JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- 2023

M. Tech-I Semester (CSE-Data Science)

COURSE CODE (CREDITS):22M1WCI131 (3)    MAX. MARKS: 15

COURSE NAME: Data Warehousing and Data Mining

COURSE INSTRUCTORS:  Dr. Pardeep Kumar    MAX. TIME: 1 Hour

*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 problems*

Q1. Explain knowledge pyramid with suitable example. Differentiate the following terms with suitable example:

  (i)     Data Warehouse and Data Mart
  (ii)    Database and Dataset
  (iii)   Bias and Variance

[CO1] [2+1+1+1]

Q2. Consider the following data: Age= {4, 8, 15, 21, 21, 24, 25, 28, 34}. Apply the following techniques for data transformation:

  (i)     Min Max Normalization with range {-5,5}
  (ii)    Z-Score Normalization
  (iii)   Normalization by decimal scaling

[CO-2][2+2+1]

Q3. Explain KDD Process in detail with suitable diagram. Explain hold out process and over fitting & under fitting with suitable example. Suggest methods to get rid of over fitting and under fitting.

[CO-1] [3+1+1]