

Syllabus for issuing a LWTR for Aeroplanes
less than 5700 kg
*** Paper I : Electric**

1- Batteries:

Types - Methods of charging - Testing - Maintenance

2- Power generation and conversion:

DC generator - Alternator - Voltage regulation – Paralling Generator control unit –
protection against (over/under voltage - reverse current) - inverters
- Maintenance

3- Cables and Aircraft circuits:

- Cables (Types - specification - Installation
- Electrical bonding and circuit Testing methods

4- Circuit controlling and circuit protection devices:

- Switches - Relays - Contactors
- Fuses - Circuit breakers - Current limiter - limiting resistors

5- DC motors:

Types - applications - motor actuator - maintenance

6- Basic Aircraft systems:

- Fire & somke detection and extinguishing systems
- Flight control & landing Gear:(control - position indications)
- Anti-ice and rain: (By using electrical methods)
- Fuel and oil systems: (control - measurments and indications)
- Engine: (ignition - starting - measurment of engine parameters)
- Air conditioning and pressurization
- Lights: (Exterior - Interior)
- Testing and maintenance