

ROLLNUMBER: 202250557

CLASS: Y2/E

DEPARTMENT: COT

Q1. What are the factors to be considered while selecting air Conditioning system?

- ❖ Initial and running cost
- ❖ Maintainability
- ❖ Required system reliability and flexibility
- ❖ Architectural constraints
- ❖ installation requirement
- ❖ Air conditioner capacity
- ❖ cooling capacity
- ❖ Noise level
- ❖ The cost
- ❖ Capacity, performance and spatial requirement
- ❖ Cooling capacity
- ❖ Energy consumption
- ❖ Durability of air conditioning

Q2 Enumerate the requirement of air conditioning?

- ❖ Temperature control: Ability to maintain consistent and comfortable temperature regardless of outdoor conditions
- ❖ Size and installations: proper sizing and installation are crucial for optimal performance and energy efficiency
- ❖ Noise level: It should operate quietly to avoid disturbance
- ❖ Humidity control: the system should be able to regulate indoor humidity levels for comfort and health
- ❖ Air quality: Besides cooling, it should maintain improve indoor air quality by filtering out pollutants and dust
- ❖ Maintenance requirement: regular maintenance should be manageable and not overly burdensome
- ❖ The cost
- ❖ Compatibility

Q3. Differentiate the effect of wind in building?

- ❖ Wind can effect buildings in various ways depending on factors like building design, location and wind speed, for example , strong wind can create pressure imbalance on buildings leading to structural damage or even collapse if not properly accounted for in design ,wind can also cause sway in tall buildings impacting comfort for occupants .
- ❖ Structural integrity: Strong winds can exert significant pressure on buildings, especially tall or light weight structures
- ❖ Façade design: Wind direction and speed influence the design of building façades, including the placement and design of windows, to minimize pressure differentials and mitigate the risk of structural damage.