

Kinematics

Sr	Questions	Answers Choice
1	Change in position of a body from initial to final point is called	A. Velocity B. Speed C. Displacement D. Distance
2	A ball is thrown straight up, what is the magnitude of acceleration at the top of its path.	A. 9.8 m/s ² B. zero C. 19.6 m/s ² D. 4.9 m/s ²
3	If a cyclist has acceleration of 2 m/s ² for 5 seconds, the change in velocity of the cyclist is.	A. 15 m/s B. 10 m/s C. 2 m/s D. 20 m/s
4	A ball is dropped from the top of a tower, the distance covered by it in the first second is.	A. 5 m B. 10 m C. 50 m D. 100 m
5	Ball dropped freely from a tower reaches ground in 4 s, the speed of impact of ball is.	A. 2.45 m/s B. 39.2 m/s C. 0 m/s D. 19.6 m/s
6	A girl walks 3 km towards west and 4 km towards south. What is the magnitude of her total distance and displacement respectively.	A. 7 km, 5 km B. 7 km, 7 km C. 1 km, 7 km D. 7 km, 1 km
7	A rider is training a horse. Horse moves 60 meters towards right in 3 seconds. Then it turns back and travels 30 meters in 2 seconds. Find its average velocity.	A. 18 m/s B. 6 m/s C. 0 m/s D. 35 m/s
8	In 5 s a car accelerates so that its velocity increases by 20 m/s. The acceleration is	A. 0.25 m/s ² B. 4 m/s² C. 100 m/s ² D. 25 m/s ²
9	Motion of a screw of a rotating fan is	A. Circular Motion B. Vibratory motion C. Rotatory motion D. Random Motion
10	A body is moving with constant acceleration starting from rest. It covers a distance S in 4 seconds. How much time does it take to cover one-fourth of this distance.	A. 1 s B. 2 s C. 4 s D. 16 s
11	A body accelerates from rest to a velocity of 144 km/h in 20 seconds. The distance covered by it is.	A. 100 m B. 1400 m C. 400 m D. 1440 m
12	Area under speed-time graph is equal to.....of moving body	A. Acceleration B. Distance C. Change in velocity D. Uniform velocity
13	The area under the speed-time graph is numerically equal to	A. Distance covered B. Velocity C. Uniform velocity D. Acceleration
14	Slope of distance-time graph is.	A. Speed B. Velocity C. Acceleration D. Displacement
15	When the slope of a body's displacement-time graph increases the body is moving with	A. Constant velocity B. Increasing velocity C. Decreasing velocity D. All of these

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- 16 Gradient of the distance -time graph is equal to the
A. Distance covered
B. Acceleration
C. Speed
D. Velocity
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- 17 A car is moving with velocity of 10 m/s . If it has acceleration of 2 m/s² for 10 seconds. What is final vlcocity of the car.
A. 20 m/s
B. 10 m/s
C. 30 m/s
D. 15 m/s
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- 18 The numerical ratio of displacemnt o distance is
A. Equal to or less than one
B. Always greater than one
C. Always equal to one
D. Always less than one
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- 19 A cyclist is travelling in a westward rierction and produces a deceleration of 8 m/s² to stop
A. West
B. North
C. East
D. South
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- 20 Gradient of the speed-time graph is equal to.
A. Speed
B. distance covred
C. Acceleration
D. Velocity
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