Assignment 5

Due on 2019-10-05, 23.59 IST.

The data set for this assignment has passed, and per our records you have not submitted this assignment.

1. Due to environmental sound in a large space, the phenomenon of reverberating sound leads to
   - Refraction and room gain
   - Reflection and standing waves
   - Reverberation and Resonance
   - Relections and refraction
   - The power is increased.
   - Acoustics Answer:
     - Reverberation and room gain

2. While designing the shape of an auditorium on the acoustical consideration of an architect to
   - Minimise the distance between sound source, audience, and maximise distance with reflective walls
   - Minimise the distance between sound source, audience, and minimise distance with reflective walls
   - Minimise the distance between sound source and audience
   - The power is increased.
   - Acoustics Answer:
     - To minimise the distance between sound source, audience, and the reflective walls

3. The correct distance between chorus, audience, and the reflective walls
   - Acoustic purpose of placing the auditorium door
   - To bring audience closer to stage and increase intimacy
   - To have better clarity
   - To increase the volume of the hall
   - To have better visibility.
   - The power is increased.
   - Acoustics Answer:
     - To bring audience closer to stage and increase intimacy

4. Introduction of barriers in an auditorium helps to compensate the distance of sound heard but in this process
   - decreases both the volume of the hall and the reach of the sound below the hall
   - increases the height of the hall and decreases the reach of sound below the hall
   - increases the volume and decreases the height
   - obstructs the direct reach of sound to the audience in the hall
   - The power is increased.
   - Acoustics Answer:
     - Increases the height of the hall and decreases the reach of sound below the hall

5. To avoid fluttering sound in the Symphony hall the balconies were
   - Narrow and along the sides
   - Wide and along the sides
   - At the back of the hall
   - Distributed all around
   - The power is increased.
   - Acoustics Answer:
     - Narrow and along the sides

6. Early Decay Time refers to
   - 10 milliseconds after the impulse from the source
   - Time required for complete decay of source sound
   - Time required to stop sound intensity level by 10 decibels
   - One-sixth of the reverberation time of the hall
   - The power is increased.
   - Acoustics Answer:
     - One-sixth of the reverberation time of the hall

7. Choose the correct matching of the shape of halls with the symbols
   - (A) T-shaped hall (B) Oval shape (C) U-shaped hall (D) True box
   - (A) Symphony Hall (B) Concert Hall (C) Forum Hall (D) Walt Disney Hall
   - (A) True box (B) Oval shape (C) U-shaped hall (D) T-shaped hall
   - 2 points
   - Acoustics Answer:
     - (A) Symphony Hall (B) Concert Hall (C) Forum Hall (D) Walt Disney Hall

8. Which of the following options are true for auditorium settings?
   - Multiple fast reflecting surfaces at different angles or a polished single wall surface because
     - The reflective sound to reach the rear pavilion faster
     - Reflected sound travels faster than the reflected sound due to art and lighting reflection
     - Sound is reflected inside the auditorium due to corner bounce wall treatment
     - The power is increased.
     - Acoustics Answer:
       - (A) T-shaped hall (B) Oval shape (C) U-shaped hall (D) T-shaped hall

9. Which of the following options are true for auditorium settings?
   - Reflective sound bounces better than another non-reflective sound due to corner bounce wall treatment
     - The areas within an enclosed space not receiving sound could be
     - Front seats where reach of sound is minimum
     - Back seats where sound converges due to corner bounce wall treatment
     - Around seats where sound converges due to corner bounce wall treatment
     - The power is increased.
     - Acoustics Answer:
       - (A) T-shaped hall (B) Oval shape (C) U-shaped hall (D) T-shaped hall

10. The acoustics and soundings of the Walt Disney Hall were made of what kind of surfaces?
    - (A) Concrete and concrete, respectively
    - (B) Concrete and concrete, respectively
    - (C) Concrete and concrete, respectively
    - (D) Concrete and concrete, respectively
    - 2 points
    - Acoustics Answer:
      - (A) Concrete and concrete, respectively