STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI –600 086
(For candidates admitted from the academic year 2019 – 2020 & thereafter)

SUBJECT CODE: 19BI/PE/DM15

M. Sc. DEGREE EXAMINATION, APRIL 2022
BIOINFORMATICS
SECOND SEMESTER

COURSE : ELECTIVE
PAPER : DATA MINING
TIME : 3 HOURS **MAX. MARKS: 100**

SECTION – A

ANSWER ALL QUESTIONS **(20 X 1=20)**

1. What is data warehouse?
2. What is PRM method in CPAR?
3. Define support between item sets.
4. What is batch data processing?
5. Define the network topology of multiple feed-forward neural networks.
6. An association rule has two parts. They are _____ and _____.
7. Class/concept refers to _____.
8. Write any one model evaluation metric used in neural network.
9. Define Apriori algorithm.
10. What is convolutional neural network?
11. _____ statistical method is generally used for prediction analysis.
12. What is an outlier?
13. Classification is a _____ method
14. Examples of static media are _____ and _____
15. What is a core point?
16. Define hard and soft clustering.
17. Expand STING.
18. What do you mean by spatio-temporal segmentation?
19. What is complete linkage?
20. Write any two challenges in data mining.

SECTION – B

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

21. Discuss the learning rules in neural network.
22. How do you evaluate the machine learning models?
23. Write in brief the architectures for multimedia data mining.
24. Write any ten applications of data mining.
25. What is Hierarchical clustering?
26. Explain the data mining functionalities.
27. Write in short the association analysis.

SECTION – C

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

28. Elucidate the importance of backpropagation in multiple-feed forward neural network.

29. Discuss the grid based clustering methods and their advantages.

30. Explain the SOM and SVM techniques.

31. Discuss the K means and K medoids based clustering.

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