JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- 2026

M.Tech-IInd Semester (CE)

COURSE CODE (CREDITS): 10M11CE212(3) MAX. MARKS: 15

COURSE NAME: Heavy/Civil Construction Equipment, Methods, and Management

COURSE INSTRUCTORS: Dr. Amardeep MAX. TIME: 1 Hour

Note: *(a) All questions are compulsory.*

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

Q.No	Question	CO	Marks
Q1	a) Define ***Peak Productivity and Actual Productivity*** b) Estimate the actual bucket load in bank cubic meters for a loader bucket whose heaped capacity is 3.82 m^3. The soil's bucket fill factor is 0.9 and its load factor is 0.8. c) What are the main factors which affect the output of face shovel.		05
Q2	An experienced operator has to excavate _wet gravel' with a dragline capacity of 2.3 m^3. The boom length is 18m and the swing angle will be 120 degrees. The material is dumped onto stockpile. Actual working time is 50 min per hour.		03
Q3.	Make a comparison between Power shovel, Drag Line, Back Hoe and Clam Shell on the basis of their application and specifications.		04
Q4.	What do you mean by hauling equipment? Discuss in detail.		03

JUIT TEST-1 EXAMINATION- Feb-2026