## Chandigarh College of Engineering and Technology (Degree Wing), Chandigarh Department of Computer Science and Engineering Sessional Test -1 (March-2020)

Subject (Code): Data Mining and Analysis (CS605C)

Semester: VIth

Name of Teacher: Dr. Ankit Gupta

Date (Session): 13.03.2020(M)

Time: 1:30 Hrs

Maximum Marks 30

Note: Attempt all questions. All questions carry equal marks. CO Q.No. Ouestions Suppose that the minimum and maximum values for the some attribute "income" are \$20,000 and \$95,000, CO3 respectively. We would like to map income to the range [0.0, 1.0]. Calculate the transformed value of \$68,000 by min-max normalization. Consider following data: {0,4,12,16,16,18,24,26,28,32,36,40,44,48,52,60}. Demonstrate the use of Equal frequency binning method on this data set. Design a hypothetical student data base for our institute with sufficient number of attributes. Discuss how Attribute CO4 Oriented Induction can be helpful on this data base for retrieving information. COI a. Discuss in detail - major issues of Data Mining. ঠে: Examine different data cube measures? a. Calculate the number of cuboids in an 10-dimensional cube with 4 levels? (2) CO<sub>2</sub> b. Suppose that a dataware house has following 4 dimensions {time, item, location, supplier}. Draw the cube corresponding cuboids. Mention the base and apex cuboid. (3) Elaborate various OLAP operations with the help of suitable examples. CO<sub>2</sub> COI/ A. Discuss various data mining functionalities. نام. Analyze the concept hierarchy with the help of suitable example.