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



**UNIVERSITY**

(Karunya Institute of Technology & Sciences)

(Declared as Deemed-to-be University under Sec.3 of the UGC Act, 1956)

**End Semester Examination – April/May – 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. |  | Explain in detail how our ears perceive difference in loudness level of sound and perceive the exact location from where the sound is coming. | CO1 | 20 |
| (OR) | | | | |
| 2. |  | Draw a simple audio waveform and list down and explain in detail all the characteristics of a sound wave. | CO1 | 20 |
| 3. | a. | Explain: Off-axis coloration. | CO2 | 3 |
|  | b. | Compare: Condenser & Dynamic microphones. | CO2 | 3 |
|  | c. | Classify microphones according to their polar pattern and explain each of them in detail with neat diagrams. | CO2 | 14 |
| (OR) | | | | |
| 4. | a. | List down any two types of Mono miking techniques. | CO2 | 3 |
|  | b. | Mention the applications of Parabolic microhone | CO2 | 3 |
|  | c. | Explain in detail about the various types of special purpose mics. | CO2 | 14 |
| 5. |  | Explain with relevant diagrams how an analog signal is converted into a digital signal. | CO2 | 20 |
| (OR) | | | | |
| 6. |  | Explain analogue recording with neat diagrams. | CO2 | 20 |
| 7. |  | Explain and give an application for the following signal processors:  a) Parametric Equalizer.  b) Paragraphic Equalizer.  c) Graphic Equalizer. | CO2 | 20 |
| (OR) | | | | |
| 8. | a. | Define Power amplifier. On what basis is the power amplifier classified. Explain the classification of power amplifiers. | CO3 | 10 |
|  | b. | Explain the operation of class A power amplifier with a neat diagram | CO3 | 10 |
|  | | **Compulsory:** | CO3 |  |
| 9. |  | Explain in detail with neat diagram the two basic construction principle of a Loudspeaker. | CO3 | 20 |

ALL THE BEST