Assignment 9

Due on 2020-04-01, 23:59 IST.

The time phase voltages at the AC side terminals of the 12-pulse line-commutated converter is balanced and unidirectional, and the equivalent leakage inductance of the two transformers is equal. Which of the following statements about the 12-pulse line-commutated converter are correct?

1. For a 6-limb valve conduction mode, $I_{6} < I_{6'}$.
2. For a 6-limb valve conduction mode, $I_{6} < I_{6'}$.
3. For a 6-limb valve conduction mode, $I_{6} < I_{6'}$.
4. For a 6-limb valve conduction mode, $I_{6} < I_{6'}$.

Which of the following statements about the voltage transformation between the AC and DC sides is correct?

1. Voltage transformation between the AC and DC sides.
2. Voltage transformation between the AC and DC sides.
3. Voltage transformation between the AC and DC sides.
4. Voltage transformation between the AC and DC sides.

Which of the following statements are correct about the converter used in the utility system?

1. Control of voltage applied to the converter by using taps.
2. Control of voltage applied to the converter by using taps.
3. Control of voltage applied to the converter by using taps.
4. Control of voltage applied to the converter by using taps.

Which of the following statements are correct about the different DC links in a converter?

1. The hysteresis in DC link voltage.
2. The hysteresis in DC link voltage.
3. The hysteresis in DC link voltage.
4. The hysteresis in DC link voltage.

Which of the following statements are correct about the converter used in the utility system?

1. Control of voltage applied to the converter by using taps.
2. Control of voltage applied to the converter by using taps.
3. Control of voltage applied to the converter by using taps.
4. Control of voltage applied to the converter by using taps.

The following sentences are incorrect:

1. Using the rototors for control variables in DC transmission systems and noting that transformer taps involve mechanical switches, which of the following statements are correct?
2. Using the rototors for control variables in DC transmission systems and noting that transformer taps involve mechanical switches, which of the following statements are correct?
3. Using the rototors for control variables in DC transmission systems and noting that transformer taps involve mechanical switches, which of the following statements are correct?
4. Using the rototors for control variables in DC transmission systems and noting that transformer taps involve mechanical switches, which of the following statements are correct?