

D

(Printed Pages 4)

(20116)

Roll No.

BCA - V Sem.

18021

BCA Examination, Dec. 2015

Introduction to DBMS

(BCA-501)

(New)

Time : Three Hours]

[Maximum Marks : 75

Note : Attempt all the sections as per instructions.

Section - A

Note : Attempt all the five questions. Each question carries **03** marks.

1. What is a data model? Why is it important?
2. What is the difference between entity, entity type and entity sets?
3. How do we convert a normalized relation to that in 1NF? Explain with example.

P.T.O.

4. What do you understand by hashing? Explain with example.
5. What are nested SQL queries? Explain with example.

Section - B

Note : Attempt any **two** questions out of the following **03** questions. Each question carries **7.5** marks.

6. Explain the concept of functional dependency and full functional dependency with an example. Also explain 2NF in detail.
7. Explain the concept of keys. Also explain primary, candidate, super and foreign key with suitable example.
8. What do you mean by data independence? Explain the difference between logical and physical data independence.

18021/2

Section - C

Note : Attempt any three questions out of the following **05** questions. Each question carries **15** marks.

9. Explain the three level architecture of DBMS.
Also explain objective of using three level architecture of DBMS.
10. How is ER model mapped to relational model?
Explain in detail.
11. What is a lock? Explain in detail about Binary, Shared and Exclusive locks.
12. Define normalization. Why do we need to normalize the database? Also explain 1NF, 2NF and 3NF in detail.