

QP CODE: 25800415



Reg No : .....

Name : .....

**B.ARCH DEGREE (REGULAR/SUPPLEMENTARY) EXAMINATIONS, JANUARY 2025**

**Third Semester**

BACHELOR OF ARCHITECTURE

**19AR03006 - CLIMATOLOGY**

2019 Admission Onwards

29BB5E4E

Time: 3 Hours

Max. Marks : 100

**Part A**

*Answer any six questions out of Eight.*

*Each question carries 5 marks.*

1. What is ITCZ?
2. Write short notes on Solar Chart.
3. Explain the characteristics of Warm Humid climatic zone in India.
4. Write short notes on the significance of climate study in site analysis.
5. Write short notes on Human Body's Heat Loss.
6. Explain Comfort Zone.
7. What is Stack effect?
8. Explain how the optimum orientation for building should be done for sun and wind.

(6×5=30)

**Part B**

*Answer any four questions out of six.*

*Each question carries 10 marks.*

9. How does earth's rotation and revolution around the sun affect climate?
10. Explain the importance of earth's thermal balance. How is it maintained?
11. Explain with sketches, the elements and features contributing to the micro climate on site.
12. Explain elaborately the thermal comfort factors.
13. Explain the process of design of a shading device.





14. Explain the various daylight design parameters.

(4×10=40)

**Part C**

*Answer any two questions out of Four.*

*Each question carries 15 marks.*

15. Enumerate the elements of climate. Also discuss how these elements are measured.
16. Explain the planning and design of building in hot and dry climate. Elaborate your answer with the help of neat sketches.
17. Define periodic heat flow. What do you mean by time lag and decrement factor in heat flow? What is the implication of thickness of a material on time lag and decrement factor?
18. Explain the process of Day-lighting techniques in residential design in any three climatic zones.

(2×15=30)

