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2069

B. Arch EXAMINATION, May 2017

(Eighth Semester)

(Old Scheme) (Re-appear Only)

AR-420-G

ARCH.

Energy Consious Arch-VIII

Time: 3 Hours [Maximum Marks: 50

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 at least *one* question from each Unit. All questions carry equal marks.

(3-35/19)M-2069 P.T.O.

Unit I

- 1. Compare and contrast different renewable and conventional energy systems used in buildings.
- **2.** Explain the concept of net zero buildings or energy plus building, citing appropriate examples.

Unit II

- **3.** Explain process of drawing control potential zone on psychrometric chart and its significance.
- **4.** Explain with diagrams concept and techniques of night cooling and evaporative cooling to enhance thermal comfort band.

Unit III

- 5. What are principles of design of thermal insulation in building envelope for different climatic zones?
- 6. Explain with the help of examples various sun shading devices, using sun path diagram.M-20692

Unit IV

- 7. Discuss the concept and construction detail of trombe wall in cold climates ?
- **8.** Explain with examples how passive solar techniques used in traditional settlements can be harnessed in contemporary architecture.

(3-35/20)M-2069 3 70