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



**End Semester Examination – Nov / Dec – 2019**

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| **Code :** | **17MT2026** | **Duration :** | **3hrs** |
| **Sub. Name :** | **DIGITAL MUSIC** | **Max. Marks :** | **100** |

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

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| **Q. No.** |  | **Questions** | **Course**  **Outcome** | **Marks** | |
| 1. |  | Explain in detail the music production in stringed instruments. Derive the expression for wave equation for stringed instruments. | CO1 | 20 | |
| **(OR)** | | | | | |
| 2. |  | Explain briefly with neat labeled diagrams on music production mechanism in a flute. | CO2 | 20 | |
|  |  |  |  |  | |
| 3. |  | List and explain the five main categories of musical instruments. | CO3 | 20 | |
| **(OR)** | | | | | |
| 4. |  | What is meant by treble clef and bass clef? How does these help musicians? Explain briefly with neat labeled diagrams. | CO3 | 20 | |
|  |  |  |  |  | |
| 5. |  | Write in detail about MPEG file format. Explain the general encoding process with illustration. | CO1 | 20 | |
| **(OR)** | | | | | |
| 6. |  | Mention the significance of digital filters in digital music production. | CO2 | 20 | |
|  |  |  |  |  | |
| 7. |  | Explain in detail the Karplus-Strong algorithm with neat labeled diagrams. | CO1 | 20 | |
| **(OR)** | | | | | |
| 8. |  | Explain in detail the Yamaha DX-7 synthesis and music production. | CO2 | | 20 |
|  | | **Compulsory:** |  | |  |
| 9. |  | Explain in detail the preference of sine waves in digital music. Also brief about response of human ear to music signals of different frequencies . | CO2 | | 20 |