

PRSU BCA PART 2 QUESTION PAPER

Paper 4 : DBMS (ORACLE, SQL) - 2017

Time : Three Hours

Maximum Marks : 100

Minimum Pass Marks : 40

Note : Attempt any two parts from each unit. All questions carry equal marks.

UNIT - 1

1. (a) What is Data Abstraction? Discuss the level of abstractions at which database may be viewed.
- (b) Described the function and responsibilities of a database administrator.
- (c) Explain the concept of data models and describe the various types of models.

UNIT - 2

2. (a) Explain the specialization and generalization in detail.
- (b) What is entity relationship model ? Explain the various symbols used in E-R diagram.
- (c) Write short notes on the following :
 - (i) Weak entity and strong entity
 - (ii) Candidate key and super key

UNIT - 3

3. (a) Explain the fundamental operations of relational algebra with example.
- (b) Explain primary key with suitable example.
- (c) Write short notes on the following :
 - (i) Set operation
 - (ii) Referential integrity

UNIT - 4

4. (a) Explain the various Pitfalls in database design.
- (b) Discuss 3NF, BCNF and 4NF with example.
- (c) Explain join dependency and multivalve dependency.

UNIT - 5

5. (a) Explain the operation of the SQL by which data can be modified.
- (b) What are aggregate functions ? Describe each function.
- (c) Write short notes on the following :
 - (i) Group by
 - (ii) Order by
 - (iii) Nested queries