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



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

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| **Code :** | **18EC3043** | **Duration :** | **3hrs** |
| **Sub. Name :** | **DATA CONVERTERS** | **Max. Marks :** | **100** |

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| **Q. No.** | **Sub Div.** | **Questions** | **Course Outcome** | **Marks** |
| **ANSWER ANY FIVE QUESTIONS (5 x 16 = 80 Marks)** | | | | |
| 1. | a. | Interpret SFDR and glitches in detail with necessary diagrams. | CO1 | 12 |
| b. | Describe the acquisition time of a system. | CO1 | 4 |
|  |  |  |  |  |
| 2. |  | Enumerate the general architecture and types of a pipeline converter. | CO2 | 16 |
|  |  |  |  |  |
| 3. |  | Explain pulse width and reverse comparing pulse width modulating D/A converter. | CO3 | 16 |
|  |  |  |  |  |
| 4. |  | Explain integrating and switched capacitor S/H circuit. | CO4 | 16 |
|  |  |  |  |  |
| 5. |  | Enumerate the general form of sigma-delta A/D converters. | CO5 | 16 |
|  |  |  |  |  |
| 6. |  | Explain data interleaved D/A converter with neat diagram. | CO2 | 16 |
|  |  |  |  |  |
| 7. |  | Illustrate the various configurations of integrating D/A converters. | CO3 | 16 |
| **COMPULSORY QUESTION (1 x 20 = 20 Marks)** | | | | |
| 8. | a. | Illustrate the dc measurement test setup of D/A converters. | CO6 | 10 |
| b. | Paraphrase the dynamic testing process of A/D converters. | CO6 | 10 |