# Kinematics

| Sr | Questions | Answers Choice |
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| 1 | 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<br>B. 6 m/s<br>C. 0 m/s<br>D. 35 m/s |
| 2 | A car is moving with velocity of 10 m/s . If it has acceleration of 2 m/s2 for 10 seconds. What is final vlocity of the car. | A. 20 m/s<br>B. 10 m/s<br>C. 30 m/s<br>D. 15 m/s |
| 3 | Area under speed-time graphi is equal to.....of moving body | A. Acceleration<br>B. Distance<br>C. Change in velocity<br>D. Uniform velocity |
| 4 | In 5 s a car accelerates so that its velocity increases by 20 m/s. The acceleration is | A. 0.25 m/s2<br>B. 4 m/s2<br>C. 100 m/s2<br>D. 25 m/s2 |
| 5 | 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<br>B. 7 km, 7 km<br>C. 1 km, 7 km<br>D. 7 km, 1 km |
| 6 | If a body does not change its position with respect to some fixed point, then it will be in a state of. | A. Motion<br>B. Uniform motion<br>C. Rest<br>D. Variable motion |
| 7 | The area under the speed-time graph is numerically equal to | A. Distance covered<br>B. Velocity<br>C. Unifrom velocity<br>D. Acceleration |
| 8 | Slope of distance-time graph is. | A. Speed<br>B. Velocity<br>C. Acceleration<br>D. Displacement |
| 9 | Ball dropped freely from a towar reaches ground in 4 s, the speed of impact of ball is. | A. 2.45 m/s<br>B. 39. 2 m/s<br>C. 0 m/s<br>D. 19. 6 m/s |
| 10 | Motion of a screw of rotating fan is | A. Circular Motion<br>B. Vibratory motion<br>C. Rotatory motion<br>D. Random Motion |
| 11 | A ball is droped from the top of a tower, the distance covered by it in the first second is. | A. 5 m<br>B. 10 m<br>C. 50 m<br>D. 100 m |
| 12 | Change in positionof a body from initial to final point is called | A. Velocity<br>B. Speed<br>C. Displacement<br>D. Distance |
| 13 | Gradient of the distance -time graph is equal to the | A. Distance covered<br>B. Acceleration<br>C. Speed<br>D. Velocity |
| 14 | 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<br>B. 2 s<br>C. 4 s<br>D. 16 s |
| 15 | 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<br>B. 1400 m<br>C. 400 m<br>D. 1440 m |

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| 16 | The numerical ratio of displacemnt o distance is | A. Equal to or less than one<br>B. Always greater than one<br>C. Always equal to one<br>D. Always less than one |
| 17 | A cyclist is travelling in a westward rierction and produces a deceleration of 8 m/s2 to stop | A. West<br>B. North<br>C. East<br>D. South |
| 18 | Gradient of the speed-time graph is equal to. | A. Speed<br>B. distance covred<br>C. Acceleration<br>D. Velocity |
| 19 | A ball is throuwn straight up, what is the magnitude of acceleration at the top of its path. | A. 9.8 m/s2<br>B. zero<br>C. 19.6 m/s2<br>D. 4.9 m/s2 |
| 20 | When the slope of a body's displacemnt time graph increase the body is moving with | A. Constant velocity<br>B. Increasign velocity<br>C. Decreasing velocity<br>D. All of these |