

School of Engineering**B.TECH Electrical Engineering
Semester End Examination - Aug 2024****Duration : 180 Minutes
Max Marks : 100****Sem VI - G2UB602T - Renewable Energy**General Instructions*Answer to the specific question asked**Draw neat, labelled diagrams wherever necessary**Approved data hand books are allowed subject to verification by the Invigilator*

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| 1) | Name different parts of internal structure of earth. | K1(2) |
| 2) | Explain energy needs in India. | K2(4) |
| 3) | Summarize advantages and various applications of OTECH system. | K2(6) |
| 4) | Explain concentrating type solar collectors , their materials and performance. | K3(9) |
| 5) | Explain the role of Gasifiers, Biomass fired boilers in biomass plants. | K3(9) |
| 6) | Explain the building integrated PV system, its components , sizing and economics. Discuss the applications of photovoltaic systems. | K5(10) |
| 7) | Describe with the neat sketch concentrating type of solar collector and derive the expression for its efficiency. | K4(12) |
| 8) | Evaluate the efficiency of a solar thermal power plant. Explain the working of solar water heater with neat diagram. | K5(15) |
| 9) | What are various types of fuel cells? Explain working principle and operation of Fuel Cell with neat sketch. | K5(15) |
| 10) | Elaborate different types of OTEC system with neat sketch: a)Open Cycle System, b)Closed Cycle System | K6(18) |