

TEST NO. 2**CH - 2****PHYSICS****Time Allowed: 15 Minutes****CLASS 9TH – 019****Paper: (Objective Type)****Maximum Marks: 12**

Note : You have four choices for each objective type question as A , B, C and D. The choice which you think is Correct, fill that circles in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question.

Q.	QUESTIONS	(A)	(B)	(C)	(D)
1.	The unit of velocity and speed is	ms	ms ⁻²	ms ⁻³	ms ⁻¹
2.	When the velocity and the acceleration are in the same direction, then the acceleration will be	Uniform	Positive	Negative	Equal
3.	Which of the following is a vector quantity?	Speed	Distance	Displacement	Power
4.	The unit of acceleration is.	ms ⁻¹	ms	ms ⁻²	ms ²
5.	Displacement is a quantity.	Scalar	Vector	Both a & b	None of these
6.	If an object is moving with a uniform changing speed then speed time graph is.	Straight	Variable	Parallel to time axis	All of these
7.	A Train is moving at a speed 36 kmh. Its speed expressed in m/s	-10 ms ⁻¹	20 ms ⁻¹	25ms ⁻¹	30 ms ⁻¹
8.	The slope of speed time graph is called.	Distance	Displacement	Velocity	Acceleration
9.	The motion of a body about an axis is called.	Circular motion	Rotational motion	Vibratory motion	Random motion.
10.	The second equation of motion is	F=ma	S=ut+1/2at ²	$V = \frac{v_f + v_i}{2}$	$V_f = v_i + at$
11.	A ball is thrown vertically upward. Its velocity at the highest point is.	10 ms ⁻¹	-10ms ⁻¹	10ms ⁻²	Zero
12.	The value of gravitational acceleration when a body is moving in downward direction is.	10 ms ⁻¹	10 ms ⁻²	10 m	10 ms

A B C D**A B C D****A B C D****A B C D****A B C D**

1	(A) (B) (C) (D)	4	(A) (B) (C) (D)	7	(A) (B) (C) (D)	10	(A) (B) (C) (D)	13	(A) (B) (C) (D)
2	(A) (B) (C) (D)	5	(A) (B) (C) (D)	8	(A) (B) (C) (D)	11	(A) (B) (C) (D)	14	(A) (B) (C) (D)
3	(A) (B) (C) (D)	6	(A) (B) (C) (D)	9	(A) (B) (C) (D)	12	(A) (B) (C) (D)	15	(A) (B) (C) (D)

نوٹ: معروضی سوال نامے کو توجہ سے پڑھیں اور ہر MCQ کی درست آپشن A, B, C, D کو پین کی سیاہی یا مارکر سے اس طرح پُر کریں کہ سیاہی دائرے سے باہر نہ نکلے۔ ایک سے

زیادہ دائروں کو پُر کرنے یا کاٹ کر پُر کرنے کی صورت میں مذکورہ جواب غلط تصور ہوگا۔

TEST NO.2**CH – 2****PHYSICS****Time Allowed: 1:45 hours****CLASS 9TH – 015****Paper : (Essay Type)****Maximum Marks:48****(PART – I)****2. Write short answers to any Five (5) questions:****10**

- (i) Define kinematics.
- (ii) What is the equation of motion?
- (iii) Derive first equation of motion.
- (iv) Sketch a velocity time graph for the motion of the body. From the graph explaining each step calculate total distance covered by the object.
- (v) Explain graphically object moving with constant speed.
- (vi) Sketch speed time graph.
- (vii) Sketch the distance time graph for a body starting from rest.
- (viii) A car starts from rest. Its velocity becomes 20 ms^{-1} in 8 s. Find the acceleration.

3. Write short answers to any Five (5) questions:**10**

- (i) Differentiate between speed and velocity.
- (ii) Define uniform speed and uniform velocity.
- (iii) Differentiate between distance and displacement.
- (iv) Define rest and motion.
- (v) Write types of motion.
- (vi) Difference between scalar and vector.
- (vii) Define vibratory motion and give example.
- (viii) How is a vector represented?

4. Write short answers to any Five (5) questions:**10**

- (i) Define rotatory motion. With example.
- (ii) Define circular motion. With example.
- (iii) What do know about position?
- (iv) Define vector and write the name of two vector quantities.
- (v) Define acceleration and write its formula.
- (vi) What is meant by positive and negative acceleration?
- (vii) Explain graphically the object is at rest.
- (viii) Derive $S = vit + \frac{1}{2} at^2$

(PART – II)**Note : Attempt any TWO questions.**

5. (a) Prove that $s = vit + \frac{1}{2} at^2$

4

- (b) Derive first equation of motion with the help of graph. **5**
6. (a) Difference between Scalars and Vectors quantities. **4**
- (b) A cricket ball is hit vertically upward and returns to ground 6 s later. Calculate (i) maximum height reached by the ball. (ii) Initial velocity of the ball. **5**
7. (a) Differentiate between distance and displacement. **4**
- (b) A stone is dropped from the top of a tower. The stone hits the ground after 5 second. Find a) The height of the tower b) The velocity with which the stone hits the ground **5**