**Assignment 3 Electrical Installations**

1. Explain the following methods of charging a battery (i) Constant current method (ii) Constant voltage method.
2. What is the function of fuse in an electrical circuit? State the desirable properties of fuse element.
3. State the different methods of earthing and explain any one of them.
4. Explain the biological effect of electric current keeping the electric safety in view. explain plate earthing.
5. Give the circuit diagram of ELCB. Explain its working in brief.
6. Explain the construction and working of any type of battery you know. What is its voltage when it is fully charged?
7. Explain requirement of earthing for any electrical equipment.
8. List various protective devices used in the electric circuits and compare working of ELCB with MCB.
9. How do you estimate the life of a battery when charging and discharging characteristics are available?
10. What do you mean by (i) Ampere hour efficiency and (ii) Watt-hour efficiency of a battery?
11. What is the importance of Power factor in AC circuits? and Explain method to improvement of power factor
12. Write down the elementary calculation for energy consumptions.