21. The number of beats produced per second is equal to

A. the sum of the frequencies of two tuning forks
B. the difference of the frequencies of two tuning forks
C. the ratio of the frequencies of two tuning forks
D. the frequency of either of the two tuning forks

Answer: Option B

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22. Beats are the results of

A. diffraction of sound waves
B. constructive and destructive interference
C. polarization
D. destructive interference

Answer: Option B

---

23. Silence zone takes place due to

A. constructive interference
B. destructive interference
C. beats
D. resonance

Answer: Option B

---

24. Doppler effect applies to

A. sound wave only
B. light wave only
C. both sound and light waves
D. neither sound nor light wave

Answer: Option C

---

25. When the source of sound moves away form a stationary listener then _____ occurs.

A. an apparent increase in frequency
B. an apparent decrease in frequency
C. an apparent decrease in wavelength
D. no apparent change in frequency

Answer: Option **B**

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26. A simple pendulum has a bob of mass m and its frequency is f. If we replaced the bob with a heavier one say of 2m then that will be its new frequency?

A. 1/4f
B. 1/2f
C. frequency lower than 20 Hz
D. 2f

Answer: Option **C**

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27. Which one is the correct relation for fundamental frequency of open and closed pipe?

A. fopen = 2 fclosed
B. fclosed = 2fopen
C. fopen = fclosed
D. fopen = 1 / f closed

Answer: Option **A**

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28. In open organ pipe

A. only even harmonics are present
B. only odd harmonics are present
C. both even and odd harmonics are present
D. selected harmonics are present

Answer: Option **C**

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29. Which one is the correct relation?

A. VNewton = V Laplace
B. VNewton =
C. VNewton =
D. VNewton =

Answer: Option **C**

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30. The dimension of elastic modulus ? is

A. ML-1T-2
B. ML-2T-2
C. MLT-2
D. ML2T-2

Answer: Option **A**