

**GREEN LAND PUBLIC SCHOOL
HOLIDAY HOME WORK (2018- 2019)**

Class-IXth

English

Biography:

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1. Create your magazine 10 pages.
 2. Page 1. Write about yourself and paste your photo.
 - Page 2. Index
 - Page 3. Interesting and current news item along with relevant pictures.
 - Page 4. Interview of any interesting person (about their hobbies, aim, achievement.
 - Page 5- Information about any festivals celebrated with relevant picture.
 - Page 6 to 10 Moral based stories, articles, poem, jokes, cartoons.
- Note: use A-4 size sheets, magazine should be hand written.

हिंदी :

1. अपनी पाठ्य पुस्तक क्षितिज गद्य खंड से पाठ -2 से 5 तक अच्छे से पढ़ें एवं स्वयं प्रश्न – उत्तर लिखें |
2. क्षितिज काव्य खंड से ललध के वाख एवं रसखान के सवैये का सरलार्थ एवं प्रश्न – उत्तर लिखकर लाए |
3. पाठ्य पुस्तक कृतिका से पाठ-1 इस जल प्रलय में के प्रश्न – उत्तर स्वयं समीक्षा करके लिखें|
4. हिंदी व्याकरण की पाठ्य पुस्तक दर्शिका से अभ्यास वाले पाँच –पाँच अपठित गद्यांश व काव्यांश भरें|
5. पाठ्य क्रम के अतिरिक्त पाँच – पाँच अपठित गद्यांश व काव्यांश करें |
6. पाठ्य पुस्तक क्षितिज से छांटकर 25 अलंकार व 25 समास लिखकर लाए (पंक्तियाँ + भेद के नाम)
7. निम्नलिखित विषयों पर विज्ञापन तैयार कीजिए | एशियन पेंट्स / अप्सरा पेंसिल / अंकल चिप्स / झंडू बाम |
8. अपनी पाठ्य पुस्तक क्षितिज से उपसर्ग एवं प्रत्यय युक्त 50 शब्द छांटकर लिखें |

Maths

POLYNOMIALS

VERY SHORT AND SHORT ANSWER TYPE QUESTIONS

- Q1. Write an example of an algebraic expression that is not a polynomial.
- Q2. $p(x) = \sqrt{x} + 1$ is not a polynomial. Give reason
- Q3. Find the value of polynomial $8x^3 - 6x^2 + 2$ at $x = 1$
- Q4. If $p(x) = 6x^3 + 5x^2 - 3x + 2$ find $p(-1)$
- Q5. Find the zero of the polynomial $p(y) = 2y + 7$
- Q6. Find the remainder when $x^{101} - 1$ is divided by $x - 1$
- Q7. Find whether $x^n + y^n$ is divisible by $x - y$ ($y \neq 0$) or not.
- Q8. Write the following polynomials in standard form

- i. $4y - 4y^3 + 3 - y^4$
- ii. $5m^3 - 6m + 7 - 2m^2$

Q9. Write the integral zeroes of the following polynomials

- i. $(x - 3)(x - 7)$
- ii. $(x + 1)(3x + 2)$

Q10. If $y = -1$ is a zero of the polynomial $q(y) = 4y^3 + ky^2 - y - 1$, then find the value of k

Q11. For what value of m is $x^3 - 2mx^2 + 16$ divisible by $x + 2$

Q12. Prove that $(a + b + c)^3 - a^3 - b^3 - c^3 = 3(a + b)(b + c)(c + a)$

LONG AND VERY LONG ANSWER TYPE QUESTIONS

Q13. If $x + 1/x = 5$, find the value of $x^3 + 1/x^3$

Q14. The polynomials $x^3 + 2x^2 - 5ax - 7$ and $x^3 + ax^2 - 12x + 6$ when divided by $x + 1$ and $x - 2$ respectively, leave remainders R_1 and R_2 respectively. Find the value of a in each of the following cases:

- i. $R_1 = R_2$
- ii. $R_1 + R_2 = 0$
- iii. $2R_1 + R_2 = 0$

Q15. Factorise $p(x) = x^4 + x^3 - 7x^2 - x + 6$ by factor theorem

Q16. Prove that $2x^4 - 6x^3 + 3x^2 + 3x - 2$ is exactly divisible by $x^2 - 3x + 2$

- i. By actual division
- ii. Without actual division

Q17. When a polynomial $p(x) = x^4 - 2x^3 + 3x^2 - ax + b$ is divisible by $x - 1$ and $x + 1$, the remainders are 5 and 19 respectively. Find the remainder when $p(x)$ is divided by $x - 2$.

