Sound

Question 1.
Sound can travel through:
(a) gases only
(b) solids only
(c) liquids only
(d) solids, liquids and gases

▼ Answer

(d) solids, liquids and gases
Sound can travel through solids, liquids and gases.

Question 2.
Voice of which of the following is likely to have minimum frequency:
(a) baby girl
(b) baby boy
(c) a man
(d) a woman

▼ Answer

(a) baby girl
Baby girl is likely to have minimum frequency.

Question 3.
Vibration in a body produce:
(a) energy
(b) sound
(c) heat
(d) none of these

▼ Answer

(b) sound
Vibration if a body produce sound.

Question 4.
A shehnai produces sound from:
(a) vibrating strings
(b) vibrating membrane
(c) vibrating air column
(d) none of these

▼ Answer

(c) vibrating air column
A shehnai produces sound from vibrating air column.

Question 5.
Drum produces sound from:
(a) vibrating membrane
(b) vibrating stretched membrane
(c) vibrating strings
(d) none of these

▼ Answer

(b) vibrating stretched membrane
Drum produces sound from vibrating stretched membrane.

Question 6.
Frequency of oscillations is:
(a) the number of oscillations per minute
(b) the number of oscillations per hour
(c) the number of oscillations per second
(d) none of these

▼ Answer

(c) the number of oscillations per second
Frequency of oscillations is the number of oscillations per second.

Question 7.
The unit of frequency is:
(a) hertz
(b) hertz /sec
(c) hertz / min
(d) hertz / hour

▼ Answer

(a) hertz
The unit of frequency is hertz.

Question 8.
The frequency determines the of a sound.
(a) loudness
(b) pitch
(c) both loudness and pitch
(d) none of these

▼ Answer

(b) pitch
The frequency determines the pitch of a sound.

Question 9.
When the amplitude is small, the sound produced is:
(a) loud
(b) feeble
(c) low pitched
(d) none of these

▼ Answer

(b) feeble
When the amplitude is small, the sound produced is feeble.

Question 10.
The ultrasound equipment works at frequencies:
(a) higher than 20,000 Hz
(b) lower than 20,000 Hz
(c) less than 20 Hz
(d) none of these

▼ Answer

(a) higher than 20,000 Hz
The ultrasound equipment works at frequencies higher than 20,000 Hz.

Question 11.
Noise pollution causes:
(a) lack of sleep
(b) hypertension
(c) anxiety
(d) all of these

▼ Answer

(d) all of these
Noise pollution causes lack of sleep, hypertension, anxiety.

Question 12.
Trees planted along the roads reduces the harmful effect of:
(a) noise pollution
(b) air pollution
(c) both (a) and (b)
(d) none of these

▼ Answer

(c) both (a) and (b)
Trees planted along the roads reduces the harmful effects of noise pollution and air pollution.

Question 13.
Number of vocal cords in human is:
(a) one
(b) two
(c) four
(d) none of these

▼ Answer

(b) two
Number of vocal cords in human is two.

Question 14.
Sound:
(a) can travel through vacuum
(b) cannot travel through vacuum
(c) sound can sometimes travel through
(d) none of these vacuum

▼ Answer

(b) cannot travel through vacuum
Sound cannot travel through vacuum.

Question 15.
Sound:
(a) Sound requires a medium to travel
(b) does not require a medium to travel
(c) sometimes require a medium to travel
(d) none of these

▼ Answer

(a) Sound requires a medium to travel
Sound requires a medium to travel.

Question 16.
Propagation of sound is fastest In:
(a) gases
(b) liquids
(c) solids
(d) vacuum

▼ Answer

(c) solids
Propagation of sound is fastest in solids.

Question 17.
Sound does not travel in:
(a) vacuum
(b) gases
(c) solids
(d) liquids

▼ Answer

(a) vacuum
Sound does not travel in vacuum.

Question 18.
Unwanted and unpleasant sounds are called:
(a) noise
(b) noise pollution
(c) music
(d) air pollution

▼ Answer

(a) noise
Noise is unwanted and unpleasant sound.

Question 19.
Process of receiving sound vibrations and sensing them by brain is called :
(a) producing
(b) speaking
(c) sensing
(d) hearing

▼ Answer

(d) hearing
Process of receiving sound vibrations and sensing them by brain is called hearing

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Question 20.
Voice box has stretched string like parts, which vibrate to produce sound are called:
(a) larynx
(b) vocal cords
(c) nerves
(d) arteries

▼ Answer

(b) vocal cords
Voice box has stretched string like parts, which vibrate to produce sound are called vocal cords.

Quesiton 21.
Large amplitude of sound vibrations will produce:
(a) loud sound
(b) slow sound
(c) meak sound
(d) shreak

▼ Answer

(a) loud sound
Large amplitude of sound vibrations will produce loud sound.

Question 22.
High frequency of sound vibrations will produce a:
(a) loud sound
(b) shreak
(c) meak sound
(d) low piched sound

▼ Answer

(b) shreak
High frequency of sound vibration will produce a shreak.

Question 23.
Excess unwanted sounds is environment can cause:
(a) noise
(b) disturbance
(c) noise pollution
(d) air pollution

▼ Answer

(c) noise pollution
Excess unwanted sounds is environment can cause noise pollution.

Question 24.
The range of audible sound for human ear is:
(a) less than 20 Hz
(b) more than 20,000 Hz
(c) from 20 Hz to 20,000 Hz
(d) none of these

▼ Answer

(c) from 20 Hz to 20,000 Hz
The range of audible sound for human ear is from 20 Hz to 20,000 Hz.

