PHYSICS: CLASS IXTH

TOPIC: SOUND WAVES

PREPARED BY: VIVEK SINGH

TEST: 01

MAX. TIME: 01:00 HRS
MA. MARKS: 30 MARKS

Q1. SHORT ANSWERS QUESTIONS:

(05 MARKS)

- A) Wave used by astronauts for communication in space?
- B) Why Sound waves are called mechanical waves?
- C) Aircrafts flying at speed higher then speed of sound are known as?
- D) What should an object should do produce sound?
- E) Nomenclature for waves containing: i) Crest & trough ii) compression and rarefractions
- **Q2.** An explosion carried out in a vacuum is visible to a human being but is not audible. Why?

(02 MARKS)

- **Q3.** What is sound wave? Define their types along with the proper diagram. **(05 MARKS)**
- **Q4.** Define the following terms:

(10 MARKS)

- A) Wavelength
- B) Time period
- C) Amplitude
- D) Supersonics
- E) Crest & Rarefraction
- **Q5.** A sound wave has a frequency of 2 kHz and wave length 35 cm. How long will it take to travel 1.5 km?

(04 MARKS)

Q6. A ship sends out ultrasound that returns from the seabed and is detected after 3.42 s. If the speed of ultrasound through seawater is 1531 m/s, what is the distance of the seabed from the ship? (04 MARKS)