

Enrolment Number: _____

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
B.TECH MIDSEM EXAMINATION
7th SEMESTER

ACY-2021-22 (EVEN SEM)

Subject Name (Code): Audio & Video (203107443)

Branch: E&C

Date: 03/08/2022

Time: 10:30 AM to 12:00PM

Total Marks: 40

Sf. No.		Marks
Q.1	(A) One-line Questions	05
	(1) The typical value of total absorption of sound by a seated person is__ (a) 0.1 sabine (b) 0.5 sabine (c) 0.7 sabine (d) 0.3 sabine	
	(2) __ is the typical value of SRI for 6-mm thick glass for 10 kg/m ² mass (a) 24 dB (b) 19 dB (c) 10 dB (d) 40 dB	
	(3) _____ is not an absorbing material for sound. (a) Painting (b) Mirror (c) Asbestos (d) Perforated board	
	(4) To which stage is the output of microphone fed in PA system? (a) Voltage amplifier (b) Mixer (c) Loudspeaker (d) Power amplifier	
	(5) Reverberation is caused by (a) absorption (b) diffraction (c) refraction (d) reflection	
	(B) Compulsory Question	05
	(1) What are the factors on which reverberation time depends?	
	(2) Define sound reduction index	
	(3) What is the necessity of reverberation?	
	(4) State the typical values of absorption coefficient of some materials are such as Open window, Carpets, Curtain, wooden chair	

(5) What are the various controls in a PA system?

- Q.2 Attempt any four (Short Questions) 12
- (1) Explain the following phenomena with the help of suitable diagrams:
reflection, diffraction, absorption, refraction
 - (2) Explain different types of wireless microphones
 - (3) Draw the block diagram of optical recording of audio signal
 - (4) Draw the diagram of optical assembly for reading CD
 - (5) Compare the various display technologies: LCD, PLASMA, LED, TFT, OLED.
- Q.3 Attempt any two 08
- (1) Explain different conditions to be fulfilled to get good acoustic properties in an auditorium
 - (2) Explain different parameters affecting the performance of wireless microphones
 - (3) Explain the advantages of Compact Discs
- Q.4 (A) Draw and explain World space satellite radio receiver 05
- (B) Draw and explain the block diagram of Audio CD player 05
- OR
- (B) Draw the block diagram of MAC transmitter 05