Total No. of Questions : 5]

P6401

SEAT No. :

[Total No. of Pages : 2

[6155]-64 T.Y. B.Sc. COMPUTER SCIENCE CS-364 : Data Analytics (CBCS Rev 2019 Pattern) (Semester - VI)

Time : 2 Hours]

Instructions to the candidates:

- 1) All questions are compulsory.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right indicate full marks.

Q1) Attempt any Eight of the following.

- a) State occam's razor principle.
- b) Define Data Analytics
- c) What is supervise learning?
- d) What is TF-IDF?
- e) What is frequent itemset?
- f) Define stemming.
- g) What is Link prediction?
- h) State Applications of AI.
- i) State types of logistic regression.
- j) Define precision

Q2) Attempt any four of the following:

- a) State types of Machine learning. Explain any one in detail.
- b) How Receiver operating characteristic (ROC) curve is created?
- **c)** What is association rule? Give one example.
- d) What is Influence Maximization?
- e) Explain Knowledge discovery in database (KDD) process.

[Max. Marks : 35

[8×1=8]

[4×2=8]

- *Q3*) Attempt any two of the following:
 - a) Write a short note on community detection.
 - b) Explain Apriori algorithm.
 - c) Short note on challenges in social Media Analytics (SMA)
- *Q4*) Attempt any two of the following:
 - a) Explain phases in Natural language processing (NLP).
 - b) Explain exploratory data analytics.
 - c) Explain life cycle of social media Analytics.
- *Q5*) Attempt any one of the following:

[1×3=3]

a) Consider the following transactional database and find out Frequent Itemsets using Apriori algorithem with minimum - support = 50%

TID	Items - Purchased
T ₁	I ₁ , I ₂ , I ₃ ,
T ₂	I ₂ , I ₃ , I ₄
T ₃	I ₄ , I ₅
T_4	I ₁ , I ₂ , I ₄
T ₅	I_1, I_2, I_3, I_5
T ₆	$\mathbf{I}_1, \mathbf{I}_2, \mathbf{I}_3, \mathbf{I}_4$

- b) Write a short note on Text analytics.
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 $[2 \times 4 = 8]$