

NEW STANDARD ACADEMY

SEMRI KOTHI SUPER MARKET, RAEBARELI

CLASS 9 (21-05-2024) DPP (Academy)

PHYSICS

1. An athlete completes one round of a circular track of diameter 200 m in 40s. What will be the distance covered and the displacement at the end of 2minutes 20s?
2. Joseph jogs from one end A to the other end B of a straight 300 m road in 2 minutes 30 seconds and then turns around and jogs 100 m back to point C in another 1 minute .What are Josephs' average speed and velocities in jogging.
3. Abdul while driving to school computes the average speed for his trip to be 20 kmh-1. On his return trip along the same route, there is less traffic and the average speed us 30Kmh-1. What is the average speed for Abdul's trip?
4. A motorboat starting from rest on a lake accelerates in a straight line at a constant rate of 3.0 ms-2 for 8.0s. How far does the boat travel during this time?
5. Draw a diagram to show the motion of a body whose speed remains constant but velocity continuously changes
6. Draw displacement –time graphs for the following situations.
 - i) When body is stationary
 - ii) When body is moving with uniform velocity
 - iii) When body is moving with variable velocity.
7. A train is moving at a speed of 40km/h at 10.00 a.m and at 50Km/h at 10.02 Assuming that the train moves along a

straight track and the acceleration is constant, find the value of the acceleration.

8. A particle with a velocity of 2m/s at t=0 moves a straight line with a constant acceleration of 0.2m/s 2m/s at t=0 moves a straight line with a constant acceleration of 0.2m/s². Find the displacement of the particle in 10s.
9. A particle is pushed along a horizontal surface in such a way that it starts with a velocity of 12m/s. Its velocity decreases at a rate of 0.5 m/s² (a) Find the time it will take to come to rest .(b) Find the distance covered by it before coming to rest.
10. When will you say a body is in
 - i) Uniform motion?
 - ii) Non uniform motion?

CHEMISTRY

1. The most 'abundant' element in earth's ceust is:
 - a) Carbon
 - b) Phosphorus
 - c) oxygen
 - d) Nitrogen
2. Which of the following is not a metal?
 - a) Copper
 - b) Silver
 - c) Lead
 - d) Bismuth
3. The non –metal which is a liquid at room temperature is:
 - a) Sulphur
 - b) Chlorine
 - c) Iodine
 - d) Bromine
4. A pure substance can be:
 - a) An element only
 - b) A compound only

