

Total No. of Questions : 5]

P6020

SEAT No. :

[Total No. of Pages : 2

[6144]-601

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

CA - 601 : RECENT TRENDS IN INFORMATION  
TECHNOLOGY

(2019 CBCS Pattern) (Semester -VI)

Time : 2½ Hours]

Instructions to the candidates:

[Max. Marks : 70

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

Q1) Attempt any EIGHT of the following (Out of TEN).

[8×2=16]

- a) What is OLTP?
- b) Define artificial intelligence.
- c) Define Data Frames.
- d) What is a Data Mart?
- e) What is data integration?
- f) What is Robotics?
- g) Define spark.
- h) List any two applications of artificial intelligence.
- i) Define graph mining.
- j) What is full form ETL.

Q2) Attempt any FOUR of the following (Out of FIVE).

[4×4=16]

- a) Differentiate between ROLAP and MOLAP servers.
- b) Explain FP tree algorithm.
- c) Explain the working of Spark with the help of its Architecture?
- d) What are the disadvantages of 'Hill Climbing' in artificial intelligence?
- e) Explain briefly data mining task.

P.T.O.

Q3) Attempt any FOUR of the following (Out of FIVE).

[4×4=16]

- a) Explain Multidimensional data model in brief.
- b) Explain data preprocessing.
- c) Explain the various search and control strategies in artificial intelligence.
- d) Differentiate between OLAP and OLTP.
- e) Explain different RDD operations in spark.

Q4) Attempt any FOUR of the following (Out of FIVE).

[4×4=16]

- a) What is Executor Memory in a Spark application?
- 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) What are the major steps involved in the ETL process?

Q5) Write a short note on any TWO of the following (Out of THREE). [2×3=6]

- a) Spark SQL.
- b) 'Water Jug Problem' in artificial intelligence with the help of diagrams and propose a solution to the problem.
- c) Data Warehouse.