Total No. of Questions : 5]	SEAT No.:
PB-1476	[Total No. of Pages : 2

[6226]-601 T.Y. B.B.A. (CA)

CA601 : RECENT TRENDS IN INFORMATION TECHNOLOGY

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

Time: 2½ Hours] [Max. Marks: 70

Instructions to the candidates:

- 1) Questions Total Number of Questions are: 5
- 2) All questions are compulsory.
- 3) Figures to the right indicate full marks.
- **Q1)** Attempt any **EIGHT** of the following (Out of TEN).

 $[8 \times 2 = 16]$

- a) Define Search Strategy.
- b) Data mining is also called as?
- c) What is OLTP?
- d) Define Local Maximum in artificial intelligence.
- e) Define Metadata?
- f) Explain Apache kafka
- g) Define Expert System.
- h) Why a data warehouse is said to contain a 'time-varying' collection of data?
- i) Define Ridge.
- j) Define graph mining.
- **Q2)** Attempt any **FOUR** of the following (Out of FIVE).

 $[4 \times 4 = 16]$

- a) Explain Face Detection and Recognition.
- b) Define 'Problem Space' in artificial intelligence.
- c) What are two advantages of Depth First Search?
- d) Explain Association rule mining with example.
- e) Explain any four uses of Data Warehouse.

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

 $[4 \times 4 = 16]$

- a) What is the difference between Data ware house and OLAP?
- b) How do we create RDDs in Spark?
- c) What do you understand by Spark Streaming?
- d) Define Data Warehouse. State any two advantages of Data Warehouse.
- e) Explain datamining and knowledge discovery in database.

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

 $[4 \times 4 = 16]$

- a) Why RDD needs in a Spark?
- b) Explain the 'Tower of Hanoi' problem in artificial intelligence with the help of diagrams and propose a solution to the problem.
- c) Explain Web mining in detail.
- d) Explain AO* Algorithm in brief.
- e) What is the major difference between star schema and snowflake schema?
- **Q5)** Write a short note on any **TWO** of the following (Out of THREE) $[2 \times 3 = 6]$
 - a) Data mining
 - b) Action
 - c) Spark SQL

