

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(MID SEMESTER EXAMINATION)**

**CLASS: BARCH
BRANCH: ARCH.**

**SEMESTER: VIII
SESSION : SP/2019**

SUBJECT : AR8311 - SUSTAINABILITY & BUILT ENVIRONMENT

TIME: 1.5 HOURS

FULL MARKS: 25

INSTRUCTIONS:

1. The total marks of the questions are 30.
 2. Candidates may attempt for all 30 marks.
 3. In those cases where the marks obtained exceed 25 marks, the excess will be ignored.
 4. Before attempting the question paper, be sure that you have got the correct question paper.
 5. The missing data, if any, may be assumed suitably.
-

- Q1 (a) Define sustainability in Architecture. [2]
(b) Describe the linkage between Energy Efficient Building and Sustainable Building. [3]
- Q2 (a) Define three various dimensions of sustainability. [2]
(b) Explain their interrelationships in habitat design. [3]
- Q3 (a) What are the features of a sustainable human settlements? [2]
(b) Discuss the relevance of Vastu Shastra in today's context. [3]
- Q4 Write short notes on (any two) [5]
(a) Vastupurusha mandala
(b) Koppen-Geiger climate classification
(c) Community Sustainability
- Q5 Explain the role of building envelope in controlling thermal performance of the building. [5]
- Q6 (a) Define Vernacular Architecture [2]
(b) What are the sustainability principles being followed in vernacular architecture? [3]

::: 02/03//2019 M :::::