Assignment 10

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment.

Due on 2019-04-10, 23:59 IST.

Questions 6, 7 and 8 are linked to the data given in question 6. While filling up the blanks with alphabets, please use one word only. Ensure that the spelling of the word entered is correct.

1) Name a strategy for preventing transmission of airborne noise.

No, the answer is incorrect.
Score: 0
Accepted Answers:
String containing any of these (OR): insulation, absorption

2 points

2) Name a strategy for preventing the transmission of noise from machine to building (on which the machine is resting).

No, the answer is incorrect.
Score: 0
Accepted Answers:
String containing any of these (OR): discontinuity, isolation

2 points

3) The ratio of sound energy transmitted to the energy incident is called ..........  

Absorption loss
Transmission loss
Transmission coefficient

2 points
4) The transmission coefficient of a defect free wall is 0.1. Over a period of time large number of cracks develop within the wall. The area of cracks sums up to 20 % of the initial wall area. Determine the new transmission coefficient of the cracked wall.

- 0.19
- 0.28
- 0.39
- 0.48

No, the answer is incorrect.
Score: 0
Accepted Answers:
0.28

5) A wall has surface density of 50 kg/m². What is the transmission loss (in dB) through the wall at 5000 Hz?

- 65.35
- 38.42
- 57.63
- 49.97

No, the answer is incorrect.
Score: 0
Accepted Answers:
49.97

6) Two reverberation rooms (one source room and one receiving room) separated by a partition wall are used for measurement of transmission loss value of the partition wall. The area of the partition wall is 5×5 m². In order to calibrate for the total absorption value of the receiving room, two partition walls were tested one after the other. In both tests, the source room sound level was maintained constant at 90 dB. The measured sound levels in the receiving room in the above two cases were 70 dB and 60 dB respectively for two partition walls. The transmission loss (TL) values for the partitions are in the ratio of 2:3 (i.e. partition 1 : partition 2). Given, the total surface area of the receiving room is 100 m². Both the rooms are isolated from external noise.

Transmission loss value of partition 1 (in dB) is .................

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 18,22

2.5 points

7) Transmission loss value of partition 2 (in dB) is .................

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 28,32
8) The average absorption coefficient for the receiving room is ..............

No, the answer is incorrect.
Score: 0

Accepted Answers:
(Type: Range) 0.23, 0.27