Assignment 3

Due on 2020-10-15, 23:59 IST.

1. A poly AC generator has a generator whose output is a 50 Hz sine wave. How many poles should the generator have?

   The number of poles should be equal to the number of cycles per second divided by the frequency. In this case, 50 Hz is the frequency, so the number of poles should be 1.

2. A poly AC generator has 60 stator slots. If the ratio of the rotor to the stator is 1:1, how many rotor slots are there?

   The number of rotor slots is equal to the number of stator slots, so there are 60 rotor slots.

3. A poly AC machine has 60 stator slots. The cell span of each coil is 12 electrical degrees. If one coil of the machine is 90 electrical degrees, then the number of slots in each phase should be:

   a. 12 slots
   b. 24 slots
   c. 36 slots
   d. 60 slots

   The correct answer is b. 24 slots.

4. A poly AC machine has 60 stator slots. The cell span of each coil is 12 electrical degrees. If one coil of the machine is 90 electrical degrees, then the number of slots in each phase should be:

   a. 12 slots
   b. 24 slots
   c. 36 slots
   d. 60 slots

   The correct answer is b. 24 slots.

5. A poly AC machine has 60 stator slots. The cell span of each coil is 12 electrical degrees. If one coil of the machine is 90 electrical degrees, then the number of slots in each phase should be:

   a. 12 slots
   b. 24 slots
   c. 36 slots
   d. 60 slots

   The correct answer is b. 24 slots.

6. A poly AC machine has 60 stator slots. The cell span of each coil is 12 electrical degrees. If one coil of the machine is 90 electrical degrees, then the number of slots in each phase should be:

   a. 12 slots
   b. 24 slots
   c. 36 slots
   d. 60 slots

   The correct answer is b. 24 slots.

7. A poly AC machine has 60 stator slots. The cell span of each coil is 12 electrical degrees. If one coil of the machine is 90 electrical degrees, then the number of slots in each phase should be:

   a. 12 slots
   b. 24 slots
   c. 36 slots
   d. 60 slots

   The correct answer is b. 24 slots.

8. A poly AC machine has 60 stator slots. The cell span of each coil is 12 electrical degrees. If one coil of the machine is 90 electrical degrees, then the number of slots in each phase should be:

   a. 12 slots
   b. 24 slots
   c. 36 slots
   d. 60 slots

   The correct answer is b. 24 slots.

9. A poly AC machine has 60 stator slots. The cell span of each coil is 12 electrical degrees. If one coil of the machine is 90 electrical degrees, then the number of slots in each phase should be:

   a. 12 slots
   b. 24 slots
   c. 36 slots
   d. 60 slots

   The correct answer is b. 24 slots.

10. A poly AC machine has 60 stator slots. The cell span of each coil is 12 electrical degrees. If one coil of the machine is 90 electrical degrees, then the number of slots in each phase should be:

    a. 12 slots
    b. 24 slots
    c. 36 slots
    d. 60 slots

    The correct answer is b. 24 slots.

11. A poly AC machine has 60 stator slots. The cell span of each coil is 12 electrical degrees. If one coil of the machine is 90 electrical degrees, then the number of slots in each phase should be:

    a. 12 slots
    b. 24 slots
    c. 36 slots
    d. 60 slots

    The correct answer is b. 24 slots.

12. A poly AC machine has 60 stator slots. The cell span of each coil is 12 electrical degrees. If one coil of the machine is 90 electrical degrees, then the number of slots in each phase should be:

    a. 12 slots
    b. 24 slots
    c. 36 slots
    d. 60 slots

    The correct answer is b. 24 slots.