FAQ's

1. What the different ways of mounting switch board?

The different types of mounting switchboard are;

a. Hinged type metal boards, which is a box made of sheet metal provided with a hinged cover to enable the board to swing open for examination
b. Fixed type metal boards, consists of an angle or channel iron frame fixed on wall or floor.
c. Protected type switchboard is one where all of the conductors are protected by metal or other enclosures
d. Open type switchboard has exposed current carrying parts on the front of the switchboard.

2. What are the components required for earthing system of an electrical installation?

Earthing system of an electrical installation consists of:

a) An earth electrode
b) A main earthing wire
c) An earth bar for the connection of the main earthing wire
d) A removable link which effectively disconnects the neutral bar from the earth bar.

3. Write short notes on telecommunication cabling systems.

Telecommunications and main cabling should be distinctly separated in independent conduits and trunking for reasons of safety and to prevent interference. External telecommunication cables may supply a building from overhead or underground. The intake is below surface level at a point agreed with the cable supplier. In large buildings the incoming cable supplies a main distribution unit which has

connections for the various parts of the building. Cables supply both switchboards and individual telephones from vertical risers.

4. Explain the ring circuit system to groups of large buildings.

For larger developments containing several buildings, either radial or ring distribution systems may be used. Ring circuit system is an underground cable laid from the sub-station to loop in to each building. To isolate the supply, two fused switches are required below the distribution boards in each building. Current flows in both directions from the intake to provide a better balance than the radial system. If the cable on the ring is damaged at any point, it can be isolated for repair without loss of supply to any to the buildings.

5. What are the tests performed on electrical installations on completion?

The following tests are an essential part on completion of electrical installation:

- Continuity – to ensure integrity of the live, neutral and earth conductors without bridging of connections.
- Insulation – to ensure that there is a high resistance between live and neutral conductors and these conductors and earth. A low resistance will result in current leakage and energy waste which could deteriorate the insulation and be a potential fire hazard.
- Polarity – to ensure that all switches and circuit breakers are connected in the phase or live conductor. An inadvertent connection would lead to a very dangerous situation where apparent isolation would still leave it live.