Assignment 06

The due date for submitting this assignment has passed. Due on 2019-09-11, 23:59 IST. As per our records you have not submitted this assignment.

1) Which part of human ear converts sound vibrations into electrical signals?  
   - [ ] Hammer  
   - [ ] Stirrup  
   - [ ] Tympanic membrane  
   - [x] Cochlea  
   No, the answer is incorrect.  
   Score: 0  
   Accepted Answers:  
   Cochlea  

2) _______ microphones are useful for measuring noise close to airplane wings.  
   - [ ] Pressure  
   - [ ] Free field  
   - [ ] Random incidence  
   - [ ] Diffusive field  
   No, the answer is incorrect.  
   Score: 0  
   Accepted Answers:  
   Pressure  

3) In carbon microphones, a variation in which of the following parameter was correlated to find out sound pressure level (SPL)?  
   - [ ] Inductance  
   - [ ] Inductance
Lecture 33: Noise sources and introduction to microphones (unit? unit=51&lesson=54)
Lecture 34: Classification of microphones-I (unit? unit=51&lesson=55)
Lecture 35: Classification of microphones-II (unit? unit=51&lesson=56)
Lecture 36: Classification of microphones-III (unit? unit=51&lesson=57)
Quiz: Assignment 06 (assessment? name=127)
Feedback for Week 6 (unit? unit=51&lesson=135)

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4) Two waves can add constructively or destructively. This phenomenon is termed as: 1 point
- Reflection.
- Refraction.
- Diffraction.
- Interference.
No, the answer is incorrect.
Score: 0
Accepted Answers: Resistance.

5) Variation in capacitance is used to measure sound pressure level in __________. 1 point
- Carbon microphones.
- Electrostatic microphones.
- Fiber optics microphones.
- Piezoelectric microphones.
No, the answer is incorrect.
Score: 0
Accepted Answers: Electrostatic microphones.

6) What is the advantage of electret microphones over DC biased capacitor microphones? 1 point
- Electret microphones permanently store charge across condenser plates. So there is no requirement of external power supply.
- Electret microphones use graphite particles so that they can produce high level audio signals from low DC voltage.
- Electret microphones use piezoelectric materials so that they can be used in high stress situations.
- Electret microphones use transistor valves which require less power.
No, the answer is incorrect.
Score: 0
Accepted Answers: Electret microphones permanently store charge across condenser plates. So there is no requirement of external power supply.

7) Which one of the following options is true regarding a 1-3 piezoelectric microphones? 1 point
- In 1-3 piezoelectric microphones, voltage is measured perpendicular to the direction in which the stress is applied.
- In 1-3 piezoelectric microphones, voltage is measured in the direction of applied stress.
- In 1-3 piezoelectric microphones, moving coil is displaced in the direction of applied stress.
- In 1-3 piezoelectric microphones, moving coil is displaced perpendicular to the direction in which the stress is applied.
No, the answer is incorrect.
Score: 0
Accepted Answers:
In 1-3 piezoelectric microphones, voltage is measured perpendicular to the direction in which the stress is applied.

8) Microphone which senses all frequencies from every direction with same sensitivity is called ______.

- Omni directional.
- Cardioid.
- Sub cardioid.
- Hyper cardioid.

No, the answer is incorrect.
Score: 0
Accepted Answers:
Omni directional.

9) What is the preferred shape of frequency response curve for a good microphone?

- It should be linear in the band width of interest.
- It should be linear with slope zero in the band width of interest.
- It should be non linear in the band width of interest.
- It should be linear with negative slope in the band width of interest.

No, the answer is incorrect.
Score: 0
Accepted Answers:
It should be linear with slope zero in the band width of interest.