Reg. No. : | | | | | | | | | | |

Question Paper Code: 59204

B.E./B.Tech. DEGREE EXAMINATION, DEC 2020

Elective

Computer Science and Engineering

15UCS904- DATA MINING

(Regulation 2015)

Duration: 1.15 hrs Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

(Answer any six of the following questions)

1. Capability of data mining is to build _____ models. CO1- U

   (a) Retrospective (b) Interrogative (c) Predictive (d) Imperative

2. Strategic value of data mining is_____. CO1- U

   (a)Cost-sensitive (b) Work-sensitive

   (c) Time- sensitive (d) Technical- sensitive

3. Friendship structure of users in a social networking site can be considered as an example of: CO2- U

   (a) Record data (b) Ordered data

   (c) Graph data (d) None of the above

4. Online transaction processing is used because _____. CO2- U

   (a) It is efficient (b) Disk is used for storing files

   (c) It can handle random queries (d) Transactions occur in batches

5. If a store has N items, the number of possible item sets is CO3- R

   (a) 2N-1 (b) N-1 (c) N/2 (d) None of the above

6. The apriori algorithm exploits the: CO3- R

   (a) Positive definiteness property of support (b) Monotone property of support

   (c) Positive semi definiteness property of support (d) Ant monotone property of support

7. Which of the following criteria is not used to decide which attribute to split next in a decision tree: CO4- R

(a) Gini index (b) Information gain (c) Entropy (d) Scatter

8. For support vectors Xj in a hard margin SVM, we have CO4- R

(a) $|WTXi+b|=0$ (b) $|WTXi+b|<1$ (c) $|WTXi+b|=1$ (d) None of the above

9. Cluster are more similar to each other _____. CO5- R

(a) Association (b) Anomaly detection (c) Clustering (d) None.

10. The _____ is one of genetic operators that are used to recombine the population of genetic material. CO5- R

(a) Genetic operator. (b) Mutation operator

(c) Cross over operator. (d) Encoding operator

PART – B (3 x 8 = 24 Marks)

(Answer any Three of the following Questions)

11. Explain the various step in the process of knowledge discovery. CO1- U (8)

12. Explain the process of data cleaning. CO1- U (8)

13. Explain various kinds of Association Rules Mining. CO2- U (8)

14. Explain with an example how classification is done using decision tree induction method. CO3- U (8)

15. Describe Partitioning Methods in detail. CO4- U (8)