

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

**CLASS: BARCHITECTURE
BRANCH: ARCHITECTURE**

**SEMESTER : III
SESSION : MO/2024**

SUBJECT: AR201 CLIMATOLOGY

TIME: 3 Hours

FULL MARKS: 50

INSTRUCTIONS:

1. The question paper contains 5 questions each of 10 marks and total 50 marks.
 2. Attempt all questions.
 3. The missing data, if any, may be assumed suitably.
 4. Before attempting the question paper, be sure that you have got the correct question paper.
 5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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		CO	BL
Q.1(a)	Classify Global Climate & Climate of India as per NBC, highlighting their major characteristics.	[5] 1	1
Q.1(b)	How an Architect analyze a given project Site with respect to Climate & other local factors?	[5] 2	3
Q.2(a)	Write short notes on : i) Wind Rose Diagram, ii) Bio-Climatic Chart	[5] 3	1
Q.2(b)	Differentiate between: Urban & Rural Climate & related Habitat	[5] 4	2
Q.3(a)	Define Sunpath Diagram. Describe the relevance of it in designing Shading Devices.	[5] 2	4
Q.3(b)	Define Daylight Factor. Appraise different techniques of Day lighting adopted in different types of Tropical climate.	[5] 2	5
Q.4(a)	Discuss various functions of Ventilation. How Stack Effect & Venturi Effect enhance ventilation in a building?	[5] 2	4
Q.4(b)	How to achieve a climate balanced architecture in Warm Humid Climate?	[5] 4	5
Q.5(a)	Describe the nature of climate and bio-climatic requirement for three different type Tropical Climate Classification.	[5] 1	2
Q.5(b)	Demonstrate the required Architectural Design intervention to solve the overheat & low humidity problem in Hot Dry Climate.	[5] 4	3

:19/11/2024:E