Dangers of electricity

Damaged insulation:

Every cable has a rubber insulation around it, if this insulation gets damaged due to normal wear and tear, the live wire will be exposed. If the user accidentally touches the wire at that point he can get electrocuted, hence damaged insulation is considered to be an electrical hazard

Overheating of cables

Every appliance must be provided with a cable of appropriate thickness depending on the working current of the appliance. Hence, if a thin cable is used in place of a thick cable, it will quickly overheat, and will eventually cause the insulation around it to melt. Therefore overheating of cables is classified as an electrical hazard

Overloading of cable

If multiple appliances are simulataneously connected to a single extension box then this would cause a large amount of current to be drawn into the extension box, if this cable cannot withstand this current it will heat up and melt eventually. Thus overloading is considered an electrical hazard

Damp conditions

Since water is a good conductor of electricity therefore all appliances must be kept away from damp conditions to reduce chances of electric shock.

Short circuit

This refers to current allowed to flow through a shorter path. This condition might arise if the live wire accidentally comes in contact with the neutral wire. Due to a low

resistance path a large amount of current will be drawn in through the live wire. If the circuit is not meant to withstand this current, it will quickly overheat and this would result in a fire hazard hence short circuiting is considered to be an electrical hazard.