



QP CODE: 23104984

Reg No : .....

Name : .....

**B.VOC DEGREE REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS,  
FEBRUARY 2023**

**First Semester**

B.Voc Sound Engineering

**BSES104 - SCIENCE OF SOUND**

2018 Admission Onwards

BF91749C

Time: 3 Hours

Max. Marks : 80

**Part A**

*Answer any ten questions.*

*Each question carries 2 marks.*

1. What do you mean by RMS value?
2. Which is the frequency range that is mainly related to human speech intelligibility?
3. What do you mean by 'release' in sound envelope?
4. How can you create pink noise?
5. What is the axial mode when sound is reflected between six surfaces?
6. Give the expansion of SPL.
7. Give a practical example for doppler effect.
8. What is the absorption coefficient value for 100% absorption?
9. Define 'critical distance'.
10. What do you mean by distortion?
11. Write the full form of STC.
12. What is the ideal reverb time value in a small recording studio?

(10×2=20)

**Part B**

*Answer any six questions.*

*Each question carries 5 marks.*



13. Explain how sound wave travels through air?
14. What do you mean by pitch?
15. Explain reflection of sound.
16. What do you mean by auditory canal resonance?
17. What is the function of ear drum?
18. Explain Hass effect.
19. What do you mean by masking?
20. How to calculate reverb time of a room?
21. What do you mean by absorption coefficient?

(6×5=30)

**Part C**

*Answer any two questions.*

*Each question carries 15 marks.*

22. Explain different types of sound waveforms, with suitable figures.
23. Discuss the three room modes. How are they caused?
24. Draw and discuss the importance of Fletcher and Munson curve.
25. What do you mean by sound isolation? How can you achieve it?

(2×15=30)