

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

**CLASS: B.ARCH
BRANCH: ARCHITECTURE**

**SEMESTER: VIII
SESSION : SP/2020**

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.
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- Q1 (a) Define sustainability as per Bruntland Commission (1987). [2]
(b) What are the objectives of Sustainable Development? [3]
- Q2 (a) Name three various dimensions of sustainability. How they contribute to form a sustainable Habitat? [3]
(b) Explain the conventional model of a building life cycle design. [2]
- Q3 (a) What are the features of a sustainable city ? [3]
(b) Discuss the relevance of Vastu Shastra in today's context. [2]
- Q4 Write short notes on (any two) : [5]
a. Vastupurusha mandala
b. Green requirements
c. Economic Sustainability
- Q5 List out the environmental impacts of building industry on Nature and Ecosystem. What are the remedies of it? [5]
- Q6 (a) Differentiate Vernacular versus Modern Buildings. [2]
(b) What are the environmental advantages in Vernacular Architecture? [3]

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