Assignment 3

Due on 2019-06-16, 23:09 IST.

Week 5 - Week 3

The data for submitting this assignment has passed.
At present your records do not have this assignment.

1. Which of the following statements is TRUE?
   - The direct sound helps in understanding the direction and loudness of the source.
   - The direct sound helps in understanding the reverberation time of the room.
   - The direct sound creates the perception of the shape and size of the room.
   - The reflected sound goes across the distance where the sound source is.

2. No. the answer is incorrect. Answer 2.

   Direct sound helps in understanding the reverberation time in the room.

3. What do abiters target a frequency range, which of the following targets a particular frequency for absorption?
   - First abiter
   - Second abiter
   - Third abiter
   - Fourth abiter

4. No. the answer is incorrect. Answer 1.

   First abiter targets a particular frequency for absorption.

5. Height measurement constant, in rooms of different volumes, when given a choice between ceiling and wall to put absorbers, it is advisable to:
   - Put the walls for large volume rooms and ceilings for small volume rooms.
   - Put the walls for small volume rooms and ceilings for large volume rooms.
   - Put the walls for large volume rooms and ceilings for both volume rooms.
   - Put the ceiling for large volume rooms and walls for small volume rooms.

6. No. the answer is incorrect. Answer 5.

   Height measurement constant, in rooms of different volumes, when given a choice between ceiling and wall to put absorbers, it is advisable to put the walls for large volume rooms and ceilings for small volume rooms.

7. Phenomena of 'drooping attenuation' happens in which part of a concert hall and why?
   - In first seats where the direct sound comes from source at very low angle.
   - In back seats where the direct sound comes from source at very high angle.
   - In back seats where the direct sound comes from source at very low angle.
   - In first seats where the direct sound comes from source at very high angle.

8. No. the answer is incorrect. Answer 8.

   Phenomena of 'drooping attenuation' happens in first seats where the direct sound comes from source at very low angle.

9. The value based on percentage of correctly heard syllables by a set of individuals in a given space is:
   - The value based on percentage of correctly heard syllables by a set of individuals in a given space.
   - The value based on percentage of correctly heard syllables by a set of individuals in a given space.
   - The value based on percentage of correctly heard syllables by a set of individuals in a given space.
   - The value based on percentage of correctly heard syllables by a set of individuals in a given space.

10. No. the answer is incorrect. Answer 3.

    The value based on percentage of correctly heard syllables by a set of individuals in a given space.

11. For an auditorium:
   - The reverberation time is important for complete hearing.
   - The percentage of correctly heard syllables by ear of individuals in a given space is calculated using the formula.
   - The reverberation time is important for complete hearing.
   - The percentage of correctly heard syllables by ear of individuals in a given space is calculated using the formula.

12. No. the answer is incorrect. Answer 7.

    The reverberation time is important for complete hearing.

13. All the above statements are correct.

14. No. the answer is incorrect. Answer 1.

    Correct answer: All the above statements are correct.

15. Calculate the impulse response for f = 2000 Hz for two cases, as compared to case 1, the floor is uniform, as shown in the figure below. Dimensions: 4.64 m x 4.64 m acoustic floor (abo). Height of ceiling 3.97 m, sight in real area of 0.32 m.

    Case 1: Densely paved
    Case 2: Closely packed

    No. the answer is incorrect. Answer 2.

    Answer: Closely packed

16. Which of the statements are TRUE in context of high-speed speech intelligibility?
   - High intelligibility of the speech delivered in a hall.
   - Better phonetics of the speech delivered in a hall.
   - Higher ratio of the word to sentence intelligibility as a listener.
   - Larger overlap of the reflected sound energy of the first impulse with the second impulse.

    No. the answer is incorrect. Answer 4.

    Correct answer: Better phonetics of the speech delivered in a hall.

17. No. the answer is incorrect. Answer 5.

    Correct answer: Better phonetics of the speech delivered in a hall.

18. No. the answer is incorrect. Answer 6.

    Correct answer: Better phonetics of the speech delivered in a hall.

19. No. the answer is incorrect. Answer 7.

    Correct answer: Better phonetics of the speech delivered in a hall.