

APEX PUBLIC SCHOOL

SANT NAGAR, BURARI, DELHI-110084

**HOLIDAYS
HOMEWORK
(2024 - 25)
CLASS – IX**



ENGLISH

Q.1 Prepare a portfolio with the following

- Introduction
- My strengths
- I need to improve on...
- My achievements
- I have participated in...
- The books I have read
- The book I wish to read

Q.2 Margie wrote, in her diary, about a real book that Tommy found in his attic. She found it very amusing and unusual. While enjoying your summer vacation, you, too, may come across something unusual. Write about an eventful day that impressed you deeply or brought a smile on your face.

Q.3 Write a journal for one week. Apart from the daily routine, the daily record must focus on your efforts of ensuring a productive day. You may include activities executed for physical and mental wellness; for environment; time spent with family; learning any new skill.

Q.4 Prepare a poster showing the life achievements of Dr. APJ Abdul Kalam.

Q.5 Read any famous novel of Ruskin Bond and write its review.

HINDI

ग्रीष्मकालीन अवकाश गृहकार्य

नोट: गृहकार्य हेतु अलग नोटबुक बनाएं।

- अपने प्रिय लेखक/लेखिका का एक पोर्टफोलियो तैयार कीजिए।
- प्रेमचंद जी का प्रसिद्ध उपन्यास 'गोदान' पढ़कर आएं। कक्षा में इससे संबंधित चर्चा की जाएगी।
- रैदास के पदों की सप्रसंग व्याख्या कीजिए।
- अपने परिवार के सदस्यों के साथ वार्तालाप के आधार पर मुहावरें बनाकर उनका वाक्यों में प्रयोग कीजिए।
- 'अतिथि तुम कब जाओगे' फ़िल्म को देखकर उसकी समीक्षा चित्रों सहित स्क़ैपबुक में कीजिए।
- 'साक्षरता अभियान' और 'पर्यावरण' संरक्षण' पर सुंदर लेख व चित्रों सहित पाँच-पाँच स्लोगन A-4 शीट पर कीजिए।
- रहीम के ऊपर एक आकर्षक परियोजना कार्य बनाएं, चित्र सहित (Project File)।
- विद्यालय की वार्षिक पत्रिका के लिए स्वरचित रचनाएँ (कविता, कहानी इत्यादि) लिखें।

- पाठ 'दुख का अधिकार' से आपने महसूस किया कि जीवन में गरीब व्यक्ति का दुख समझने वाला कोई नहीं होता, इन गर्मियों की छुट्टियों में अपने आस-पास के कमजोर वर्गों की परशानियों को जानकर आँ और कक्षा में इसकी चर्चा करें ।

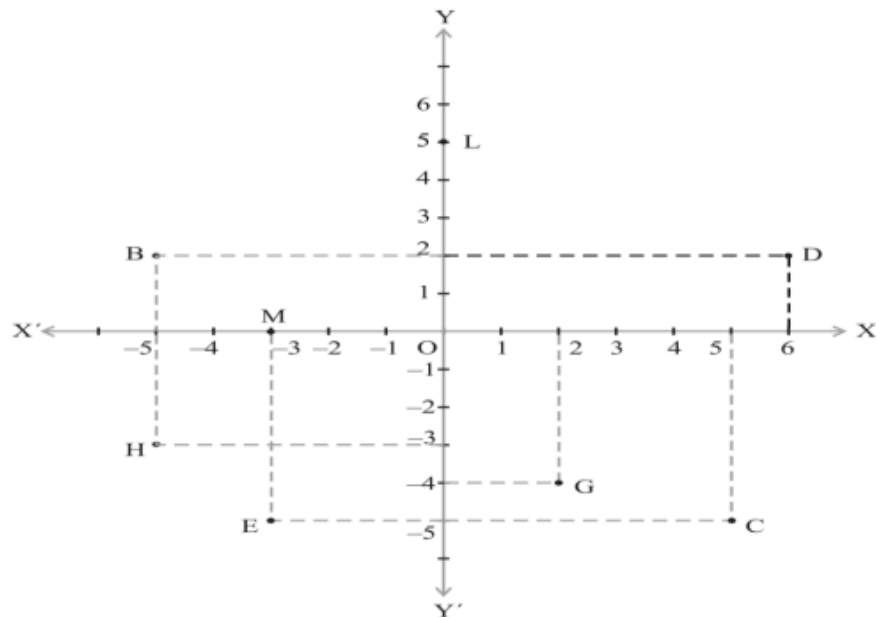
MATHS

- 1) The decimal representation of a rational number is
 - a) Always terminating
 - b) Either terminating or repeating
 - c) Either terminating or non repeating
 - d) Neither terminating nor repeating
- 2) Factorise : $2y^3+y^2-2y-1$.
- 3)

If $x=3+2\sqrt{2}$ find a) $x^2 + \frac{1}{x}$

b) $x^4 + \frac{1}{x^4}$

- 4) See fig., and write the following:
 - a) The coordinates of B.
 - b) The coordinates of C.
 - c) The points identified by the coordinates (-3,-5).
 - d) The coordinates of the point M.
 - e) The abscissa of the point D.
 - f) The ordinates of the point H.



