No. of Printed Pages: 03 Roll No. .....

### **AA-263**

# Master of Architecture EXAMINATION, May 2017

(First Semester)

(Re-appear Only)

## SUSTAINABLE ARCHITECTURE MARC-607

Climate Responsive Architecture in Tropics

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.

(2-03) M-AA-263

P.T.O.

#### Unit I

- Enumerate various elements of climate and what challenges these elements pose to architecture of Tropics.
- **2.** Write short notes on any *two* of the following:
  - (a) Climate Responsive design elements
  - (b) Climate data and its relevance in design of built-forms
  - (c) Micro climate site elements.  $7.5 \times 2 = 15$

#### **Unit II**

- 3. Define in detail 'comfort zone'.
- 4. What are various physiological and environmental factors which act as a barriers in occupant comfort?
  15

#### **Unit III**

- 5. Write short notes on the following:
  - (a) Thermal behaviour of buildings
  - (b) Heat flow calculation.  $7.5 \times 2 = 15$

6. Explain passive control strategies to be adopted in buildings.

#### **Unit IV**

7. Explain Sun-path diagram. 15

8. Describe the strategies to cut-off sun rays in buildings.15

M-AA-263 2

(2-03) M-AA-263 3 30