

Section-2

Q-1 Heating Ventilation and Air Conditioning (HVAC)

- a) Heating ventilation and air conditioning is the technology of indoor and vehicular environment comfort. Its goal is to provide thermal comfort and acceptable indoor air quality.
- b) HVAC is an important part of residential structures such as single family homes, apartment buildings, hotels and senior living facilities, medium ~~and~~ to large, industrial and office buildings, such as skyscrapers and hospitals, vehicles such as cars, trains etc., where safe and healthy building

Conditions are regulated with respect to temperature and humidity, using fresh air from outdoors.

c) Ventilation refers to the intentional deliver of outside air to the building indoor environment.

d) It is one of the most important factors for maintaining acceptable indoor air quality in buildings.

Mechanical Lifts and Escalators:

a) An elevator is a hoisting and lowering mechanism equipped with a car or platform that moves along guides in a shaft, or hoistway, in a substantially vertical direction and that transports passengers or goods or both between two or more floors of a building.

b) Freight elevator carries freight, which may be accompanied only by an operator and persons necessary for loading and unloading it.

c) Escalators or powered stairs are used when it is necessary to move large number of people from floor to floor.

d) They are providing continuous movement of persons and can thus remedy traffic conditions that are not readily addressed by elevators or mechanical lift.

Fire Fighting and Fire Protection Buildings

a) It is defined as the protection of the occupants of the building, contents and structure of the building and adjacent building from the risk of fire and spread of fire.

b) The objective is achieved by using fire resistive materials in the constructions.

c) By suitable planning of the building internally and in relation to adjacent building internally and by protecting providing suitable means of quick escape for the occupants.

d) These measures are essential to minimize the spread of fire and limit the total damage to a minimum.