



STANDARD OPERATING PROCEDURES

FIRE SAFETY



Fire prevention plan and inspection

Purpose: To produce fire safe work environment by scheduled check-up of equipment involved in fire prevention and control such as;

1. **Evacuation:** Adequacy of exits and no blockage to them
2. **Fire alarm and detection:** fire, smoke & heat detection system and evacuation alarm
3. **Water supply:** Storage, pump and distribution system
4. **Fire Extinguishing Systems and Equipment:** Sprinkler, Hose pipe, portable extinguisher etc.

Cause of fire accidents in Institute

1. **Solid fire:** Burning of wooden, stationary, vegetation, plastics and others;
2. **Liquid and gaseous fire:** Burning of chemicals in lab, flammable liquids, gases and paints etc;
3. **Electrical fire:** Short circuit and overheating of electrical appliances.

Solid or general fire (Class A fire)

1. Keep unnecessary people away; isolate hazard area and deny entry;
2. Stay upwind, out of low areas, and ventilate closed spaces before entering;
3. Use water, spray or foam.

Liquid and gaseous fire (Class B fire)

1. Keep unnecessary people away; isolate hazard area and deny entry;
2. Stay upwind, out of low areas, and ventilate closed spaces before entering;
3. Use foam, powder, CO₂.

Electrical fire (Class C fire)

1. Switch off the main electrical supply by using rubber gloves;
2. Use CO₂ type fire extinguisher;
3. Do not throw water on live electrical fire;
4. Do not attempt to disengage a person in contact with a live apparatus, which you cannot switch off immediately. Insulate yourself from the earth by standing on a rubber mat or dry board, before attempting to get him clear. Do not touch his body; push him clear with a non-insulating material.
5. Continue artificial respiration until recovery.

General first aid

1. Move victim to fresh air and call emergency medical care;
2. if not breathing, give artificial respiration; if breathing is difficult, give oxygen.
3. In case of contact with fire material, immediately flush skin or eyes with running water for at least 15 minutes.
4. Keep victim quiet and maintain normal body temperature.
5. Effects may be delayed; keep victim under observation.

CALL EMERGENCY NUMBER

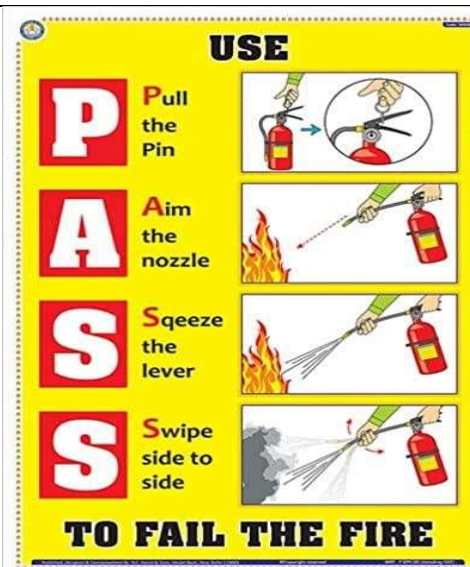
Use of different type of extinguisher

Particular fire extinguisher is or are used in specific fire hazards as shown below

Symbols found on fire extinguishers & what they mean

	Water	Foam spray	ABC powder	Carbon dioxide	Wet chemical
Wood, paper & textiles (A)	✓	✓	✓	✗	✓
Flammable liquids (B)	✗	✓	✓	✓	✗
Flammable gases (C)	✗	✗	✓	✗	✗
Electrical contact (E)	✗	✗	✓	✓	✗
Cooking oils & fats (F)	✗	✗	✗	✗	✓

How to use fire extinguisher?



What to do if your cloth catches fire

