[5840]-302

Second Year M.Sc. (Computer Science)
CSUT 232 : MACHINE LEARNING
(2019 Pattern) (Revised) (Semester - III)

Time : 3 Hours]   *[Max. Marks : 70*

Instructions to the candidates:
1) *Q. 1 is compulsory.*
2) *Attempt any 5 questions from question 2 to 7.*

Q1) **Solve any Five of the following :**   **[10]**

a) What are types of ANN?

b) What is reinforcement learning?

c) Explain the term support vectors.

d) Write an applications of Association Rule.

e) What is dendrogram?

f) What is Fl-score?

Q2) **Attempt All :**

a) Describe machine learning system cycle and design cycle in detail. **[7]**

b) Write a short note on Support Vector Machine algorithm. **[5]**

Q3) **Attempt All :**

a) What is machine learning? Explain various types of machine learning models. **[7]**

b) Differentiate Supervised/Unsupervised Learning and Reinforcement Learning. **[5]**

P.T.O.

Q4) **Attempt All :**

a) Discuss components and types of ANN in detail. **[7]**

b) Find the frequent itemsets with minsup = 2. **[5]**

TID	Items bought
T1	A,B,C
T2	B,C,D
T3	A,B,C,D
T4	A,E

Q5) **Attempt All :**

a) Write a short note on Decision tree algorithm. Give advantages and disadvantages. **[7]**

b) Explain the types of learners in classification. **[5]**

Q6) **Attempt All :**

a) What are the steps in handling missing data. **[7]**

b) Explain the concept of linear regression model. **[5]**

Q7) **Write a short note on any Two of the following :** **[12]**

a) Feature scaling.

b) Overfitting and Underfitting.

c) Naïve Bayes classifier.

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