

ST. COLUMBUS SCHOOL
DAYAL BAGH, FARIDABAD
CLASS – IX
HOLIDAY HOMEWORK (2024-25)

General Instructions:-

1. Revise the completed syllabus of all the subjects for the Test to be held in July.
2. Holiday Homework of all the subjects should be done in A4 size sheets.

SUBJECT – ENGLISH

1. 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.
2. Prepare yourself for the speaking assessment on any one of the topics given below:
 - Benefits of games and sports
 - Unforgettable moment of my life
 - Experience of any adventurous trip
3. Revise the syllabus done in the class for Periodic Test I.
4. Write a self-composed poem on the given topics with minimum 4 stanzas
 - a) Music
 - b) I am blessed
 - c) My school my pride
5. Read the chapters 1 and 2 from ‘Moments’ supplementary reader and write the answers for the textual questions given at the end of the story.
6. Read any one of the books mentioned below and write the book review:
 - (i) You Are Born To Blossom
“A.P.J Abdul Kalam”
 - (ii) How I taught My Grandmother to read
“Sudha Murty”
 - (iii) The Magic of the Lost Story
“Sudha Murty”
 - (iv) Grandparents
“Sudha Murty”
 - (v) The Boy who wanted to Fly
“J.R.D. Tata”
 - (vi) Wings of Fire
“A.P.J Abdul Kalam”
 - (vii) The Secret Island
“Enid Blyton”
 - (viii) The Blue Umbrella
“Ruskin Bond”

SUBJECT – MATHS

1. If $a+b+c = 0$ then prove that $\frac{a^2}{bc} + \frac{b^2}{ab} + \frac{c^2}{ca} = 3$
2. If $a + b = 5$ and $ab = 2$. Find the value of $a-b$.
3. Factorize the following:
 - a) $x^6 + y^6$
 - b) $2x^3 - 3x^2 - 17x + 30$
 - c) $9x^2 - 12x + 4$
4. Plot the points $(-3, 0)$, $(5, 0)$, $(0, 4)$ on Cartesian plane. Name the figure formed by joining these points and find its area.
5. If a point is on negative side of y-axis at a distance of 3 units from origin, then what are the coordinates of the point?
6. Write the co-ordinates of the point:
 - i. Whose ordinate is -5 and which lies on y-axis?
 - ii. Which lies on x and y axes both?
 - iii. Whose abscissa is -3 and which lies on x-axis?
7. If $x + 2$ is the factor of $x^3 - 2ax^2 + 16$, then what is the value of a ?
8. If $x - 2y = 11$ and $xy = 8$, find the value of $x^3 - 8y^3$.
9. If $a + b + c = 7$ and $ab + bc + ca = 20$, find the value of $a^3 + b^3 + c^3$.
10. A and B are friends. A is elder to B by 5 years. B's sister C is half the age of B while A's father D is 8 years older than twice the age of B. If the present age of D is 48 years, find the present ages of A, B and C.
11. In which quadrants or on which axis do each of the points $(4, -2)$, $(-3, 7)$, $(-1, -2)$, $(3, 6)$ lie?
12. If $\frac{x}{y} + \frac{y}{x} = -1$ (if $x, y \neq 0$), find the value of $x^3 - y^3$.
13. Evaluate using identity:
 - i) 104×105
 - ii) $(0.99)^3$
 - iii) $(999)^3$
 - iv) $(1004)^3$
14. In rectangle OABC, point O is the origin $OA=10$ units along x-axis, $AB=8$ units. Find the co-ordinates of vertices A, B and C.
15. If the co-ordinates of points P and Q are $(-5, 3)$, $(-5, m)$, and the sum of the abscissa and ordinate of both points are equal, then write the possible values of m .

CASE STUDY

Charity is the act of helping those who are in need of it. It is a humanitarian act. So Radha distributed chocolates in an orphanage, on her birthday, she gave 5 chocolates to each child and 20 chocolates to adults. Taking number of children as x and total chocolates distributed as y .

- i. Write a linear equation, in standard form as $ax + by + c = 0$.
- ii. What is the Value of $(a + b + c)$?

iii. If she distributed 205 chocolates, then how many children are there in the orphanage?

PROJECT WORK

TOPIC- COORDINATE GEOMETRY SPIROGRAPH/ 3D PATTERN ART

Prepare a beautiful spirograph / 3d pattern art using coordinate geometry principles.

