CLASS 9 SUBJECT -PHYSICS DATE 02.06.2020 PAWAN KR.

Home work (Based on the previous learning materials)

CHAPTER (FORCE AND LAWS OF MOTION)

Solve Numerical problems.

Q. N. 1.Two persons manage to push a motor car of mass 1200 kilogram uniform velocity along a level road .The same motor car can be pushed by 3

Person to produce an acceleration of 0.2 m/s². with what force does each person push the motor car ?(Assume that all the persons push the motor car with the same muscular effort)

Q. N. 2 A hammer of mass 500 gram moving at 50 metre per second strikes a nail. The nail stops the hammer in a very short time of 0.01 second .what is the force of the nail on the hammer?

Q. N. 3. A motor car of mass 1200 kilogram is moving along a straight line with a uniform velocity of 90 km per hour. Its velocity is slowed down to 18 kilometre per hour in 4 seconds by an unbalanced force. calculate the acceleration and change in momentum. Also calculate the magnitude of force required.

Q. N. 4 The following is the distance time table on an object in motion.

Time in seconds	Distance in metres
0.	0
1.	1
2.	8
3.	27

4. .   64
5.   125
6.   216
7.   343

    A) what conclusion can you draw about the acceleration? is it constant. Increasing, decreasing, or zero?

    B) what do you infer about the forces acting on the object?