



**DAT-6504**

Seat No. \_\_\_\_\_

**B. Architecture (Sem. V) Examination**

**May - 2022**

**Environmental Science & Services-III**

Time : **2** Hours]

[Total Marks : **80**

**1** Explain : (Any **two**) **10**

- (a) Dumb-waiter
- (b) Criss-Cross type Escalator
- (c) Design of Machine Room
- (d) Sky Lobby in a tall building
- (e) Double-decker lifts

**2** Explain the difference between Hydraulic lift and **10**  
Traction Lift. Where do we recommend each of this lift.

**OR**

Discuss the difference between Geared and Gearless traction lift.

**3** Draw a cross-section of a hoist-way of typical passenger **20**  
lift and label parts.

**OR**

Transverse Cross-section of an Escalator and label parts.

Explain the meaning of the terms : (Any **two**) **10**

- (1) Lift Car
- (2) Counter weight
- (3) Travel time
- (4) Rated Load

**5** Discuss the design consideration for elevator planning in a public building from following point of view (a) lift lobby(b) location (c) Arrangement / Grouping. **10**

**OR**

List down all information and drawings an Architect provides to the Authority related to the elevator system in the building.

**6** Design Consideration of elevator in a Hospital Building. **10**

**OR**

Design consideration of elevator in a Hotel

**7** Explain the typical design detail for : (Any **one**) **10**

- (a) Entrance Door at first floor level to a lift well
- (b) Lift pit

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