## Maintenance of Air and Oil Circuit Breakers

| Duration: 60 mins | Level: Intermediate | Pass mark: 80% |

### Course Description:

Circuit breakers are devices that open or close a set of electrical contacts to interrupt or complete an electrical circuit. A switchgear is a self-contained, enclosed assembly of circuit breakers and related components. Both circuit breakers and switchgear serve to protect plant circuits from various electrical problems. They can switch power on and off, and they can isolate circuits on which work is being performed. Electrical maintenance personnel are responsible for keeping circuit breakers and switchgear working properly and for performing periodic inspections and any necessary repairs. This course covers the operation and maintenance of high-voltage circuit breakers and switchgear (4 KV and above) that are typically used for in-plant distribution of electrical power. Many high-voltage circuit breakers used for transmission purposes consist of three single-phase breakers connected to a common operating mechanism. However, the distribution breakers discussed in this course are three-phase breakers.

### Learning Objectives:

- Describe the procedure for disconnecting an air-magnetic circuit breaker from primary power
- List the components inspected on an air-magnetic circuit breaker during preventive maintenance
- List the tests performed on an air-magnetic circuit breaker during preventive maintenance
- List the inspections and tests performed on an oil circuit breaker during preventive maintenance