20101372

B Voc Degree Examination, NOVEMBER 2020

First Semester

B.Voc Sound Engineering

BSES104 - SCIENCE OF SOUND

2018 admission onwards

4C82B088

Time: 3 Hours   Max. Marks : 80

Part A

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. What happens to loudness of sound when amplitude is decreased?

2. What is the human hearing frequency range?

3. What do you mean by 'decay' in sound envelope?

4. What is tangential mode?

5. What is a reverberant field?

6. Which frequency range does the human auditory canal enhance?

7. Which part of the human ear is known as body's balance organ?

8. What is the effect that is created when sound goes through multiple reflections?

9. What is an echo?

10. What happens when there is a movement between the sound source and listener?

11. Write the full form of STC.

12. Write down Sabine equation.

(10×2=20)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Explain fundamental frequency and harmonics.

14. What is the difference between VU meter and PPM meter?

15. What is a node and anti-node?

16. Describe the function of semi-circular canals.

17. Explain Doppler effect. Where can you observe this effect?

18. What is pink noise?

19. Explain spacial localization.

20. What do you mean by sound isolation?

21. Define transmission loss.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. Explain the different characteristics of sound.

23. Comment on sound absorption, reflection, refraction and diffraction.

24. Draw and discuss the importance of Fletcher and Munson curve.

25. What are the important acoustical features required for a recording studio?

(2×15=30)