

11. According to Newton sound travel in air under the conditions of

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|--------------|---------------|
| A. adiabatic | B. isothermal |
| C. isobaric | D. isochoric |

Answer: Option C

12. Sound waves do not travel in vacuum because

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|---|-----------------------------------|
| A. they are transverse waves | B. they are stationary waves |
| C. they require material medium for propagation | D. they do not have enough energy |

Answer: Option C

13. Velocity of sound in vacuum is

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|-------------------------|-------------------------|
| A. 332 ms ⁻¹ | B. 320 ms ⁻¹ |
| C. Zero | D. 224 ms ⁻¹ |

Answer: Option C

14. Increase in velocity of sound in the air for 1 °C rise in temperature is

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|--------------------------|--------------------------|
| A. 1.61 ms ⁻¹ | B. 61.0 ms ⁻¹ |
| C. 0.61 ms ⁻¹ | D. 2.00 ms ⁻¹ |

Answer: Option C

15. The velocity of sound is greatest in

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| A. Water | B. air |
| C. copper | D. ammonia |

Answer: Option C

16. On loading the prong of a tuning form with wax its frequency

- A. increases B. decreases
C. remains unchanged D. may increase or decrease

Answer: Option B

17. The velocity of sound in air would become double than its velocity at 0°C at temperature

- A. 313°C B. 586°C
C. 819°C D. 1172°C

Answer: Option C

18. The normal ear is the most sensitive in the frequency range

- A. 20000 to 30000 hertz B. 10 to 20 hertz
C. 2000 to 4000 hertz D. 6000 to 8000 hertz

Answer: Option C

19. Ultrasonic have

- A. frequency in the audible range B. frequency is greater than 20 kHz
C. frequency lower than 20 Hz D. all of above

Answer: Option B

20. The periodic alternation of sound between maximum and minimum loudness are called

- A. silence zone B. interference
C. beats D. resonance

Answer: Option C