

# Apollo Institute of Engineering and Technology

## Assignment/Question Bank

**Branch: EE**

**Subject:** Testing and Commissioning of Electrical Equipments (2180901)

1. Classify tests to be performed on electrical equipments
2. Explain voltage ratio test for three phase transformer with its Importance.
3. What is insulation resistance? Explain insulation resistance measurement for HT type rotating electrical machine.
4. What is earthing? State the factors to be affected to the earth resistance.
5. Discuss the different ways to reduce earth resistance.
6. Explain the inspection of newly purchased three phase induction motor at site. What will you include in technical report after inspection?
7. Explain the earthing of 66KV substation with line diagram.
8. Explain polarization index with its importance.
9. State the necessity of temperature rise test for three phase transformer.
10. For the following conditions explain in detail troubles, causes and its remedies for induction motor: i) draws 1.5 times full load current at rated loading condition. ii) rotor and shaft are heated up.
11. What is drying out of power transformer?
12. Explain variation of IR during the drying out procedure of power transformer.
13. Explain the polarity test of CT with neat circuit diagram.
14. State the name of different tests to be performed for efficiency of DC Machine.
15. Explain any one test to be performed on three phase synchronous machine to find out its synchronous impedance.
16. Explain any two commissioning tests to be performed on AC motor at site.
17. Enlist different tests to be performed on busbar.
18. Why gas insulated substation is required? Discuss.
19. Explain any one method to locate the fault in underground faulty cable.
20. What is lightning arrester? Where is it located?
21. Explain the importance of lightning arrester with its characteristics.
22. Explain the making and breaking tests on circuit breaker.
23. Differentiate IR test and HV test.
24. Explain HV test on rotating electrical machines.
25. For the following conditions explain in detail troubles, causes and its remedies for Circuit breaker (i) Fails to operate in faulty condition. ii) Operates in healthy (normal) condition.