

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

**CLASS: BARCH
BRANCH: ARCH**

**SEMESTER: I
SESSION : MO/2019**

SUBJECT : AR101 PRINCIPLE OF ARCHITECTURE

TIME: 2.00 HOURS

FULL MARKS: 25

INSTRUCTIONS:

1. The total marks of the questions are 25.
 2. Candidates may attempt for all 25 marks.
 3. Before attempting the question paper, be sure that you have got the correct question paper.
 4. The missing data, if any, may be assumed suitably.
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- Q1 (a) In what ways is the golden ratio related to Fibonacci series? [2]
Q1 (b) Who illustrated the concept of Modular? Write about Fibonacci series with equation? [3]
- Q2 (a) What is Biomimicry? What kind of approach an architect took to mimic lotus flower in Lotus temple structure? [2]
Q2 (b) How the light and space elements of biophilic design you can utilize based on the quality of light? [3]
- Q3 (a) Mention the kind of transformation in following: [2]
 a) A sphere transformed to ellipsoidal form by elongating axis.
 b) Physically attaching one or more subordinate form to its volume.
Q3 (b) Discuss different form of spatial organization. [3]
- Q4 (a) Mention eight ordering principle to make your design complete. [2]
Q4 (b) How repetition, pattern and rhythm are different from each other? [3]
- Q5 (a) What is the prime generator of form? Write down the properties of form. [2]
Q5 (b) What are the elements of design? Design a composition using three geometric figures to create symmetry. [3]

::: 14/10/2019 M :::