

MCA-13

December - Examination 2015

MCA IInd Year Examination**Advance Database Management System****Paper - MCA-13****Time : 3 Hours]****[Max. Marks :- 80**

Note: The question paper is divided into three sections A, B and C. Write answers as per given instructions.

Section - A

8 x 2 = 16

Note: Answer all questions. As per the nature of the questions delimit your answer in one word, one sentence or maximum upto 30 words. Each question carries 2 marks.

- 1) (i) What do you mean by instance and schemas?
- (ii) What is ROLLBACK and CHECKPOINT in SQL?
- (iii) What is storage and wear entity?
- (iv) What are the uses of DML?
- (v) What is Transaction?
- (vi) Define Atomicity.
- (vii) What is a view?
- (viii) What do you mean by generalization?

Section - B

4 x 8 = 32

(Short Answer Questions)

Note: Answer any four questions. Each answer should not exceed 200 words. Each question carries 8 marks.

- 2) What is relationship? Give example.
- 3) Define security and privacy with regards to database administration. How are these two concepts related to each other?
- 4) What is con-currency control? Explain its objective and list three major problems if a DBMS does not have concurrency control.
- 5) Discuss the meaning of universal quantifier and existential quantifier.
- 6) Compare inner join and outer join.
- 7) What is functional dependencies? Explain with example.
- 8) What is the difference between DBMS and DDBMS?
- 9) Explain RSA public key encryption algorithm with example.

Section - C

2 x 16 = 32

(Long Answer Questions)

Note: Answer any two questions. You have to delimit your each answer maximum upto 500 words. Each question carries 16 marks.

- 10) Write short notes on Network Model and its concepts.
- 11) Explain in detail the relational calculus?

- 12) Explain any ten fundamental operation in Relational algebra.
- 13) Write short note on the following:
- (i) Cursors
 - (ii) Triggers
 - (iii) Procedures
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