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

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

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| **Code :** | **14EC1001** | **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. | Appraise on the colour coding of resistors with suitable examples. | CO1 | 12 |
| b. | Comprehend on the types of Inductors. | CO1 | 8 |
| (OR) | | | | |
| 2. | a. | Enumerate in detail about Semiconductors. | CO1 | 14 |
| b. | Contrast Active and Passive components. | CO1 | 6 |
|  |  |  |  |  |
| 3. | a. | Discuss in detail about the PN Junction diode. | CO1 | 14 |
|  | b. | Compare FET and BJT. | CO1 | 6 |
| (OR) | | | | |
| 4. |  | Briefly discuss about the Bipolar junction transistor with necessary diagrams. | CO1 | 20 |
|  |  |  |  |  |
| 5. | a. | Simplify the following using Karnaugh map  F(A,B,C,D) = ∑(1,3,4,5,6,7,9,11,13,15) | CO1 | 16 |
|  | b. | Find the decimal number corresponding to the following.  i. (101)2 ii. (110)2 | CO1 | 4 |
| (OR) | | | | |
| 6. |  | Provide a detailed description on Logic gates with its truth table. | CO1 | 20 |
|  |  |  |  |  |
| 7. | a. | Schematically explain the communication system. | CO2 | 14 |
|  | b. | State the need for modulation. | CO2 | 6 |
| (OR) | | | | |
| 8. |  | Derive the expression for Amplitude modulation with a neat waveform. | CO2 | 20 |
|  | |  |  |  |
|  | | **Compulsory**: |  |  |
| 9. |  | Explicate Satellite communication in detail with necessary diagrams. | CO2 | 20 |

ALL THE BEST