

Total No. of Questions : 5]

SEAT No. :

P2143

[Total No. of Pages : 2

[5803]-601

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

**CA-601 : RECENT TRENDS IN INFORMATION  
TECHNOLOGY**

**(2019 CBCS Pattern) (Semester - VI)**

*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) :

**[8 × 2 = 16]**

- a) What is OLAP?
- b) Define 'State Space' in artificial intelligence.
- c) What is Data frame?
- d) What is RDD?
- e) What is Data Mart?
- f) Define ETL tools.
- g) What is a Plateau in artificial intelligence?
- h) Define OLTP.
- i) Which language is not supported by Spark?
- j) Define Ridge.

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

**[4 × 4 = 16]**

- a) What are components of spark? Explain.
- b) Explain Architecture of Data Warehouse.
- c) What is the philosophy of artificial intelligence?
- d) Describe technique of data mining.
- e) Write the advantages of Bidirectional Search.

**P.T.O.**

**Q3) Attempt any Four of the following (Out of Five) : [4 × 4 = 16]**

- a) What is data cleaning? Describe various method of data cleaning.
- b) Explain any two Types of OLAP Servers.
- c) Elaborate the Spark Installation Steps?
- d) Explain Breadth First Search technique of artificial intelligence.
- e) Write any four applications of Data Mining.

**Q4) Attempt any Four of the following (Out of Five) : [4 × 4 = 16]**

- a) Differentiate between MOLAP and HOLAP
- b) What is the Missionaries and Cannibals Problem Statement? Write its solution.
- c) How is Apache Spark different from MapReduce?
- d) What is Data warehouse? Describe any two applications in brief.
- e) Write in detail the various blind search techniques in artificial intelligence.

**Q5) Write a short notes on Any Two of the following (Out of Three) : [2 × 3 = 6]**

- a) 'Water Jug Problem' in artificial intelligence with the help of diagrams and propose a solution to the problem.
- b) Action
- c) Snowflake Schema

