



SNS COLLEGE OF TECHNOLOGY



(An Autonomous Institution)



DOMESTIC APPLIANCES (DO's AND DON'T's FOR SAFETY)



DOMESTIC APPLIANCES

- A large number of domestic accidents are due to leakage or short circuit in domestic appliances. It is therefore of utmost importance that only proper type of appliances having the ISI mark are selected and care is taken in their use to see that there is not chance of any fire taking place due to the heat generated by the appliance.
- Care should also be taken to see that the earthing of the appliance is in healthy condition and that the flexible cable conductor to the appliance is not worn out and connections are not loose.
- IS 302-1977 classifies the appliances in three categories:
 - (a) **Class I appliance:** This is an appliance in which protection against electric shock does not depend on basic insulation only, but which includes an additional safety precaution i.e. the accessible metallic parts are connected to the protective earthing conductor so that they cannot become live in the event of the failure of the insulation.





DOMESTIC APPLIANCES



(b) **Class II appliance:** In this appliance a double insulation or reinforced insulation is provided. Provision for earthing in such case is not necessary.

(c) **Class III appliance:** This appliance operates at very low voltage i.e. less than 32 volts between conductors and 18.5 volts between conductor and neutral.

- The maximum permissible leakage current for class I appliance is 210 microamperes and for Class II appliance 42.5 microamperes. The insulation resistance for Class I and Class II appliances should not be less than 2 Megohms and 7 Megohms respectively.
- The minimum size of the cord used are as follows:

Rating of the appliance	Size of the Phase Conductor
Upto 3 Amps	0.50 Sq. mm
3 to 10 Amps	0.75 Sq. mm



DO's AND DON'T's FOR SAFETY IN DOMESTIC APPLIANCES



DO'S:

- While purchasing, buy only standard electrical appliance/equipment and accessories.
- The supply cord should be in good condition, free from cuts or damaged insulation or entanglement.
- Always use 3-pin plugs in the appliances/equipment and connect them to 3-pin sockets only.
- Check that the pins of the socket or the plug or any other electrical connections are not loose.
- Put the switch 'OFF' when the appliance/equipment is not in use. Remove the plug from the socket.
- Get your appliances/equipment and wiring checked periodically for any defect or electrical leakage. Even a few of current leaking and passing through the human body may result in serious or even fatal shock.





DO's AND DON'T's FOR SAFETY IN DOMESTIC APPLIANCES



DO'S:

- Always check the rated voltage, current and the operating time of your appliance/equipment and ensure that these are not exceeded.
- Protect appliance/equipment against humidity.
- Always keep the rotating electrical equipment like the table fan out of reach of children and pets.
- Before replacing a lamp or handling a fan, make sure that the supply is switched OFF.
- Always call a qualified person for any repair to the electrical circuit/appliance/equipment.
- Always use the correct size and quality of fuse wire for replacement.
- While removing a fuse carrier, pull the supply-end first. While replacing it, the supply-end should be inserted last.





DO's AND DON'T's FOR SAFETY IN DOMESTIC APPLIANCES



DO'S:

- Always treat an electrical circuit as "LIVE" unless found 'DEAD' by testing.
- For any electrical accident or fire, switch off the power supply immediately.
- Give artificial respiration to the victim of an electric shock and immediately call for a doctor.



DON'T'S:

- Never assume an electric circuit as 'DEAD'.
- Don't have temporary or naked joints or wiring.
- Don't touch the water or the metallic container when the immersion heater is 'ON'.
- Don't work with wet hands, shoes or chappals on electrical appliances and equipment.
- Don't clean electrical switches, boards etc. with wet cloth.



DO's AND DON'T's FOR SAFETY IN DOMESTIC APPLIANCES



DON'T'S:

- Don't connect domestic electrical appliance/equipment to a lamp holder, connect it to a socket of suitable current rating.
- Don't replace a "BLOWN" fuse unless the defect in the circuit/appliance has been rectified.
- Don't touch exposed electrical circuit.
- Don't throw water on live electrical appliance/equipment/circuit. In case of fire, use dry sand or an approved fire extinguisher such as Carbon-dioxide, dry chemical powder or vapoursing liquid types.
- Don't join flexible cords by twisting the wires and taping them together.
- Don't remove the mesh guard of a table or pedestal fan.
- Don't touch the T.V. antenna without disconnecting the T.V. receiver from the circuit. You may get shock due to feedback.





DO's AND DON'T's FOR SAFETY IN DOMESTIC APPLIANCES



DON'T'S:

- Don't touch pins of a plug while putting it in a removing it from the socket.
- Don't place cloths, paper or other combustible materials near an electrical appliance when it is in use.
- Don't put too many plugs in one socket to avoid overload.





THANK YOU