9. (a) What is data mining? Discuss following data mining techniques : 4

   (i) Association Rules.

   (ii) Clustering techniques.

   (b) Discuss variaus data mining tools and applications. 3½

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S-773

B.A/B.Sc. (Part-II) Examination, 2015

(New Syllabus)

Computer Application

Second Paper

(DBMS and RDBMS)

Time Allowed : Three Hours]   [Maximum Marks : 50

Note : Answer five questions in all. Question No.1 is compulsory. Attempt One question from each of the Units I, II, III, and IV.

$(2 \times 10 = 20)$

1. (a) Write the name of five DBMS Software.

   (b) What do you mean by Relational Calulus? Explain with example.

   (c) Compare there traditional data models.

   (d) Explain following constraints with example:-

   PRIMARY KEY, NOT NULL

(e) Write the syntax of CREATE command with example.

(f) What do you mean by security? Differentiate between system security and data security.

(g) What is E-R diagram?

(h) Define:

(i) Inconsistency

(ii) Integrity

(i) Define B-Tsee with example.

(j) Differentiate between ROLAP and MOLAP.

Unit-I

2. Explain Relational data model with example. Also describe its advantages and limitations.

7½

3. (a) Discuss the Database Architecture with example. 3½

(b) Explain SELECT(σ) and Project (π) Operations of Relational algebra on Relational model. 4

Unit-II

4. Write the syntax of following commands with example: 7½

(a) UPDATE

(b) COMMIT

(c) GRANT

(d) ROLLBACK

(e) DROP

5. Discuss variaus types of keys with example.

7½

Unit-III

6. What do you mean by Entity-Relationship model? Discuss various symbols of E-R diagram with example. 7½

7. Discuss following file organization tecniques:-

(a) Sequential file organization. 7½

(b) Direct file organization

(c) Indexed Sequential file organization.

Unit-IV

8. What is Data warehouse? Discuss the data warehouse process and architecture. 7½