. What are the merits of green revolution?
- Q15. What are the different ways of increasing farm production? Give examples.
- Q16. Which non-farm activities are practiced in Palampur? Write a short note.
- Q17. Difference between traditional and modern farming.
- Q18. Explain the facilities available in village Palampur?
- Q19. From where do small farmers arrange for the capital that they require during cultivation?
- Q20. Define yield, technological reforms, non farm activities.

NOTE- You are required to do the questions in your respective subject notebooks.

COMPUTER

Q1. Make a pictorial list of the devices which are the result of technological convergence.

Q2. Make a file project on the services provided by Internet.
