

Section-2

Ans:1 Heating Ventilation & Air Conditioning (HVAC) :-

- (i) The acronym HVAC stands for heating ventilation and air conditioning and it's the broadly used term to describe equipment used to keep home at a comfortable temperature.
- (ii) Air Conditioning is the process of creating controlling and maintaining indoor atmospheric conditions best suited to the requirements of man or to the needs of industry is known as air conditioning.

Mechanical Lifts :-

- (i) 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 goods or both, between two or more floors of a building.
- (ii) Passenger elevators are designed primarily to carry persons. Hospital elevators are also passenger elevators but employ special cars, suitable in size and shape for transportation of patients in stretchers and of attenders accompanying them.

- (iii) Elevators are desirable in all multistory buildings for movement of passengers and freight. They may be required by local building codes for any building over two stories high or for transportation of disabled persons.
- (iv) Elevators, however, are not usually accepted as a means of egress, because no cohesive strategy has been established to assure proper operation of elevators in an emergency.
- (v) Nevertheless, elevators are vital for fire fighting in a high-rise building.

Escalators:-

- (i) Escalators, or powered stairs are used when it is necessary to move large numbers of people from floor to floor.
- (ii) They provide continuous movement of persons and can thus remedy traffic conditions that are not readily addressed by elevators.
- (iii) Escalators should be viewed as preferred transportation systems whenever heavy traffic volumes are expected between relatively few floors.
- (iv) Escalators are generally used in straight sections, spiral escalators are also available.

Fire Protection of Buildings :-

- (i) It is defined as the protection of the occupants of the building, contents and structure of the building and adjacent building from the risks of fire and spread of fire.
- (ii) The objective is achieved by using fire resistive materials in the construction.
- (iii) These measure are essential to minimize the spread of fire and limit the total damage to a minimum.