## MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST/SECOND SEMESTER B. ARCH, DEGREE EXAMINATION - NOVEMBER 2018

SUBJECT: ARC-14-111 – PRINCIPLES OF ENVIRONMENTAL DESIGN (2014 SCHEME)/ ARC 116 ENVIRONMENTAL STUDIES (2010 SCHEME)

Friday, November 09, 2018

Time: 14:00 - 17:00 Hrs.

Max. Marks: 50

- Answer any FIVE questions.
- Support the answers with sketches wherever necessary.
- 1. Define the term built environment. Highlight its major components.

(6+4 = 10 marks)

- 2. Briefly explain the below and also mention their causes and impacts:
- 2A. Heat Island effect
- 2B. Urban sprawl

(5+5 = 10 marks)

- 3. Write a short note on the importance of following aspects in climatic responsive design of buildings:
- 3A. Trombe Wall
- 3B. Openings in buildings

(5+5 = 10 marks)

- 4A. How does a courtyard help in maintaining the thermal comfort of a building?
- 4B. What are the principles of organic architecture?

(5+5 = 10 marks)

5. Explain role of an architect as a custodian of Built Environment.

(10 marks)

6. Explain the principles and philosophy of Nari Gandhi as an Eco-Sensitive Architect.

(10 marks)

