



# THE AMERICAN COLLEGE, MADURAI

(An Autonomous Institution Affiliated to Madurai Kamaraj University)  
Re-accredited (2<sup>nd</sup> Cycle) by NAAC with Grade “A”, CGPA – 3.46 on a 4-point scale

## Backlog Arrear Examination, March 2021

**PHS 3231**

**Physics in Music**

**Max.Marks:60**

**Time: 2 Hours**

**Part A**

**Answer any four of the following questions.**

**4 x 15 = 60**

1. (a) What is Resonance? Give examples.  
(b) Elaborate on the Characteristics of Musical Sound.
2. How does Sound travel through Human Ear? Explain with a neat diagram.
3. Describe the physical structure of a Violin and the mechanism with which it produces musical notes when bowed.
4. Discuss the importance of construction materials used in a recording studio with special reference to absorption of sound.
5. (a) Explain the phenomenon of ‘Beats’ in sound waves.  
(b) Write a short note on the Musical Interval - ‘Minor Sixth’.
6. What is Reverberation Time? Enumerate the general procedure involved in calculating the reverberation time of any building using Woods – Sabine formula.

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