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



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

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| **Code :** | **16EC1001** | **Duration :** | **3hrs** |
| **Sub. Name :** | **ELECTRONICS FOR EVERYDAY LIFE** | **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. | Describe the biasing and characteristics of rectifier diode with neat diagram. | CO1 | 15 |
| b. | Mention few applications of PN Junction diode. | CO1 | 5 |
| (OR) | | | | |
| 2. | a. | State the color coding process of resistor with suitable examples. | CO1 | 12 |
| b. | List the types of resistors and capacitors. | CO1 | 8 |
|  |  |  |  |  |
| 3. |  | Appraise on the characteristics of transistor in CB configuration with a clear explanation and relevant diagram. | CO1 | 20 |
| (OR) | | | | |
| 4. | a. | Describe the operation of NPN transistor in detail. | CO1 | 12 |
|  | b. | Derive the relationship between α and β of a transistor. | CO1 | 8 |
|  |  |  |  |  |
| 5. | a. | Pictorially represent the NAND and NOR equivalent of AND, OR and NOT with brief explanation. | CO1 | 15 |
|  | b. | Define the Forward current gain and Reverse voltage gain of a common base configuration. | CO1 | 5 |
| (OR) | | | | |
| 6. | a. | Convert (473)10 to its equivalent octal, binary and hexa decimal number. | CO1 | 12 |
|  | b. | Write a brief note on XOR and XNOR gate with necessary diagrams and truth table. | CO1 | 8 |
|  |  |  |  |  |
| 7. |  | Design a 4x1 Multiplexer and draw its logic circuit. | CO1 | 20 |
| (OR) | | | | |
| 8. | a. | Compare and contrast 2G, 3G and 4G techniques. | CO2 | 15 |
|  | b. | Discuss briefly about the applications of Wi-Fi and Bluetooth. | CO2 | 5 |
|  | |  |  |  |
|  | | **Compulsory**: |  |  |
| 9. |  | Comprehend on the role of IOT in smart health care. | CO3 | 20 |

ALL THE BEST