

**T. Y. B. C. A.
BCA -303 Relational Database Management System**

Teaching Scheme (per week)		Examination Scheme					
Th. (hours)	Pr. (hours)	Internal		External		Total	
		Th. (marks)	Pr. (marks)	Th. (marks)	Pr. (marks)	Th. (marks)	Pr. (marks)
3	-	30	-	70	-	100	-

UNIT I (17 Marks)

Transition Management: Recovery, concurrency, security: Introduction, Discretionary access control, Mandatory access control, Statistical databases, Data encryption, Distributed Databases: Introduction, Some Preliminaries, The twelve objectives, Problems of distributed systems.

UNIT II (18 Marks)

Structured Query Language (SQL): Introduction to SQL, Constraints, DDL, DML, DCL, Create, Alter, Drop, Rename, Grant, Revoke, Select Clause, Functions, Different Types of Joins, set operators.

UNIT III (17 Marks)

PL/SQL: Index, View, Sequence, Trigger, Procedure, Cursor, Exception Handling.

UNIT IV (18 Marks)

Decision Support: Introduction, Aspects of decision support, Database design for decision support, Data Warehouses and Data marts, Online analytical processing, Data mining

Books:

1. Introduction to Database System à C. J. Date (7th edition) Low Price Edition
2. SQL, PL/SQL à Evan Bayross (2nd edition) BPB
3. Database system concepts à Henry F. Korth (3rd edition) TMH

Question Paper Scheme:

University Examination Duration : 3 Hours.

- Q.1 - Unit-I (17 Marks)
 A. Objective/ Short Questions.
 B. Descriptive/ Long questions.
- Q.2 - Unit-II (18 Marks)
 A. Objective/ Short Questions.
 B. Descriptive/ Long questions.
- Q.3 - Unit-III (17 Marks)
 A. Objective/ Short Questions.
 B. Descriptive/ Long questions.
- Q.4 - Unit-IV (18 Marks)
 A. Objective/ Short Questions.
 B. Descriptive/ Long questions.

Note: Options should be given in all questions.