- 5) Verify that :

$$x^3+y^3+z^3-3xyz = \frac{1}{2} (x+y+z) [(x-y)^2 + (y-z)^2 + (z-x)^2]$$

- Q6. Find one rational and one irrational number between 1.501 and 1.502.
- Q7. Find two irrational numbers between 0.2301 and 0.2424....
- Q8. Rationalise the denominator $16 / (\sqrt{41}-5)$
- Q9. Represent $\sqrt{5.5}$ on the real line.
- Q10. If $x = 3 + \sqrt{8}$, show that $(x^2 + 1) / x^2 = 34$.
- Q11. Find the value of a and b if $(3 + \sqrt{7}) / (3 - \sqrt{7}) = a + b\sqrt{7}$
- Q12. Simplify: (i) $6^{2/5} \times 6^{3/5}$ (ii) $3\sqrt{4} \times 3\sqrt{16}$ (iii) $81^{3/4}$ (iv) $4\sqrt{1250} / 4\sqrt{2}$
- Q13. For what value of a, $(x-3)$ is a factor of $x^3 + x^2 - 17x + a$?
- Q14. Find the zero of the polynomial $p(x) = 2x + 5$.
- Q15. Find the remainder when $P(x) = x^3 + 3x^2 + x + 1$ is divided by $g(x) = 5 + 2x$.
- Q16. Find the value of $x^6 + 1/x^6$, if $x + 1/x = 3$.
- Q18. Find the value of $a^3 + b^3 - 3ab$ if $a + b = -1$.
- Q19. Factorise: $x^2 - y^2/100$.
- Q20. Factorise: $(3m^2 - 2m)(6 - 3m^2 + 2m) - 5$.

LAB MANUAL ACTIVITIES:

1. ALGEBRAIC IDENTITY
2. FACTORIZATION OF POLYNOMIALS
3. QUADRANTS AND COORDINATES
4. THE SQUARE ROOTS OF NATURAL NUMBERS
5. EULER'S FORMULA

PHYSICS

1. With reference to the content given in NCERT, find out what are the three laws of motion?
2. Give examples showing applicability of the laws of physics in everyday life situations. Make a project file on how physics is involved in sports, dance and sound of various musical instruments.
3. Revise Ch. - Motion.

CHEMISTRY

1. Revise Chapter:-1 Matter in our surroundings.
2. AIL Activity
 - a) To study diffusion in our day- to- day life.
 - b) To study the effect of temperature on the rate of diffusion.
 - ☐ You have to explore, observe, discover and perform activities related to diffusion. Then categorize your observations into the following: - Solid in liquid diffusion, Liquid in liquid diffusion, Gas in liquid diffusion, Solid in gas diffusion, Gas in gas diffusion.
 - ☐ Also study the effect of temperature on the rate of diffusion while performing the activities.
 - ☐ After observing and performing the activities, write down your observations in a scrapbook and also paste pictures while performing the activities.
 - ☐ Your work will be assessed on the basis of handwriting, presentation, neatness, indexing, and completion of activity and so on.

BIOLOGY

- Revision of the Chapter-5-The Fundamental Unit of Life.
- Draw diagrams of all the cell organelles on A-4 size sheet and write the name of the scientist who discovered it.

SOCIAL SCIENCE

A. Make a project on any one of the following:

- (i) Natural Disaster Management: Flood
- (ii) Man Made Disaster Management: Building Collapses.

Guidelines for Project-

1. Project to be completed on an A-4 size sheet.
2. Project should be handwritten.
3. On the first page student performa to be given.

4. Acknowledgement
5. Content or Index
6. Newspaper cuttings, maps and diagrams are must.
7. Project should be strictly based on India.

B. Complete your written work.

C. Revise chapters done in class.

D. Complete the given worksheet in notebook.

E. Learn question answers and prepare for PA-1.

F. Do practice of the following map work:

- (i) India: States and Union Territories
- (ii) India and Neighbouring countries
- (iii) India- Latitude and Longitudes
- (iv) Tropic of Cancer and states through which the Tropic of Cancer passes.

FRENCH

- Complete the worksheets given in class and paste in your notebooks .
- Make a chart on famous celebrities of France

ART & CRAFT

● Mandala Art

◆ Materials to be used-

- Hard Board (12x12 inch) (shape – square or round only)
- Fabric Colours
- Mirrors
- Fevicol
- Decorative Accessories



STEP BY
STEP DOT
MANDALA
TUTORIAL
