

Kinematics

Sr	Questions	Answers Choice
1	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/s ² C. 100 m/s ² D. 25 m/s ²
2	If a cyclist has acceleration of 2 m/s ² for 5 seconds, the change in velocity of they cyclist is.	A. 15 m/s B. 10 m/s C. 2 m/s D. 20 m/s
3	Gradient of the distance -time graph is equal to the	A. Distance covered B. Acceleration C. Speed D. Velocity
4	A car is moving with velocity of 10 m/s . If it has acceleration of 2 m/s ² for 10 seconds. What is final vlocity of the car.	A. 20 m/s B. 10 m/s C. 30 m/s D. 15 m/s
5	A cyclist is travelling in a westward rierction and produces a deceleration of 8 m/s ² to stop	A. West B. North C. East D. South
6	The area under the speed-time graph is numerically equal to	A. Distance covered B. Velocity C. Unifrom velocity D. Acceleration
7	Slope of distance-time graph is.	A. Speed B. Velocity C. Acceleration D. Displacement
8	A body accelerates from rest to a velocity of 144 km h ⁻¹ in 20 seconds. The the distance covered by it is.	A. 100 m B. 1400 m C. 400 m D. 1440 m
9	A girl walks 3 km towards west and 4 km towards south. What is the magnitude of her total disance and displacement respectively.	A. 7 km, 5 km B. 7 km, 7 km C. 1 km, 7 km D. 7 km, 1 km
10	If a body does not change its position with respect to some fixed point, then it will be in a state of.	A. Motion B. Uniform motion C. Rest D. Variable motion
11	When the slope of a body's displacemnt time graph increase the body is moving with	A. Constant velocity B. Increasign velocity C. Decreasing velocity D. All of these
12	Gradient of the speed-time graph is equal to.	A. Speed B. distance covred C. Acceleration D. Velocity
13	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
14	Motion of a screw of rotating fan is	A. Circular Motion B. Vibratory motion C. Rotatory motion D. Random Motion
15	Area under speed-time graphi is equal to.....of moving body	A. Acceleration B. Distance C. Change in velocity D. Uniform velocity

16	A rider is trainign a hours. Hore move 60 meters towrds right in 3 seconds. Then it turns back and travels 30 meters in 2 secons. Find its average velocity.	A. 18 m/s B. 6 m/s C. 0 m/s D. 35 m/s
17	Change in positionof a body from initial to final point is called	A. Velocity B. Speed C. Displacement D. Distance
18	A body is moving with constnat acceleration strting from rest. It vovers a distance S in 4 seconds. How much time does it take to covr one-fourth of this distance.	A. 1 s B. 2 s C. 4 s D. 16 s
19	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
20	Ball dropped freely from a towar 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