| Total No. of Questions : 5] | SEAT No. : |
|-----------------------------|-------------------------|
| PA-1983 | [Total No. of Pages : 2 |

[5954]-601 T.Y.B.B.A. (C.A.)

RECENT TRENDS IN INFORMATION TECHNOLOGY (2019 Pattern) (Semester - VI) (CA-601)

Time: 2½ Hours] [Max. Marks: 70

Instructions to the candidates:

- 1) Questions: Total Number of Questions are 5 (Five).
- 2) Total Marks assigned: 70
- 3) Time assigned: 2½ Hours.

Q1) Attempt any EIGHT of the following (Out of TEN): $[8 \times 2 = 16]$

- a) What is artificial intelligence?
- b) Explain component of spark.
- c) What is data mart?
- d) List any two applications of data warehouse.
- e) Define OLTP.
- f) Define ETL tools.
- g) Define Data mining.
- h) What is a Ridge in artificial intelligence?
- i) What is natural language processing?
- j) Define Meta data.

Q2) Attempt any FOUR of the following (Out of FIVE): $[4 \times 4 = 16]$

- a) Describe the Architecture of data warehouse.
- b) Explain briefly the various components of spark.
- c) Explain the three important artificial intelligence techniques.

- d) What are the disadvantages of Depth First Search?
- e) What are the difference between OLTP and OLAP?

Q3) Attempt any FOUR of the following (Out of FIVE): $[4 \times 4 = 16]$

- a) Explain the various search and control strategies in artificial intelligence.
- b) Describe technique of data mining.
- c) Explain any four uses of data warehouse.
- d) What is the philosophy of artificial intelligence?
- e) Write down the steps of KDD process.

Q4) Attempt any FOUR of the following (Out of FIVE): \checkmark [4 × 4 = 16]

- a) What is a heuristic function?
- b) What is multidimensional data model? Explain.
- c) Define data cleaning. Describe various method of data cleaning.
- d) Explain briefly with solution Missionaries and Cannibals Problem Statement.
- e) Explain Graph mining in brief

Q5) Write a short note on Any TWO of the following (Out of THREE): $[2 \times 3 = 6]$

- a) State the 'Water Jug Problem' in artificial intelligence with the help of diagrams and propose a solution to the problem.
- b) Data mining task.
- c) ROLAP and HOLAP.

