

Renewable Energy Resources-Super Important questions

By the TIE review team

Module-1-5 SIMP

1. Discuss causes of energy scarcity, further mention factors to be considered for solving energy crunch problems
2. Explain the term energy resources, explain its advantages and disadvantages
3. Explain any 5 thermal storage applications
4. With the help of a diagram define (a)Solar altitude angle (ii)Surface azimuth angle (iii)Zenith angle
5. Explain the flat plate collector with a neat sketch
6. Find the solar attitude angle at 2h after local solar noon on 1 June 2021 for a city, which is located at 26.7 degrees N latitude, find sunset and sunrise hours for the day length
7. Explain concentrating type collectors with advantages and disadvantages
8. Explain in detail the photovoltaic cell with a neat diagram
9. Explain in detail the efficiency of solar cells and fill factor, Mention their applications
10. Explain binary cycle geothermal power plant
11. Explain dry steam geothermal power plant
12. Explain thermochemical hydrogen production technologies
13. Explain Electrolytic hydrogen production technologies
14. Explain the main consideration in selecting a site for wind generators
15. Explain the waste recovery management scheme with a diagram
16. Explain the fixed and floating dome type of biogas plant
17. Explain various stages of cooling and cleaning of gasifier plants
18. Explain the problems faced in exploiting tidal energy
19. Explain how down draft gasifier works
20. Explain the co-operating two basin system
21. Explain the working of closed cycle OTEC with a diagram
22. Explain the working of sea wave energy conversion system