SUBJECT NO-AR22003, SUBJECT NAME- Climatology & Solar Architecture LTP- 3-0-0, CRD- 3

SYLLABUS :-

Climatology and its relation to environmental design, climatic elements - sun, solar radiation, sun-path, temperature, wind, humidity and comfort conditions. Heat flow through design elements, microclimatology, environmental control systems in tropical climates. Design of windows, openings and shading devices. Concepts of solar energy utilization in cooling, heating and lighting the buildings by passive and active methods, photovoltaic cell etc. . Application of solar energy in solar water heating, swimming pool heating, wood seasoning - use of flat plate collectors. Design integration and consolidation for application of solar energy in buildings.