Reg.No. \_\_\_\_\_\_\_\_\_\_\_\_



**End Semester Examination – Nov/Dec - 2017**

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| **Code :** | **14MT2003** | **Duration :** | **3hrs** |
| **Sub. Name :** | **AUDIO ENGINEERING** | **Max. marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Explain: Inverse square law. | CO1 | 5 |
| b. | Explain the various characteristics of a sound wave in detail. | CO1 | 15 |
| (OR) | | | | |
| 2. | a. | If sound intensity level experienced at 10 feet distance is 80 dB, what will be the sound intensity level experienced from the same source at 20 feet. | CO1 | 3 |
| b. | What will be the wavelength of a 100Hz sound signal? | CO1 | 3 |
| c. | Explain the functioning of Human hearing mechanism with a neat diagram. | CO1 | 14 |
|  |  |  |  |  |
| 3. | a. | Compare electret microphone and condenser mic. | CO2 | 3 |
|  | b. | Compare Handheld microphone with a Boom microphone | CO2 | 3 |
|  | c. | Classify microphones according to their construction and explain in detail the working of the same. | CO2 | 14 |
| (OR) | | | | |
| 4. | a. | Explain NOS, MID-SIDE, SPACED stereo miking techniques. | CO2 | 6 |
|  | b. | Classify microphones according to their polar pattern. | CO2 | 14 |
|  |  |  |  |  |
| 5. |  | Explain Sampling and Quantisation with neat diagrams. | CO1 | 20 |
| (OR) | | | | |
| 6. |  | Explain how magnetic recording and reproduction of binary signals is accomplished. | CO2 | 20 |
|  |  |  |  |  |
| 7. |  | Define Equalization. What are the different types of Equalizers? Explain them in detail. | CO2 | 20 |
| (OR) | | | | |
| 8. | a. | Define Reverberation. Compare Reverb with echo. Explain Digital reverb in detail | CO2 | 10 |
|  | b. | Explain the operation Class B Push-Pull Amplifier with a neat diagram. Explain cross over distortion | CO2 | 10 |
|  | |  |  |  |
|  | | **Compulsory:** |  |  |
| 9. |  | List down all the critical specifications to be looked for before choosing a right loudspeaker for an application. Explain each one of them in detail. | CO3 | 20 |

ALL THE BEST