

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- 2025

M.Tech-I Semester (CSE/IT)

COURSE CODE (CREDITS): 22M1WC1131 (3)

MAX. MARKS: 15

COURSE NAME: Data Warehousing and Data Mining

COURSE INSTRUCTORS: Dr. Rakesh Kanji

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	Explain the importance of Data warehouse and construction procedure.	CO1,2	1+2
Q2	Briefly elaborate salient features of Data warehouse. Differentiate Database from Data warehouse w.r.t exactness features.	CO1,2	2+1
Q3.	Build Data warehouse based on star schema w.r.t time, location, product as dimension table and sales as fact table. Create some cuboids out of that.	CO2	1.5+1.5
Q4.	Based on cube as per Q3, provide slice, dice and dice+slice related only one query for each of them. If a disk page has 8 elements then for $2*4*1$ and the the cuboid is $8*8*2$ then how many disk page will be required for a slice operation?	CO2	1.5+1.5
Q5	Explain the role of indexing, dimension hierarchy and aggregate function in Data warehouse system.	CO2	1+1+1