

The Assessment for both Protection engineer and Protection testing & commissioning engineer is having two types: Interview and practical test. The following table shows the content of each type for each engineer.

Criteria	Content	Protection Engineer	Protection Testing & Commissioning Engineer
Interview Assessment			
Power System Principles	Short Circuit, Fault level, Relay settings, Relay coordination, equipment sizing, etc.	✓	x
Principles of Instrument Transformers	Current transformer, Voltage transformer	✓	✓
Feeder / Cable Protection	Non dir. O/C & E/F relays, Dir. O/C & E/F relays, Distance Relays, Pilot Wire Protection, Current Differential relays	✓	✓
Transformer Protection	Biased Differential relays, REF relays, Transformer Main Protection	✓	✓
Transformer Testing	Ratio/Vector Group, Transformer Stability, REF stability	✓	✓
Bus-Bar Protection	High / Low impedance Stability	✓	✓
Practical Test Assessment			
Relay Wiring and test kit connections	1. CT/ VT connections for the given protection relay,	✓	✓

Criteria	Content	Protection Engineer	Protection Testing & Commissioning Engineer
	2. testing connections between the relay and the test kit		
Relay Communication & Configuration	1. To download / upload the settings from/to the relay 2. To program the relay for the given protection settings	✓	✓
Relay testing	To test the relay for the given protection settings	✓	✓

Remarks:

1. The minimum score to pass both tests is **70 %**.
2. Practical test shall be conducted after passing the interview test.
3. In the practical test, the relay will be given to the candidate. The candidate shall bring the relay test kit (6 currents) for his choice make. He shall come with the laptop with relay communication software.
4. For both tests, candidate shall bring his own calculator.
5. As per the process mapping, the practical test is normally set within two weeks after interview exam.
6. For practical test, candidate may expect any relay make installed in the system. Normally, one of the three functions will be given: Directional overcurrent protection, Distance protection or Transformer Differential protection.