

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

Make-up Examination-Nov-2025

COURSE CODE (CREDITS): 22B1WCE733 (3)

MAX. MARKS: 25

COURSE NAME: PERENNIAL POWER STRUCTURES

COURSE INSTRUCTORS: DR. NIRAJ SINGH PARIHAR MAX. TIME: 1 Hour 30 Minutes

Note: (a) All questions are compulsory.

(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

(c) Use of calculator is permitted.

Q.No	Question	CO	Marks
Q1	Illustrate the concept of mass defect through nuclear fission reactions. Also deduce the energy released in the fission reaction from a unit mass of uranium isotope and compare it with the derived energy from coal having calorific value of 6000 kcal/kg.	3	6
Q2	Provide a description of the various types of cooling materials. Also brief about their application in the nuclear power plant.	2,4	6
Q3	Explain the functional working of pressurized water nuclear reactor through a representative figure.	1,2	8
Q4	Discuss the classification of dams and reservoirs on various grounds through a flow chart.	4	5