

Total No. of Questions : 5]

SEAT No. :

P-1922

[Total No. Of Pages : 2

[6034]-601

T.Y.B.B.A.(C.A.)

**Recent Trends in Information Technology
(Semester-VI) (2019 Pattern) (CBCS)**

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates :

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks*

Q1) Attempt any Eight of the following (Out of Ten)

[2 × 8 = 16]

- a) What is OLTP?
- b) Define artificial intelligence.
- c) Define Data Frames.
- d) What is a Data Mart?
- e) Define OLAP.
- f) What is Robotics?
- g) Define spark.
- h) List any two applications of artificial intelligence.
- i) Which type of model is a Decision Tree?
- j) What is full form ETL?

Q2) Attempt any Four of the following (Out of Five)

[4 × 4 = 16]

- a) Differentiate between OLAP and OLTP
- b) Explain FP tree algorithm.
- c) Explain different RDD operations in spark.
- d) What are the disadvantages of 'Hill Climbing' in artificial intelligence?
- e) Explain briefly data mining task

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Q3) Attempt any Four of the following (Out of Five)

[4 × 4 = 16]

- a) How is Apache Spark different from Map Reduce?
- b) What is data preprocessing? Explain
- c) Write down the algorithm of Breadth-First Search with its advantages.
- d) Explain the various search and control strategies in artificial intelligence.
- e) How does Spark work? Explain with the help of its Architecture?

Q4) Attempt any Four of the following (Out of Five)

[4 × 4 = 16]

- a) What is Data ware house? State any two advantages.
- b) What is a heuristic function?
- c) What are the two advantages of 'Depth First Search' (DFS)?
- d) Explain the three important artificial intelligence techniques.
- e) Explain briefly State Space Representation of Water Jug Problem.

Q5) Write a short note on any Two of the following (Out of Three)

[3 × 2 = 6]

- a) 'Means End Analysis' (MEA) in artificial intelligence
- b) ETL Process
- c) MOLAP server



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