SYLLLABUS: METER & RELAY TESTER GRADE-II in NDMC

1. Electrical Fundamentals

- Basic electrical quantities (Voltage, Current, Resistance, Power)
- Ohm's Law, Kirchhoff's Laws
- Series and Parallel circuits
- Electrical measuring instruments

2. Electrical Machines

- Transformers (principle, testing, maintenance)
- DC machines
- Induction motors
- Motor starters and protection

3. Metering

- Energy meters (single-phase and three-phase)
- Calibration and testing of meters
- Meter installation and wiring
- Errors in metering and corrections

4. Protective Relays

- Types of relays (over-current, differential, distance relay)
- Relay testing
- Protection of transformers, feeders, and motors
- Relay coordination

5. Power Systems Basics

- Generation, transmission, and distribution of electricity
- Substation equipment
- Switchgear and protection devices
- Earthing and safety practices

6. Electrical Wiring & Maintenance

- Domestic and industrial wiring
- Cables and conductors
- Fault finding and troubleshooting
- Electrical safety rules"