

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST-1 EXAMINATION- 2025

B.Tech VII Semester (CS/IT/ECE/BT/BI)

COURSE CODE (CREDITS): 22B1WCE733 (3)

MAX. MARKS: 15

COURSE NAME: PERENNIAL POWER STRUCTURES

COURSE INSTRUCTOR: DR. NIRAJ SINGH PARIHAR

MAX. TIME: 1 HR

Note: (a) All questions are compulsory.

(b) Marks are indicated against each question in square brackets.

(c) The candidate is allowed to make suitable numeric assumptions wherever required for solving problem.

Q.No	Question	CO	Marks
Q1	Discuss the major conventional energy types and explain any one of them in detail.	CO1	5
Q2	Explain the different types of geothermal energy based power units and their working through neat figures.	CO2	5
Q3	Illustrate the concept of mass defect through nuclear fission reactions. Estimate the amount of power output available through fission of a 1kg Uranium with 1% concentration of U-235 and the number of households it would serve with an average consumption of 300 kwh.	CO2	5