Reg.No: | | | | | | | | | | | |

CONTINUOUS INTERNAL ASSESMENT TEST I-OCT 2025

I-Yr / I Sem ECE

(EE25C04) Basic Electronics And Electrical Engineering

Time: 1 1/2 Hrs | Answer all questions | Maximum: 50 Marks

PART-A (2*5=10)

1. What are the various type of Resistors.
2. What is intrinsic & extrinsic semiconductor
3. Draw the V-I characteristics of a PN junction diode.
4. Derive emf equation of a DC Generator.
5. Define Transformer. Types of transformer based on the voltage.

PART-B (2*13=26)

6(a). Explain the working principle of **PN** junction diode& explain VI characterstics of PN junction diode.(**OR**)

(b) Explain the working principle of zener diode& explain VI characterstics of zener diode.

7.A. i) Explain with a neat circuit diagram, the construction and principle of operation of DC Generator.(8)
(ii) Derive the Torque equation of DC Motor.(5) (OR)
B. Explain with a neat circuit diagram the construction and principle operation of Transformer.

PART-C (1*14=14)

8. Explain with a neat circuit diagram the construction and principle operation of three phase Synchronous Generator.