8. Describe various types of Mechanical Conveyors, their purposes and types of buildings where these mechanical converyors are being installed.

BB-267

M. Arch. (Sustainable Architecture)

EXAMINATION, May 2018

(Second Semester)

(Main & Re-appear)

MARC616

TECHNOLOGIES FOR ENERGY EFFICIENT BUILDINGS

Time : 3 *Hours*] [*Maximum Marks :* 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. All questions carry equal marks.

Unit I

1. Discuss the principles of earth air tunnel cooling system. Define each type of passive solar heating system and list the efficiency of each.

2. Describe various types of heating system and differentiate between direct heating system and central heating system giving merits and demerits of each.

Unit II

3. Define Air-conditioning and its purposes. Describe the various types of air-conditioning system, which you suggest to create a comfortable environment in shopping complex. Explain the function of VAV fan system.

4. What is Air Handling Plant ? Explain is the function of Refrigeration. Explain three types of mechanical ventilation systems.

Unit III

5. Describe the general design considerations for cold water lines and hot water lines. Also decribe briefly by an example the general methodology to calculate the Over Head Tank size and its storage capacity.

6. Name three applications for which each of the following lamp types would be appropriate :

(a) Incandescent

(b) Fluorescent

(c) H.I.D.

(d) Low-pressure sodium.

Unit IV

7. What do you know about vertical circulation in buildings ? Describe various means and methods of climbing up. Also explain the grouping of lifts and planning consideration for vertical circulation.