Name: _____	Subject: Physics	Class: 10th	Time: 80 minutes	Total Marks:	40
Chapter No.	MJDexpert.com			Obtained marks	

Note: Please attempt any 10 short questions from Question 2. Also, attempt both parts (a and b) of Question 3. Cutting and removal of any content is strictly prohibited.

Objective-Section

Q. 1 Encircle the correct answer.   (10x1=10)

1. Which form of energy is sound?
   (A) Mechanical (B) Chemical (C) Thermal (D) Electrical
2. The unit of intensity of sound is:
   (A) Hertz (B) Newton (C) Watt (D) Decibel
3. The pitch of sound mostly depends on:
   (A) Frequency (B) Length (C) Amplitude (D) Wavelength
4. The intensity level of a train siren is:
   (A) 150 dB (B) 130 dB (C) 100 dB (D) 120 dB
5. Frequency of a tuning fork depends upon:
   (A) Length (B) Mass (C) Force (D) Amplitude
6. The sensation of sound persists in our mind for:
   (A) 0.01 s (B) 0.1 s (C) 0.02 s (D) 0.2 s
7. The speed of sound in air at 20°C is:
   (A) 343 m/s (B) 330 m/s (C) 320 m/s (D) 310 m/s
8. In general, the speed of sound is greater in:
   (A) Solids (B) Liquids (C) Gases (D) None of these
9. Which organism can hear sound of frequency up to 120,000 Hz:
   (A) Bats (B) Mice (C) Dogs (D) Cats
10. The speed of sound in a solid is ____ times greater as compared to gases:
    (A) 15 (B) 5 (C) 10 (D) 2

Subjective-Section

Q.2 Write short answers of any ten of the following questions: (10x2=20)

i. What is sound? What are necessary conditions for generation of sound?
ii. Define loudness of sound.
iii. What is the difference between frequency and pitch?
iv. What is meant by sound level? Write its formula.
v. What is meant by decibel scale?
vi. Define resonance.
vii. Define Echo. How much minimum distance for echo?
viii. What is meant by reflection of sound?
ix. What is meant by noise? Write its sources.
x. What is the difference between musical sound and noise?
xi. Write two uses of ultrasound.
xii. What is meant by SONAR?

Q.No.3 Long Question: (5+5=10)

a) Write echo method for measuring the speed of sound.
b) Define loudness of sound. Upon which factors does it depend?