DELHI PUBLIC SCHOOL JAMMU
Revision Sheet for Cycle Test 1 (2018-19)

Class-XI **Subject – Physics**

TOPICS:

1. **Physical World and Measurement**
2. **Kinematics**

Section A (Very Short Type Questions)

1. Define Physics. Give its relation with other branches.
2. How Physics is related with the Society and technology.
3. What is Measurement? Define Unit and give its relation with the numerical value.
4. Why the graph having a line perpendicular to time axis cannot exist?
5. Differentiate between Speed and Velocity.

Section B (Short Type Questions)

6. The greatest and least resultant of two forces acting at a point is 10 N and 6 N resp. If each force is increased by 3 N, find the resultant of new forces when acting at a point at an angle of 90 degree with each other.
7. What are Significant Figures? What are different types of Systematic Errors, how these errors can be removed?
8. What are the Advantages of SI units over other System of Units?
9. What is a Projectile? Give any two examples of projectile.

Section C (Long Type Questions)

10. Explain why it is easier to pull a lawn roller than pushing it? Explain.
11. Define Cross product and Dot Product of Vectors.
12. Define Relative Velocity. Draw a position time graph for the bodies having zero relative velocity.
13. Two trains each of length 100 meter are running on parallel tracks. One overtakes the other in 20 seconds and one crosses the other in 10 seconds. Calculate the velocities of two trains.
14. Each side of a cube is measured to be 7.203 meter. What are the total surface area and the volume of the cube to appropriate significant figures?
15. Define a) Time Period, b) Frequency, c) Centripetal Acceleration, d) Angular Velocity.
16. When a rifle is fired at a distant target, the barrel of gun is not lined exactly on the target, why?
17. Convert 347 dynes into Newton.
18. Convert 0.006 joules into ergs.

Section C (Long Type Questions)

19. The critical velocity of flow of liquid depends upon the viscosity of liquid, radius of tube and density of liquid. Find the formula for the critical velocity.
20. Show that trajectory of projectile is parabolic in nature.
21. A car is moving along a straight line OP. It moves from O to P in 18 seconds and returns from P to Q in 6 seconds, where OP is equal to 360 meter and OQ is equals to 240 meter. What are the average velocity and average speed of the car in going
    (a) from O to P , (b) from O to P and back to Q.
22. What do you mean by Resolution of Vectors? When the resolved components of a vector are known as Rectangular Components of Vector. Derive its mathematical expression.
23. What is the principle of Homogeneity? Show that the equation which is dimensionally correct may or may not be correct mathematically.
24. A boy stands at 78.4 meter from a building and throws a ball which just enters a window 39.2 meter above the ground. Calculate the velocity of projection of the wall.