विषय : हिंदी

नोट : दिए गए प्रदत्त कार्य को A - 4 शीट में कीजिए ।

1. योग अभ्यास के लाभ तथा विश्व योग दिवस के विषय पर योग शिक्षक तथा विद्यार्थी के मध्य संवाद लिखिए।
2. साक्षरता अभियान, पर्यावरण संरक्षण, मां, परोपकार, वृक्षारोपण, प्रदूषण, सावधानी हटी दुर्घटना घटी, होशियार रहो- सुरक्षित रहो, आदि में से किसी एक विषय पर स्वरचित स्लोगन लिखिए।
3. वाद - विवाद प्रतियोगिता में प्रथम आने पर अपने मित्र को एक बधाई पत्र लिखिए।
4. भक्ति कालीन कवियों का कोलाज बनाएं और उनमें से किन्हीं चार प्रमुख कवियों की रचनाओं का संकलन कीजिए।
5. वाचन कौशल के मूल्यांकन हेतु 'जीवन संघर्षमय है इससे घबराकर थमना नहीं चाहिए' विषय पर कोई एक स्वरचित कविता लिखिए व याद कीजिए ।
6. **शीर्षक** - 'कुमार्ग', **शिक्षा**- 'अपने हित के लिए गलत कर्मों का मार्ग नहीं अपनाना चाहिए' - दिए गए शीर्षक व शिक्षा पर आधारित लघु कथा लिखिए ।
7. भारतीय ऐतिहासिक स्थलों के नाम चित्र सहित लिखकर किसी एक ऐतिहासिक स्थल के विषय में संपूर्ण सचित्र परियोजना तैयार कीजिए।
8. कक्षा में कराए गए पाठ्यक्रम को आवधिक परीक्षा हेतु पुनः अवलोकन (दोहराएं) कीजिए ।
9. पूरक पाठ्यपुस्तक कृतिका की कहानियाँ पढ़िए तथा पुस्तक में ही उनके प्रश्नों के उत्तर रेखांकित कीजिए।

SUBJECT – SCIENCE

1. Define the term displacement. Is it a vector quantity or a scalar quantity?
2. What is a circular motion? Is circular motion an acceleration motion?
3. A car is travelling at a speed of 36 km/h. The driver applied the brakes and retards the car uniformly. The car is stopped in 5 sec. Find
 - (i) The acceleration of the car and
 - (ii) The distance before it stops after applying brakes.
4. Can displacement be zero? If yes, give two examples of such situations.
5. An object moves along a straight line with an acceleration of 2 m/s^2 . If its initial speed is 10 m/s, what will be its speed 2s later?
6. Liquids generally have a lower density than solids. But you must have observed that ice floats on water. Find out why.
7. How does the water kept in an earthen pot (matka) become cool during summer?
8. Why are we able to sip hot tea or milk faster from a saucer rather than a cup?
9. Give reason for the following observations:
 - (a) Naphthalene balls disappear with time without leaving any solid.
 - (b) We can get the smell of perfume while sitting several metres away.
10. What produces more severe burns, boiling water or steam?
11. What is the function of mitochondria?
12. What is the role of Golgi Apparatus in a cell?
13. What will be the fate of a living cell in hypertonic, hypotonic, and isotonic solution?
14. Write the differences between mitosis and meiosis cell division.
15. What do you understand by the term membrane biogenesis?
16. Prepare a colourful project on plant cell.

SUBJECT – SOCIAL SCIENCE

1. Can a disaster be prevented? Enumerate some of the ways through which impact of a disaster can be reduced.
2. Make a project file on Natural Disaster. Write about their information also paste pictures related to the topic as follows-
 - a. Tsunami , Droughts , Landslides
3. Mark all the 28 states and Union territories on map.
4. Identify the places on the map of France as given below-
Paris, Nantes, Marseilles, Bardeauri

PROJECT-

Make a project on the problems faced by the tribals during colonial period in India not exceeding more than 6 pages (painting, collage, drawing or pasting)

SUBJECT- INFORMATION TECHNOLOGY

1. Make a presentation on the following topic. Presentation should have at least five slides. First slide should contain information of the students. The presentation should be on the following basis:

Roll No	Topic
1-15	Communication Skills
16-30	Digital Documentation
31 Onwards	Electronic Spreadsheet

2. Revise the syllabus done in the class for Periodic Test I.

SUBJECT- PHYSICAL EDUCATION

- Do the below mentioned practical in the practical file.
Practical 1:- AAPHER youth fitness test with diagram.
Practical 2 :- Volley Ball – Labelled diagram of field and equipments, rules, terminologies and skills.
Practical 3 :- Kho-Kho –Labelled diagram of field, rules, terminologies and skills.
Practical 4:- Computation of BMI of 10 members from family or neighbourhood.

Be Happy By Doing Good

1. Spare some time and help your mother in household work. Talk to your parents and elders and learn values.
2. Adopt the habit of reading newspaper and learn new words and expressions.
3. Read at least two books (Hindi & English) apart from prescribed syllabus.
4. Respect flora and fauna (Plants and Animals). Keep your home and surroundings clean. Plant at least 5 saplings.
5. Keep water for birds and stray animals outside your house or in balcony.
6. Food is equal to God. So avoid wasting of food.
7. Try to share your knowledge and donate old books and notebooks to the underprivileged and deprived children of your locality.
8. Maintain a diary in English & Hindi and write your experience along with daily routine during summer break. It will help you in enriching your vocabulary and writing skills.



ENJOY YOUR SUMMER BREAK.....