(For the candidates admitted from 2012 - 2013 onwards)

M.C.A. DEGREE EXAMINATION, NOVEMBER 2017.

Fourth Semester

DATA MINING AND WAREHOUSING

Time: Three hours

Maximum: 75 marks

PART A — $(5 \times 5 = 25 \text{ marks})$

Answer ALL the questions.

1. (a) What are the various steps of knowledge discovery? Discuss.

Or

- (b) Discuss on data warehouses.
- 2. (a) Discuss on data integration.

Or

- (b) Write a note on data transformation.
- 3. (a) Discuss on classification and prediction.

Or

(b) Write about back propagation.

4. (a) Write a note on cluster analysis.

Or

- (b) Discuss on the K-means partitioning method.
- 5. (a) How to choose a data mining system?

 Discuss.

Or

(b) Discuss on collaborative filtering.

PART B - (5 × 10 = 50 marks)

Answer ALL the questions.

6. (a) Describe the architecture of data mining system.

Or

- (b) Describe the steps for the design and construction of data warehouses.
- 7. (a) Explain discretization and concept hierarchy generation for numerical data.

Or

(b) Give a detailed note on dimensionality reduction.

- 8. (a) Explain the following:
 - (i) Preparing the data for classification and prediction.
 - (ii) Comparing classification and prediction methods.

Or

- (b) Explain Bayesian classification.
- 9. (a) Explain Hierarchical clustering methods.

Or

- (b) Give a detailed note on model-based clustering methods.
- 10. (a) Give a detailed note on trends in data mining.

Or

- (b) Explain the following:
 - (i) Theoretical foundation of data mining.
 - (ii) Statistical data mining.