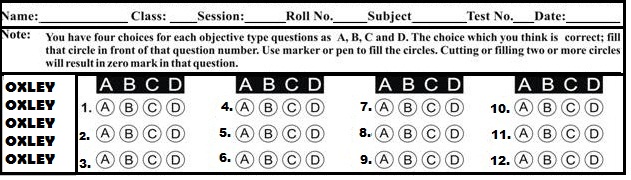
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| **CLASS 9th PAPER PHYSICS**  **Time: 2 Hours FLP: Chapter 1 to 5 Date: 14-09-2023** | | |  |
| **Name:** | **Section:** | **Roll No.** | **60** |



**PAPER OBJECTIVE**

**Q#1. Multiple Choice Questions.**

1. **Which one of the following is the smallest quantity?**
2. 0.01 g (b) 2 mg (c) (d) 5000 ng
3. **By dividing the displacement of a moving body with time, we obtain**
4. Speed (b) Acceleration (c) Velocity (d) Deceleration
5. **A boy jumps out of a moving bus. There is a danger for him to fall:**
6. Towards the moving bus (b) Away from the bus

(c) In the direction of motion (d) Opposite to the direction of motion

1. **A body is in equilibrium when a body has a**
2. Variable speed (b) Uniform Velocity (c) a is zero (d) Both b and c
3. **Earth’s gravitational force of attraction vanishes at**
4. 6400 km (b) Infinity (c) 42300 km (d) 1000 km
5. **Prefixes are used for**
6. Base Unit (b) Derived Unit (c) Both a and b (d) None
7. **A car completes a half-round trip of a circular path, its displacement will be**
8. πr (b) 2r (c) 2 πr (d) All of these
9. **If both the mass and velocity of a body become double, then momentum becomes:**
10. Double (b) Remain Same (c) Half (d) Four Times
11. **The motion of football on the ground is an example of …… equilibrium:**
12. Stable (b) Unstable (c) Neutral (d) None
13. **The value of g at a height equal to one Earth’s radius above the surface of Earth is**
14. 2g (b) ½ g (c) 1/3 g (d) ¼ g
15. **The balloon's motion when air is exhausted, is an example of?**
16. 1st Law of Motion (b) 2nd Law of Motion (c) 3rd Law of Motion (d) None
17. **If the initial and final positions of a body are the same, then displacement will be?**
18. Zero (b) May or may not be zero (c) Must have some (d) All of these

**PAPER SUBJECTIVE**

**SECTION I**

**Note: Out of Questions No 2, 3 and 4 write 15 (fifteen) short answers. While writing answers, write question No. and its part carefully. Each part carries two marks. (30)**

**Q#2**

1. What role S.I. units have played in the development of science?
2. What is meant by Vernier constant?
3. Enlist all the base quantities with their SI units.
4. A car starts from rest. Its velocity becomes 20 ms-1 in 4 s. Find its acceleration.
5. Difference between distance and displacements?

**Q#3**

1. Plot the speed time graph for an object moving with uniform velocity.
2. What is meant by the banking of roads?
3. State Newton’s 2nd law of motion and also prove F = ma.
4. Action and reaction are always equal and opposite. Then how does a body move?
5. Define torque and its SI unit.

**Q#4**

1. Think of a body that is at rest but not in equilibrium.
2. How the head-to-tail rule helps to find the resultant of forces, write steps.
3. On what factors the orbital speed of a satellite depends?
4. Define geostationary orbit.
5. State the law of gravitation and also prove that .

**SECTION II**

**Q#5**

1. State and explain the law of conservation of momentum with the help of a sphere example.
2. A boy throws a ball vertically up. It returns to the ground after 5 seconds. Find
3. The maximum height reached by the ball.
4. The velocity with which the ball is thrown up.

**Q#6**

1. What is equilibrium? Explain the states of equilibrium with an example.
2. Find the acceleration due to gravity on the surface of Mars. The mass of Mars is and its radius is 3370 km.

**BEST OF LUCK STUDENTS ☺ ☹ ☺ ☹ ☺**