Q18. If $a + b + c = 9$ and $ab + bc + ca = 26$, find $a^2 + b^2 + c^2$

Q19. Simplify:

$$(4x^2 - 9y^2)^3 + (9y^2 - 16x^2)^3 + (16x^2 - 4y^2)^3 + (2x - 3y)^3 + (3y - 4x)^3 + (4z - 2x)^3$$

Pg 1

Science:

1. Revise July Periodic Test Syllabus (Biology Le-2 and Chemistry Le-2).
2. Chemistry:- Read Le -3, Atoms and molecules.

Biology:- LE-3 Tissues

Write the summary of both lessons.

3. Model & Project:
 - i. Plant cell – Dinesh
 - ii. Animal cell Susheela
 - iii. Sericulture- Model Anchal
 - iv. Poultry farming- Anoop
 - v. Newon and Nephron- Sakshi
 - vi. Irrigation System- Anurag
 - vii. Fluid mosaic structure of plasma membrane by Vikas.
 - viii. Model of house sparrow with labelling - Rohit.
4. Read about plant tissue and search atleast 35 Questions and write their answer.
5. On A-3 size sheet write the name of element, symbol and their atomic number.
6. Solve at least 15 numerical from Le 1 and 2.

Physics: Chapter: Motion

1. What is meant by the statement 'Rest and motion are relative terms'? Give example to show it.
2. Explain whether the walls of a classroom are at rest or in motion.
3. Define scalar and vector quantities.
4. Identify the following as scalar or vector quantities:- mass, velocity, speed, length, distance, displacement, temperature, force, weight, power, work and energy.
5. The school of a boy from his home is 1 km to the east. When he reaches back home, he says that he had traveled 2 km distance but his displacement is zero. Justify your answer.
6. Under what condition, the average speed is equal to the magnitude of the average velocity.
7. Can the average speed of a moving body be zero?
8. Can the average velocity of a moving body be zero? State examples.
9. A car covers a distance of 5 km in 20 mins. Find the velocity of the car in (a) km/min (b) m/s (c) m/min (d) km/hr.
10. a train is moving with a velocity of 45km/hr. calculate the distance traveled by it in 1 hr, 1 min, 1 second.
11. An object P is moving with a constant velocity for 5 mins. Another object Q is moving with changing velocity for 5 mins. Out of these two objects, which one has acceleration? Explain.
12. Can an object be accelerated if it is moving with constant speed? If yes, explain giving examples.
13. (i) When do you say that an object has positive acceleration?
(ii) When do you say that an object has negative acceleration?
14. State which of the following situations are possible and give an example of each of these:-
(a) a body moving with constant acceleration but with zero velocity.
(b) A body moving horizontally with acceleration in vertical direction.

(c) A body moving with a constant speed in an accelerated motion.

15. What is a reference point?

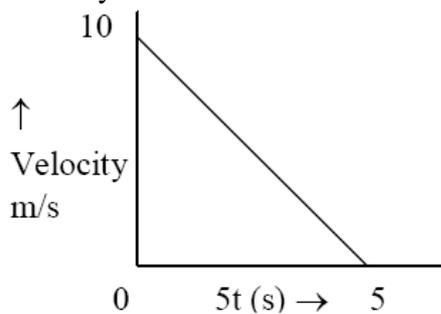
16. Name the 2 physical quantities which can be obtained from velocity-time graph.

17. An electric train is moving with a velocity of 120km/hr. how much distance will it cover in

30 sec?

18. Give differences between linear motion and circular motion.

19. Velocity time graph of a body is shown in the figure. What are initial and final velocities of the body?



20. A body moves around the sun with constant speed in circular path. Is the motion of the body

uniform or accelerated?

21. Name the physical quantity which remains constant during uniform circular motion.

22. Name the physical quantity which changes during uniform circular motion.

23. An object has moved through a distance. Can it have zero displacement? Support your answer with an example.

24. A physical quantity is measured – 10m/s. is it speed or velocity?

25. A car is moving with a uniform velocity of 10m/s. the driver of the car decides to overtake

the bus moving ahead of the car. So the driver of the car accelerates at 1m/s^2 for 10 sec. Find the velocity of the car at the end of 10 sec. also find the distance traveled by the car while accelerating

S.St:

1. Choose any disaster and make a project file.

2. Choose any one topic of Term -1 from any book and prepare P.P.T.

3. Prepare 20 M.C.Q. on following topic:

i. The story of village Palmpur.

ii. India size and location .

iii. French Revolution.

Democracy And Contemporary world.

iv. Show all the place related to French Revolution in the world map.

v. Write about the Indian postral communities in india.

6. Find some trees having medicinal values. Paste their pictures and write about them.