

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(MID SEMESTER EXAMINATION MO/2023)**

**CLASS: BARCH
BRANCH: ARCH**

**SEMESTER : 3rd
SESSION : MO/2023**

SUBJECT: AR201 CLIMATOLOGY

TIME: 02 Hours

FULL MARKS: 25

INSTRUCTIONS:

1. The question paper contains 5 questions each of 5 marks and total 25 marks.
 2. Attempt all questions.
 3. The missing data, if any, may be assumed suitably.
 4. Tables/Data handbook/Graph paper etc., if applicable, will be supplied to the candidates
-

- | | | |
|--------|---|-----|
| Q.1(a) | Describe is the relevance of Climatology in Building Design. | [2] |
| Q.1(b) | Illustrate the steps to be followed to achieve a climate balanced Architecture. | [3] |
| | | |
| Q.2(a) | Differentiate between macro-climate & micro-climate. | [2] |
| Q.2(b) | Define Site Climate and explain how it influence building design at that site. | [3] |
| | | |
| Q.3(a) | 'Sun - the dominating influence on climates'- Discuss. | [2] |
| Q.3(b) | Name the major four climatic variables and explain how influence our sensation of climatic comfort or discomfort. | [3] |
| | | |
| Q.4(a) | Demonstrate graphically thermal balance mechanism of Earth. | [2] |
| Q.4(b) | How the thermal balance of the body is maintained and why it is necessary? | [3] |
| | | |
| Q.5(a) | Discuss the relation of climatic elements to comfort. | [2] |
| Q.5(b) | What is the comfort zone and how it is related with bioclimatic chart ? | [3] |

:::::19/09/2023 E:::::