

SYLLABUS FOR SAFETY STEWARD

Fundamentals of fire engineering science , fire control technology , principles of industrial safety and accident prevention ,, leadership, communication & soft skills, risk management and hazard control system , health, safety, environmental engineering and construction safety , industrial safety , construction industry safety , fire engineering science , emergency planing & first aid, unit 1 • classification of fire • general causes of fire • detection of fire • extinguishing methods • first aid fire fighting equipments unit 2 • fire bucket, fire beater, hose reel hose • portable extinguisher • depends on weight • depends on operating method • depends on content • depends on position of nozzle • construction • operation • maintenance • refilling unit 3 • fixed fire fighting installations using water • hydrant or fire water system • classification of hydrant system • sprinkling system • major foam pourer system • steam drenching system • emulsification • special fires and fire fighting, • fixed fire fighting installations not using water • complete co2 flooding system • complete dcp spraying system • complete halon flooding system • investigation of fire • point, time and cause of ignition • arson and detection of fires, • hose • types of hose • characteristic • frictional lose • material used • cause and prevention of mildew, • causes and prevention of shock • causes and prevention of rubber acid • care and maintenance • types of hose fittings • couplings • component parts of inter locking couplings • suction coupling wrenches • branches, nozzles and branch holders, • foam making branches • nozzles • collecting head and suction hose fittings, • breechings • adapters • maintenance of hose fittings, fire alarm • introduction of electronics and electricity:- • semi conductor physics • circuit control and protective devices unit 2 • transistors • principles of fire detectors • parts of fire alarm unit • control panel unit 3 • type of detectors • automatic fire detection • classification of detector • control and indicating equipment unit 4 • trouble shooting and maintenance • intruder alarms, • rope, lines, knots and ladders • introduction • manufacturing materials • types of ropes and size unit 2 • cordage • causes of deterioration of ropes and lines • different type of knots different type of lines, purpose of knots • ladders • introduction • hook ladder, escape ladder, turn table and extension ladder • hook ladder belts unit 4 • scba and foam making equipments • introduction • physiology of respiration block 4 unit 1 • effects of respiration • essential fetchers of ba set • description and technical details • care and maintenance various ba sets unit 2 • advantage and disadvantage of various ba set • foam & foam making equipments • definition • different type of foam concentrate unit 3 • storage • characteristics • foam branch and its type • mechanical foam generator • pumps, primers, tenders and water relays • introduction, definition • deferent types of pumps • deferent types of primer, working principle of various pumps primers • maintenance and trouble shooting • testing of pumps • advantages and disadvantages • water relay system • open circuit system • closed circuit system • different type of tenders and fire alarm system • operation and maintenance of various tenders • water, foam, co2, dcp and emergency tenders, introduction to safety • goals, need, history of safety. • importance of industrial safety unit 2 • accident causation • theories and principles of accident causation • the effect of accident, • unsafe act • unsafe condition, physical hazards chemical hazards mechanical hazards unit 2 • housekeeping and importance • advantages of good house keeping • post accident strategy unit 3 • first aid • fire fighting • accident investigation., • first aid • introduction • body structure and functions unit 2 • position of causality • the unconscious casualty • fracture and dislocation unit 3 • injuries to muscles and joints • resuscitation • bleeding unit 4 • management of shock • burns, scalds and accidents caused by electricity • rescue and transport of casualty

Disclaimer : The above syllabus is broadly indicative but not exhaustive