

INTERNAL EXAM: 1

SEM: 3rd, ELE

SUB: PE & PLC

FULL MARK: 10

Answer all the questions:

(5 × 1 = 5)

- Q 1
- (i) Define Latching current and Holding current.
 - (ii) What is voltage clamping device? Give some example.
 - (iii) What are the advantages of using a free wheeling diode in a rectifier circuit?
 - (iv) Define storage time of power BJT?
 - (v) What do you mean by duty cycle?
 - (vi) Draw $v-i$ characteristics of a thyristor.

2Q. What are the modes of operation of SCR? Explain (2.5)

3Q. Describe single phase full-wave controlled converter circuit for R-L load with necessary circuit diagram? (2.5)

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INTERNAL EXAM : 2

SUB : PE & PLC

Answer all the question

SEM : 5TH

FULL MARK : 10

(5 × 1 = 5)

Q1 (i) Define Inverter.

(ii) Define chopper.

(iii) What is rise time?

(iv) What is latching current?

(v) What is the function of buck converter?

(2.5)

Q2 Explain in detail about the speed control of synchronous motor by power electronic drive.

(2.5)

Q3 Explain in brief about buck boost converter.