PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2024
(Fourth Semester)

Branch – **STATISTICS**

MAJOR ELECTIVE COURSE – II :
DATA MINING AND WARE HOUSING

Time: Three Hours   Maximum: 50 Marks

SECTION-A (5 Marks)
Answer ALL questions
ALL questions carry EQUAL marks   (5 x 1 = 5)

1. Identify, the total categories of functions that are involved in Data Mining are:
    (i)   5   (ii) 4
    (iii) 3   (iv) 2

2. In Data Warehousing, which of these is the correct advantage of the Update-Driven Approach?
    (i)   It provides high performance
    (ii) It can be processed, copied, annotated, integrated, restructured and summarised in advance in the semantic data store
    (iii) Both of the above
    (iv) None of the above

3. The classification of the Data Mining System consists of:
    (i)   Machine Learning   (ii) Information Science
    (iii) Database Technology   (iv) All of the above

4. Which is true for neural networks?
    (i)   It has set of nodes and connections
    (ii) Each nodes computes it's weighted input
    (iii) Node could be in excited state or non excited state
    (iv) All of the above

5. _____ must be considered before investing in data mining.
    (i)   Functionality   (ii) Compatibility
    (iii) Both (i) and (ii)   (iv) None of the above

SECTION - B (15 Marks)
Answer ALL Questions
ALL Questions Carry EQUAL Marks   (5 x 3 = 15)

6. (a) What is data warehouse? Explain with a example.
                              (OR)
    (b) Discuss about the importance of metadata.

7. (a) What is Data mining?
                              (OR)
    (b) Justify the Pincer Search algorithm.

8. (a) Explain clustering paradigms.
                              (OR)
    (b) Evaluate decision trees.

9. (a) Explain neural network.
                              (OR)
    (b) State the rough sets in neural network.

10. (a) Discuss the web mining.

(OR)

(b) Explain sequence mining.

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

11. (a) Briefly explain multidimensional data model.

(OR)

(b) Elucidates data warehouse and its backward process.

12. (a) Compare the following terms (i). KDD vs. Data mining and (ii). DBMS vs. DM

(OR)

(b) Classify the needs of association rules in DM.

13. (a) Construct the partitioning algorithm with k-medoid algorithm.

(OR)

(b) Discuss decision tree construction algorithm.

14. (a) Explain Data mining techniques using neural network.

(OR)

(b) Categorize the applications of neural network.

15. (a) Construct the web structure mining and text mining.

(OR)

(b) Create the concept of temporal association rules and its importance.

Z-Z-Z   END