

QP CODE: 23146831

Reg No : Name :

B.A DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS, DECEMBER 2023

First Semester

B.A Audiography & Digital Editing

Core Course - AE1CRT01 - SCIENCE OF SOUND

2017 Admission Onwards

F74C303A

Time: 3 Hours

Max. Marks: 80

Part A

Answer any **ten** questions.

Each question carries 2 marks.

- 1. What is amplitude of sound?
- 2. What is an Octave?
- 3. What is the speed of sound in air?
- 4. What is the relation between Temperature and speed of the sound?
- 5. Doubling the pressure gives an increase of db. Explain with equation.
- 6. What is decibel?
- 7. How wavelength is related with diffraction of sound?
- 8. What is mean by loudness?
- 9. What is frequency of sound?
- 10. What is ITD?
- 11. Explain the application of echo.
- 12. What is dambing?

(10×2=20)

Part B

Answer any **six** questions. Each question carries **5** marks.

- 13. Explain ultrasonic sound and infrasonic sound.
- 14. What is in phase and out phase? Explain with diagram.
- 15. What is simple and complex sound?
- 16. What is timber of the sound?
- 17. Practical application of echo.
- 18. What is dynamic range and frequency range of hearing?
- 19. What are Doppler Effect and its application?
- 20. How we perceive the space through sound?
- 21. What is early reflection?

(6×5=30)

Part C

Answer any **two** questions. Each question carries **15** marks.

- 22. What is room mode? Calculate the room mode up to 3rd order of room width 15 feet length 16 feet And height 11 feet.
- 23. Explain hearing mechanism, with diagram.
- 24. Explain sound localization. Direction and space.
- 25. What is absorption coefficents of materials? Explain about any three materials.

(2×15=30)