Question 25.
The amplitude of the sound wave decides its:
(a) loudness
(b) pitch
(c) speed
(d) none of these

▼ Answer

(a) loudness
The amplitude of the sound wave decides its loudness.

Question 26.
If the amplitude becomes twice than the loudness of sound increases by a factor of:
(a) 2
(b) 4
(e) no change
(d) none of these

▼ Answer

(b) 4
If the amplitude becomes twice than the loudness of sound increases by a factor of 4.
Loudness of sound is proportional to the square of the amplitude of the vibration producing the sound.

Question 27.
In sitar sound Is produced by:
(a) beating
(b) rubbing
(c) blowing
(d) plucking

▼ Answer

Answer: (a)
In sitar sound is produced by plucking.

Match the Column-A with Column-B:

Question 1.

Column-A	Column-B
(a) Unit of frequency	(i) Amplitude

(b) Pleasant sound	(ii) High frequency
(c) Unwanted sound	(iii) Hertz
(d) High pitch sound	(iv) Music
(e) Loudness	(v) Noise

▼ Answer

Column-A	Column-B
(a) Unit of frequency	(iii) Hertz
(b) Pleasant sound	(iv) Music
(c) Unwanted sound	(v) Noise
(d) High pitch sound	(ii) High frequency
(e) Loudness	(i) Amplitude

Question 2.

Column-A	Column-B
(a) Number of vibrations produced by a vibrating particle in one second	(i) 330 m / sec
(b) Pitch	(ii) frequency
(c) Flute	(iii) vibration
(d) To and fro motion of a vibrating body about its mean position	(iv) vibration air column
(e) Speed of sound in air	(v) frequency of vibration

▼ Answer

Column-A	Column-B
(a) Number of vibrations produced by a vibrating particle in one second	(v) frequency of vibration
(b) Pitch	(ii) frequency
(c) Flute	(iv) vibration air column
(d) To and fro motion of a vibrating body about its mean position	(iii) vibration
(e) Speed of sound in air	(i) 330 m / sec

Question 3.

Column-A	Column-B
(a) Sound propagation	(i) Time period

(b) Maximum displacement of a vibrating particle from its mean position	(ii) Vacuum
(c) 1 KHz	(iii) Amplitude
(d) Time in which vibrating particle completes one vibration	(iv) Material medium
(e) A medium through which sound cannot travel	(v) 1000 Hz

▼ Answer

Column-A	Column-B
(a) Sound propagation	(iv) Material medium
(b) Maximum displacement of a vibrating particle from its mean position	(iii) Amplitude
(c) 1 KHz	(v) 1000 Hz
(d) Time in which vibrating particle completes one vibration	(i) Time period
(e) A medium through which sound cannot travel	(ii) Vacuum

State whether the following statements are True or False:

Question 1.
Sound cannot travel in vacuum.

▼ Answer

True

Question 2.
The number of oscillations per sound of a vibrating object is called its time period.

▼ Answer

False

Question 3.
If the amplitude of vibration is large, sound is feeble.

▼ Answer

False

Question 4.
For human ears, the audible range is 20 Hz to 20,000 Hz.

▼ Answer

True

Question 5.
The lower the frequency of vibration, the higher is the pitch.

▼ Answer

False

Question 6.
Unwanted or unpleasant sound is termed as music.

▼ Answer

False

Question 7.
Noise pollution may cause partial hearing impairment.

▼ Answer

True

Question 8.
The loudness of sound is measured in hertz.

▼ Answer

False

Question 9.
One hertz means one vibration per second.

▼ Answer

False

Question 10.
Sound travels fastest in solids.

▼ Answer

true

Question 11.
We can hear all the vibrations made by different bodies.

▼ Answer

False

Question 12.
Cusions, curtains and rugs absorb sound.

▼ Answer

True

Question 13.
The quality of sound depends on the material of vibrating part.

▼ Answer

True

Question 14.
Sound with frequency above 20,000 Hz is called ultrasonic.

▼ Answer

True

Question 15.
Smaller the amplitude of vibration, the louder is the sound.

▼ Answer

False

Question 16.
In human beings, the vibration of the vocal cords produces sound.

▼ Answer

True

Fill in the blanks:

Question 1.
Time taken by an object to complete one oscillation is called …….

▼ Answer

time period

Question 2.
Loudness is determined by the ……. of vibration.

▼ Answer

amplitude

Question 3.
The unit of frequency is ……..

▼ Answer

hertz

Question 4.
Unwanted sound is called ……..

▼ Answer

noise

Question 5.
Shrillness of a sound is determined by the ……. of vibration.

▼ Answer

frequency

Question 6.
Sound is produced by ……. objects.

▼ Answer

vibrating

Question 7.
……. in human beings vibrate to produce sound.

▼ Answer

Vocal cords

Question 8.
When we touch a source of sound, we can feel the ……..

▼ Answer

vibrations

Question 9.
Sound cannot travel in ……..

▼ Answer

vacuum

Question 10.
The audible frequency for human ear is ……..

▼ Answer

20 Hz to 20,000 Hz

Question 11.
Sound requires a ……. to travel.

▼ Answer

medium

Question 12.
The number of vibrations per second defines ……..

▼ Answer

frequency

Question 13.
Sound travels fastest in ……..

▼ Answer

solids

Question 14.
Only vibrating bodies produce ……..

▼ Answer

sound

Question 15.
……. part of dholak vibrate to produce sound.

▼ Answer

Stretched membrane

Question 16.
……. part of Sitar vibrate to produce sound.

▼ Answer

Stretched string

Question 17.
……. part of flute vibrate to produce sound.

▼ Answer

Air column
