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



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

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| **Code :** | **17EC1001** | **Duration :** | **3hrs** |
| **Sub. Name :** | **BASIC ELECTRONICS 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. | Comprehend on Covalent Bond with a structure. | CO1 | 10 |
| b. | Elaborate on the active and passive components and provide detailed description about resistors. | CO1 | 10 |
| (OR) | | | | |
| 2. | a. | Enumerate in detail about Inductor and its types. | CO1 | 10 |
| b. | Appraise on the various types of semiconductors with necessary diagrams. | CO2 | 10 |
|  |  |  |  |  |
| 3. | a. | Provide a detailed description on PN junction diode with its characteristics. | CO3 | 15 |
|  | b. | Summarize about Half wave rectifier. | CO3 | 5 |
| (OR) | | | | |
| 4. |  | Explicate in detail about Uni junction transistor with necessary diagrams. | CO3 | 20 |
|  |  |  |  |  |
| 5. | a. | Elucidate on the various Logic gates with its truth table. | CO4 | 12 |
|  | b. | State your perception about universal logic gates with necessary diagrams and proof. | CO4 | 8 |
| (OR) | | | | |
| 6. | a. | Simplify the following using Karnaugh map  F(A,B,C,D) = ∑(1,3,4,5,6,7,9,11,13,15) | CO4 | 10 |
|  | b. | Discuss in detail about a 4x1 Multiplexer. | CO2 | 10 |
|  |  |  |  |  |
| 7. |  | Define Modulation and derive the expression for Amplitude modulation with necessary waveforms. | CO5 | 20 |
| (OR) | | | | |
| 8. | a. | Express in detail about the Super heterodyne receiver. | CO5 | 15 |
|  | b. | Write short notes on Wi-Fi. | CO6 | 5 |
|  | |  |  |  |
|  | | **Compulsory:** |  |  |
| 9. |  | Elaborately discuss about Satellite communication with relevant diagrams. | CO5 | 20 |

ALL THE BEST