

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc(SS) DEGREE EXAMINATION DECEMBER 2023
(Fifth Semester)

Branch – SOFTWARE SYSTEMS (Five year Integrated)

DISCIPLINE SPECIFIC ELECTIVE – I: DATA MINING

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (5 x 1 = 5)

- 1 In Data mining, KDD refers to as _____.
(i) Knowledge Discovery Database (ii) Knowledge Discovery Data
(iii) Knowledge Data definition (iv) Knowledge data house
- 2 Where is data warehousing used?
(i) Logical system (ii) Transaction system
(iii) Decision support system (iv) Functional system
- 3 Which of the following statement is true regarding classification?
(i) It is a measure of accuracy
(ii) It is a subdivision of a set
(iii) It is the task of assigning a classification
(iv) It is a reliable one
4. _____ forms of data mining assigns records to one of a predefined set of classes.
(i) Classification (ii) Clustering
(iii) Both (i) and (ii) (iv) Clarification
- 5 In web mining, _____ is used to find natural groupings of users, pages, etc.
(i) Clustering (ii) Associations
(iii) Sequential analysis (iv) Classification

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 3 = 15)

- 6 a. What are the different tasks of Data Mining?
OR
b. Explain the process of KDD?.
- 7 a. Differentiate Data Mining And Data Warehousing.
OR
b. What are the differences between OLAP and OLTP?
- 8 a. What is the purpose of Apriori Algorithm?
OR
b. What is meant by ensemble learning?
- 9 a. State the applications of clustering.
OR
b. Evaluate data stream mining.

Cont...

- 10 a. Define Spatial data.
OR
b. Why is graph mining used?

SECTION -C (30 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** Marks (5 x 6 = 30)

- 11 a. Explain in detail about Data mining functionalities.
OR
b. List the motivating challenges of data mining.
- 12 a. Elucidate Data warehouse. Discuss Design principles.
OR
b. Illustrate and explain the OLAP architecture.
- 13 a. Explain Mining Frequent Patterns using APRIORI.
OR
b. What are the Draw backs of Apriori Algorithm? Explain about FP Growth Concept in Detail.
- 14 a. Discuss in detail Clustering. Explain about Types of Data in Cluster Analysis.
OR
b. What are outliers? Discuss the methods adopted for outlier detection.
- 15 a. Discuss in detail about Data mining Applications.
OR
b. Enumerate hoeffding tree algorithm.

Z-Z-Z

END