



**IV. STATE TRUE OR FALSE**

13. Solar air collectors transfers- energy through conduction .
14. The building orientation determines the amount of radiation it receives .
15. Day lighting is a practice of placing windows openings, reflective surfaces to provide effective internal lighting .
16. Materials used to construct the building plays a major role in regulating the amount of heat trapped within the room. .

**V. ANSWER IN A SENTENCE OR TWO:**

17. Mention any two environmental benefits of green building.
18. What are the two different loads in cooling load calculation?
19. What is the formula for heat transfer through opaque surfaces?
20. What is U Value?

**SECTION – B****ANSWER ANY FOUR QUESTIONS:****(4x10=40)**

21. Write a brief note on energy efficient building.
22. Discuss the advantages and disadvantages of passive and active solar heaters.
23. Write a brief note on the Heat pump.
24. State the advantages of the Trombe Wall Systems.
25. Differentiate between water and air collectors with necessary diagram
26. Discuss GRIHA rating system in brief.

**SECTION – C****ANSWER ANY TWO QUESTIONS:****(2x20=40)**

27. Differentiate Zero energy buildings and Green building.
28. Explain the various components of a flat plate collector and elucidate the procedure selecting and Sizing a Solar Heating System.
29. Differentiate active and passive heating.
30. Write a detailed note on the
  - (a) Absorption refrigeration system.
  - (b) Protective coatings.

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