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School of University Polytechnic

Diploma in Electrical Engineering
Mid Term Examination - May 2024

Duration : 90 Minutes
Max Marks : 50

Sem IV - N1DI407B - Industrial Electronics and ControlGeneral Instructions

Answer to the specific question asked

Draw neat, labelled diagrams wherever necessary

Approved data hand books are allowed subject to verification by the Invigilator

- 1) Explain di/dt protection. K2 (2)
- 2) Define diode. Draw the symbol of a diode. K1 (3)
- 3) Explain the VI characteristics of power diode and signal diode. K2 (4)
- 4) Explain the various power loss in the junction region of a thyristor. K2 (6)
- 5) Illustrate the advantages, disadvantages and application of UJT. K3 (6)
- 6) Illustrate the construction of UJT. Draw the basic structure, symbol representation, its equivalent diagram and VI characteristics. K3 (9)
- 7) Analyze the difference between DIAC & TRIAC with their respective VI characteristics. K4 (8)
- 8) Analyze the working principle, and construction of TRIAC. Draw the sketch of TRIAC symbol and its VI characteristics with explanation. K4 (12)

OR

- Analyze single phase full wave mid point converter. Draw the circuit diagram, equivalent circuit and the VI characteristics. K4 (12)