

M. Sc. DEGREE EXAMINATION, APRIL 2023
BIOINFORMATICS
SECOND SEMESTER

COURSE : ELECTIVE
PAPER : DATA MINING
TIME : 3 HOURS

MAX. MARKS: 100

SECTION – A

ANSWER ALL QUESTIONS

(20 X 1=20)

1. How are data classified?
2. Define “data warehouse”.
3. Comment two important functionalities of data mining.
4. Define “attribute”.
5. Expand PRAM.
6. Draw Schematic representation of multiple feed forward neural network.
7. Mention the steps involved in data pre-processing.
7. Justify the importance of “data integration”.
8. Mention two drawbacks of Apriori algorithm.
9. Define “spatial data mining”.
10. Write the formula for support in association rule mining.
11. An association rule has two parts. They are _____ and _____.
12. Class/concept refers to _____.
13. CPAR refers to _____.
14. Aggregate linkage is a method available in _____.
15. Soft clustering deals with _____.
16. Define “convolutional neural network”.
17. List two challenges in data mining.
18. Core point lies at _____.
19. Expand STING.
20. Provide an example for data prediction.

SECTION – B

ANSWER ANY FOUR QUESTIONS. EACH ANSWER SHOULD NOT EXCEED 500 WORDS. ALL QUESTIONS CARRY EQUAL MARKS. (4 x 10 = 40)

21. Describe the concepts of characterization and discrimination.
22. How to find frequent item sets using Apriori algorithm?
23. Appreciate the learning rules in data mining.
24. What can be achieved by “association analysis”?
25. Justify the role of feed forward neural networks.
26. Explain uses of the concept of “hyperplane” in SVM.
27. Elaborate the steps in involved in text mining.

SECTION – C

ANSWER ANY TWO QUESTIONS. EACH ANSWER SHOULD NOT EXCEED 1200 WORDS. ALL QUESTIONS CARRY EQUAL MARKS. (2 x 20 = 40)

28. Compare and contrast data, database, data warehouse, concept and class description.
29. Elaborate in detail the methods of data reduction.
30. Appreciate various existing clustering techniques with relevance to effectiveness.
31. Expand SOM and its applications in data mining.
