# ||Jai Sri Gurudev|| BGS Institute of Technology BG Nagara - 571448

# Dept. of Electronics & Communication Engg.,

#### Sem: 7th

Date:

Sec: A & B

**Duration: 10min** 

# **Power Electronics Quiz Questions on Thyristors**

- 1. A Thyristors (SCR) is a
- a) P-N-P device
- b) N-P-N device

c) P-N-P-N device

d) P-N device

Answer: c

# 2. Which terminal does not belong to the SCR?

- a) Anode
- b) Gate
- c) Base
- d) Cathode

# Answer: c

## 3. An SCR is a

- a) four layer, four junction device
- b) four layer, three junction device
- c) four layer, two junction device
- d) three layer, single junction device

## Answer: b

# 4. Choose the false statement.

- a) SCR is a bidirectional device
- b) SCR is a controlled device
- c) In SCR the gate is the controlling terminal
- d) SCR are used for high-power applications

## Answer: a

# 5. In the SCR structure the gate terminal is located

- a) near the anode terminal
- b) near the cathode terminal
- c) in between the anode & cathode terminal
- d) none of the mentioned

## Answer: b

# 6. The static V-I curve for the SCR is plotted for

a) Ia (anode current) vs Ig (gate current), Va (anode - cathode voltage) as a parameter

- b) Ia vs Va with Ig as a parameter
- c) Va vs Ig with Ia as a parameter
- d) Ig vs Vg with Ia as a parameter

# Answer: b

7. If the cathode of an SCR is made positive with respect to the anode & no gate current is applied then

- a) all the junctions are reversed biased
- b) all the junctions are forward biased
- c) only the middle junction is forward biased

d) only the middle junction is reversed biased

#### Answer: c

#### 8. For an SCR in the reverse blocking mode, (practically)

a) leakage current does not flow

- b) leakage current flows from anode to cathode
- c) leakage current flows from cathode to anode
- d) leakage current flows from gate to anode

#### Answer: c

# 9. With the anode positive with respect to the cathode & the gate circuit open, the SCR is said to be in the

- a) reverse blocking mode
- b) reverse conduction mode
- c) forward blocking mode
- d) forward conduction mode

#### Answer: c

## **10.** For an SCR in the forward blocking mode (practically)

- a) leakage current does not flow
- b) leakage current flows from anode to cathode
- c) leakage current flows from cathode to anode
- d) leakage current flows from gate to anode

Answer: b

Signature of Staff

Signature of HOD