



QUEEN'S VALLEY SCHOOL QUEEN'S VALLEY JUNIOR SCHOOL

ASSINGMENT

For Class : IX

Sections : All Sections

Subject: Physics(Work, Energy and Sound)

Remember the amplitude, or height of a sound wave is a measure of the amount of energy in the wave. so the greater the intensity of a sound, the greater the amplitude.

Q1. Give an example for:

- Force acting in the direction of displacement.
- Force action against the direction of displacement
- Force acting perpendicular to the direction of displacement.

Q2 a) Two bodies have same momentum. Which will have greater Kinetic energy – heavier body or lighter body?

b) Two bodies have same Kinetic energy. Which has greater momentum – heavier body or lighter body.

Q3. Distinguish between work, energy and power. State the S.I units for each of these quantities.

Q4. A porter lifts a luggage of 15 kg from the ground and puts it on his head 1.5m above the ground. Calculate the work done by him on the luggage.

Q5. What is the work to be done to increase the velocity of a car from 30km/hr to 60km/hr if the mass of car is 1500kg?

Q6 A body is vibrating 6000 times in one minute. If the velocity of sound in air is 360m/s Find:

- Frequency of vibration in Hz
- Wavelength of the wave produced

Q7 A wave moves a distance of 8m in 0.05s

- Find the velocity of the wave.
- What is the wavelength of the wave if its frequency is 200hz.

Q8 A child hear an echo from a cliff 4s after the sound from a powerful cracker is produced. How far is the cliff from the child. Velocity of sound in air = 344m/s

Q9 Describe the human ear.

Q10 Give some uses of ultrasound and SONAR.

Q11 Explain the following terms shown in the below diagram

