

## I. Choose.

1. Metals
2. 20Hz to 20,000 Hz
3. String instrument
4. Sour
5. Red
6. OH<sup>-</sup>
7. Salt and water
8. Formic acid
9. Violin
10. Hydrochloric acid

## II. Fill in

11. Oscillations
12. Vibrating bodies
13. Ultrasonic sound
14. Bitler
15. Indicator
16. Acidus
17. Frequency
18. Noise Pollution

## III. Match.

19. 330 m
20. Frequency below 20 H z
21. Needs Material Medium
22. Frequency morethan 20,000 Hz
23. Turmeric
24. Phenolphthalein

## IV. True or False.

25. True
26. False
27. True
28. True
29. True
30. True
31. False

## V. Reason and Assertion.

32. Option A : Both assertion and reason are true and reason is correct explanation of assertion.

## VI. Short answers.

33. The most common example of showing that light travels faster than sound is lightning. Whenever a lightning strikes, we see the lightening first and then hear the thunder after sometime.
34. To increase the loudness of the sound by 4 times, the amplitude should be squared.
35. Vibration means a kind of rapid to and fro motion of an object. This to and fro motion of the body causes the substances around it to vibrate.
36. The chemical compounds which have sour taste are called acid. Ex - Hydrochloric acid, sulphuric acid, Nitric acid.
37.
  - ★ Acids are sour in taste
  - ★ Acids are corrosive in nature
  - ★ Acids are colourless
  - ★ Acids are soluble in water.

38.

Acids	Bases
★ They produce H <sup>+</sup> ions in water	★ They produce OH <sup>-</sup> ions in water
★ They are sour in taste	★ They are bitter in taste
★ Few acids are in solid state	★ Most of the bases are in solid state.
★ Acids turn blue litmus paper red	★ Bases turn red litmus paper blue

39. Sound with a frequency greater than 20,000 Hz is called as ultrasonic sound. Animals such as bats, dogs dolphins etc. are able to hear certain ultrasonic sounds as well.

40.

Music	Noise
<ul style="list-style-type: none"> <li>★ Music is produced by the regular patterns of vibrations</li> <li>★ Music is pleasant for hearing</li> </ul>	<ul style="list-style-type: none"> <li>★ Noise is produced by the irregular and non - periodic vibrations</li> <li>★ Noise is unpleasant for hearing</li> </ul>

- 41.
- ★ Noise may cause Irritation, stress, Nervousness and headache.
  - ★ Long term exposure to noise may change the sleeping pattern of a person.
  - ★ Sudden exposure to louder noise may cause a heart attack and unconsciousness.
42. Tree parts such as thick branches, leaves wood effectively absorb sound. So it reduces noise pollution.
- 43.
- ★ Bases are bitter in taste
  - ★ Bases are corrosive in nature
  - ★ Bases are generally colourless
  - ★ Bases also conduct electricity in aqueous solution.
44. When an acid and a base react to form water and a salt involves the combination of  $H^+$  ions and  $OH^-$  ions to generate water.
45. Audible sound, Infrasonic sound, ultrasonic sound
46. Turmeric, Hibiscus flower, Beetroot Juice Litmus, Phenolphthalein, Methyl orange.
- 47.
- ★ All automobiles should have effective silencers.
  - ★ Residential area should be free from heavy vehicles.
  - ★ People working in noisy factories should wear ear plugs.

#### VII. Detail.

48. Refer Pg. No. 2 and 3
49. Refer Pg. No. 53
50. Refer Pg. No. 5
51. Refer Pg. No. 55
52. Refer Pg. No. 8 and 9
53. Refer Pg. No. 57 and 58